

# Snapshot

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## SOA Blueprints: An Executive Summary

By Rob Kidd

Executive Management, you are facing demands from all your constituencies. Regulators ranging from the SEC to the accounting standards board are demanding you take responsibility for corporate governance, and failure is not an option. Shareholders want profitability and accountability; this failing, the company board will summarily ask you to accept a lesser compensation package, in line with lesser results. The economy is picking up and so are company earnings. Now, after a long hiatus of bad news, employees are expecting better hours, working conditions, compensation, and benefits. IT holds one of the keys to resolving the above problems and helping you and your management team cope with these multiple dilemmas. Service-Oriented Architecture (SOA) holds promise, as an enabler for IT cost containment, corporate governance, regulatory compliance, and organizational responsiveness. SOA is also an enabling platform to drive profitability growth.

#### **SOA Explained: The Promise**

Service-Oriented Architecture (SOA) is focused on creating a concept, technology, and process framework that will allow enterprises to develop, interconnect, and maintain enterprise applications and services efficiently and cost-effectively. While this goal is not new, SOA seeks to eclipse previous efforts such as modular programming, code reuse, and object-oriented software. SOA is designed to allow developers to overcome many complex implementation challenges such as distributed software, application integration, multiple platforms and protocols, and numerous access devices, while leveraging the potential of the Internet. The driving goal of SOA is to eliminate these barriers so that applications integrate and run seamlessly.

SOA encompasses more than technologies such as Web Services, SOAP and J2EE, as it is independent of any specific technology. SOA is an application architecture in which all functions, or services, are defined by a description language and have interfaces that are called to perform business processes. An SOA service or business-processing component is self-contained and platform-independent, and can be dynamically located and invoked. A client from any device, using any operating system, in any language, can access an SOA service. Thus, SOA is an enabler of just-in-time integration and interoperability of legacy applications; a key consideration for enterprises that are seeking to deploy demand driven computing environments.

SOA provides close alignment of business objectives with IT operations. IT cost savings can be achieved by SOA's capability to rapidly update or modify existing applications. For example, applications can be modified to reflect new and changing products, customers, and revenue streams. Regulatory compliance headaches can be reduced through quick updates of existing applications and data stores to meet new regulatory edicts. So too can organizational mandates for improved ERP, CRM, or other LOB needs. SOA enables cost containment, regulatory compliance, and profitability initiatives in that it allows IT to provide demand-driven computing.

While the potential business benefit of SOA is significant, it cannot be realized en masse without tangible proof points. This is where third-party reference implementations and validation models play an important role in

driving market acceptance. Reference blueprints, specifications, and implementations based on best practices that validate the SOA model are essential to codify the true value of SOA for large-scale enterprise implementations.

### **SOA Blueprints**

The Middleware Company is in the vanguard of SOA Blueprints that represent a comprehensive attempt to define and implement a fully functional application suite demonstrating SOA best practices in real-world operating environments. The Middleware Company highlights the best practices for SOA application development garnered through multiple use-cases, at both a functional and behavioral level, to demonstrate how SOA can be applied to real world problems. The blueprint, specification, and implementation are based upon a fictitious company that was developed through a working-group/panel of experts consisting of vendors, integrators, and end-users. Vendors including IBM, Microsoft, and BEA are planning to deliver a reference implementation, based on their respective technologies to be validated and verified by third parties.

#### **SOA Blueprint Buzz**

So why is this important and valuable to enterprises considering and/or adopting the SOA model? The SOA Blueprint validates the SOA specification and blueprint through a real-world reference implementation and provides a concrete implementation of the SOA model through various vendors' technologies. Thus, SOA Blueprints give enterprises real-world implementations that can be used as a departure point for their own implementations, which can also benefit from the body of SOA best practices that the blueprints provide.

From the business bottom line, SOA Blueprints are an absolute must to achieve the business benefits of SOA. In the past, executive management has been sold promising IT technology and concepts purported to reduce costs and increase profitability — only to achieve neither result — and in some cases the new products have substantially increased costs or have had other negative impacts on the business. In most cases, these past failures can be directly traced to the fact that the implementations were flawed. By having reference blueprints, specifications, and implementations for a set of technologies and concepts, IT has a proven model on which to build a proven and tested implementation. Just consider, how many executives would hire a peer to do a job, if that individual had no prior experience? Similarly, who would deploy an unproven IT solution without a record of accomplishment? With the availability of real-world tested and validated SOA Blueprints, executives and organizations have a high probability of avoiding a flawed deployment or other negative impact, by building on and extending a proven implementation.

### **SOA: The Enterprise Mandate**

SOA in its fullest incarnation allows enterprise business and business processing objectives to be cost-effectively aligned with IT to deliver the functionality demanded by the business it serves. The current trend toward demand-driven computing dictates that for enterprise IT to be effective, it has to help the organization instantly comply with increasing numbers of regulatory requirements and competitive pressures, i.e., operating proactively, closely mirroring the business it serves. IT must act as a service provider and this can be enabled by SOA. In this evolving competitive environment, market pressures require that enterprises quickly leverage the business processes and information of customers, suppliers, and markets, as well as their own information assets and lifecycles. Highly automated and simplified IT operations that are closely aligned to business processes are fundamental to achieving these results. Quality SOA implementations can help deliver these results. Business benefits such as cost containment, profitability, and regulatory compliance are the byproducts of a successful implementation.

For those organizations and managers considering SOA as a possible strategic business and IT direction, it is strongly recommended that appropriate business and technical council be sought before moving forward. These strategies require evaluation in the context of the specific business environment and the particular implementation context. Appropriate business and technical counsel as well as employee buy-in are as important to achieving the SOA promise as is the benefit of having real-world tested blueprints and implementations.

The Sageza Group, Inc. 32108 Alvarado Blvd #354 Union City, CA 94587 650·390·0700 fax 650·649·2302 London +44 (0) 20·7900·2819 Milan +39 02·9544·1646