Get Serious About SOA Governance: A Five-step Action Plan for Architects

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Introduction

Whether your organization’s service-oriented architecture (SOA) has 50 services being used by one customer, or 50 customers using one service, you need SOA governance; increased business agility depends on it. SOA governance provides the ability to quickly and continuously translate and transmit business strategy and requirements into the processes, policies, and controls that will guide the evolution of your infrastructure and your enterprise.

Failure to provide effective SOA governance exposes your organization to serious risks resulting from

- Insufficient adoption of services
- Fragmented approaches to SOA
- Resources wasted on services that can’t be reused
- Rampant and redundant service creation across siloed SOA initiatives
- Ineffective communication of priorities and best practices
- Cultural resistance to change

For any organization that has adopted SOA as its primary approach to enterprise architecture, governance becomes the conduit that connects and aligns corporate, IT, and business unit objectives. For these organizations, effective governance ensures that communication, collaboration, and the two-way flow of information keep SOA initiatives and investments inextricably connected to the enterprise to deliver sustainable business value.
Critical Role of the Architect

The success of a governance initiative rests on the shoulders of the architect, and you’ll need to play several roles, including strategist, communicator, and enforcer. This white paper describes five key practices to take into consideration as you help your organization achieve SOA success. There’s more to SOA governance than these five practices, but they provide a solid foundation upon which to grow and extend your SOA capabilities.

STEP 1—TRANSLATE THE VISION

Your job is to translate executive vision into corporate strategy by building a reference architecture and implementation road map to achieve your business goals. This process flow should include checkpoints and controls to ensure governance requirements are met at each stage of the implementation process. It is essential to communicate that strategy to the various stakeholders through guidelines and policies that extend into the lifecycle. Make sure that everything from high-level metrics to detailed best practices is accessible to everyone—from executive to developer. Implement processes and technologies to break down barriers and establish a collaborative environment. SOA is a dynamic, more-organic environment. Continuous, closed-loop communication is important for the ongoing refinement of your strategy and road map.

STEP 2—SET AND ENFORCE A STRATEGY

Support your strategy by creating standards, policies, and process gates to ensure projects meet requirements before they are funded. Collaborate with your team, publishing best practices in a central repository along with the appropriate standards. You also need to provide guidelines for prioritizing service requests; for example, a service that could be used by multiple applications should have priority over one that can only be reused once or twice. Reward compliance with funding; you might, for example, use the calculated reuse percentage as a basis for rewarding achievement. Also, if developers aren’t following a certain policy, find out why, and share information with them to determine if the policy is applicable.

STEP 3 - ESTABLISH AND MAINTAIN SOA VISIBILITY

Because SOAs are dynamic, you’ll need continuous information about what’s going on at runtime to avoid so-called ivory-tower syndrome and to make good decisions. With constant analysis, you can get a clear view of what’s really going on—as opposed to what you expected. Don’t try to do this using a
heap of spreadsheets. You’ll need an automated and structured tool for SOA monitoring, enforcement, traceability, and compliance. Use this information to support a product lifecycle approach, complete with a versioning strategy, service retirement, and upgrade path, to minimize disruption to your customers.

**STEP 4 - SUPPORT INNOVATION AND PROTECT PERFORMANCE**

A well-managed SOA nurtures innovation by providing an environment in which services and systems can be used in creative, unanticipated ways, such as in mashup applications, which can provide unexpected business value. Effective governance must balance this flexibility with system performance through continuous monitoring to proactively address potential performance issues. In addition to monitoring, security measures can control access to services to guard against accidental overload and performance degradation. Don’t overlook security as a critical component of effective SOA governance.

**STEP 5 - TRACK AND PROMOTE SOA SUCCESS**

Good SOA governance depends on a steady stream of information up and down the value chain. Communicate goals and progress to all stakeholders to help ensure both top-down and bottom-up support for the SOA. Many organizations have found that it helps to provide a scoreboard to fuel momentum, demonstrate commitment to programs, and provide recognition of progress among stakeholders. For example, you might want to publish service reuse or uptime statistics on your public scoreboard to significantly improve future investment decisions.

**Conclusion**

SOA has entered the mainstream, and many organizations have begun reaping the rewards of their transformation efforts. Most organizations, however, face significant challenges along the path to SOA, their efforts complicated by a confluence of cultural, organizational, and technological challenges. These are symptoms of ineffective or altogether absent governance. Organizations that enact effective SOA governance possess the processes, policies, and measurements to prevent, correct, and prevail over these issues.

As the architect, you have a critical role in your organization’s SOA success and governance should be a top priority—without it, you will fail. The five practices presented in this white paper are key to any SOA governance program.

For more information on SOA governance and on Oracle’s SOA governance solution, please visit oracle.com/technologies/soa/soa-governance.html.