CONSULTING SERVICES

TIBCO SOA Governance Best Practices: An Introduction

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HIGHLIGHTS:

The information described here is part of a series of introductory best practices reports for deploying a successful SOA. Other TIBCO reports in this series include:

- TIBCO Service-Oriented IT Organizational Structure Best Practices: An Introduction
- TIBCO SOA Project Organization, Staffing and Funding Best Practices: An Introduction
- TIBCO Services Life Cycle Best Practices: An Introduction
- Designing Services in an SOA Using TIBCO BusinessWorks

This document introduces the SOA governance issues and provides an overview of an SOA governance model.

This series is part of a larger in-depth set of best practices that support TIBCO's proven delivery methodology, the TIBCO Accelerated Value Framework, which is used by our TIBCO Professional Services Group to help our customers minimize risks, accelerate delivery and enable a quality integration and SOA strategy and deployment.

Contact TIBCO Professional Services Group for more details on the topics presented in this report and to find out how we can help you develop and deploy an SOA that best meets your unique requirements and environment.

SOA Governance Issues in Traditional IT Organizations

There are a number of issues with traditional IT organizations that prevent them from being able to manage and govern IT effectively. In the SOA model, business services and related reusable integration components are new categories of IT assets and they are not owned by individual business units, application development, or other IT group. Traditional IT governance is based upon an ownership model and this cannot support an SOA strategy long-term. In SOA, services are developed as sharable, reusable packages of business functionality. Once these components begin to be reused and development picks up, the inadequacies of traditional IT governance becomes apparent.

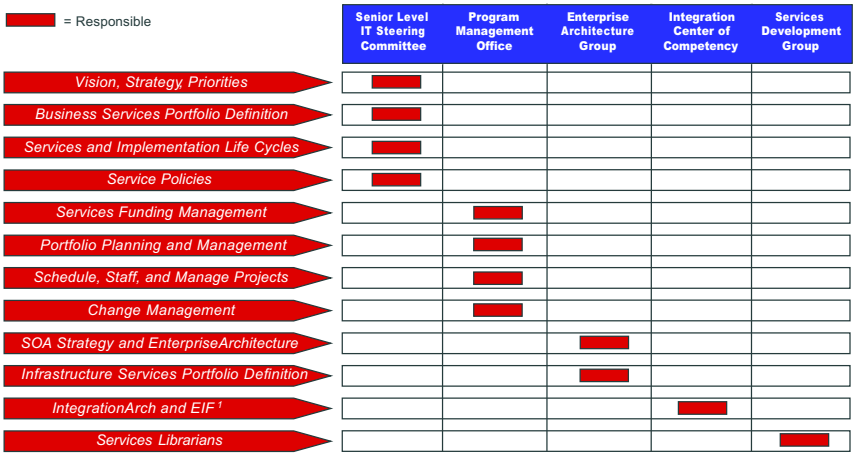
Figure 1.
Governance Issues Related to Traditional IT Organizations

Central IT Must Play Key Role in Services Governance

The benefits of evolving to an SOA will not materialize unless IT's structure and processes adapt to the new category of assets that business services and enterprise integration offer. More centralized oversight and governance is one of the required changes.

Figure 2 presents the key governance areas within a service-oriented IT organization and the groups that are typically responsible for them. This is not an exhaustive list of activities and groups - only those that are key to effective SOA governance.

Figure 2.
Key SOA Governance Areas



[1] EIF - Enterprise Integration Framework - SOA and integration technical standards, best practices, design patterns, tools and other reusable components.

SENIOR LEVEL IT STEERING COMMITTEE

Research by MIT and others has demonstrated that a strong governance model is a key differentiator between organizations that get the most from their investments in IT and those that don't. As Forrester notes, "A central component to a strong governance model is a powerful and effective IT steering committee." This committee is led by central IT, but has participating representatives from each business unit and application development group, as well as the enterprise architecture group.

- **Vision, Strategy, Priorities**. One of the primary roles of this committee is to develop the SOA and enterprise integration vision, strategy and priorities and to educate IT and the business with regards to them, thus setting the tone for the organization to think about SOA and what it means to the organization. The governance aspect of this relates to the need to ensure that the organization is evolving according to the vision, strategy and priorities set forth.
- **Business Services Portfolio Definition**. The steering committee ensures that the portfolio of business services meets the needs of services users, manages the evolution of these services, and (in coordination with the program management office) keeps the business and IT stakeholders informed of the status of enhancement requests, plans and schedules.
- **Services and Implementation Life Cycles**. These life cycles dictate how services and implementation projects are delivered – from conception to approval, budgeting, working with the business on requirements and processes, and through to project closure and update of tactical and strategic plans, etc. In order to ensure effective life cycles, input, buy-in and participation of multiple IT and business groups is required. All of these groups should have representatives on the senior level IT steering committee.

  The senior level IT steering committee is responsible for specifying and ensuring adherence to the services and implementation life cycles. However, the enterprise architecture group and services librarians play a gatekeeping (i.e. governance) role within each of these life cycles.
- **Service Policies**. The senior level IT steering committee works with the various IT and business groups to specify and govern service policies.

PROGRAM (OR PROJECT) MANAGEMENT OFFICE

- **Services Funding Management**. The program management office uses its enterprise scope, and project and application portfolio management authority, to ensure that business services get the funding and the support levels they need.
- **Portfolio Planning and Management**. This topic refers to governing the portfolio of projects and applications on the SOA and integration roadmap.
- **Schedule, Staff, and Manage Projects**. The program management office takes the lead in scheduling, staffing, and managing projects.
- **Change Management**. Change management refers to how changes to a shared business service are requested by a business unit or application development area, how these requests are evaluated, and what options are available if a change cannot be accommodated. Change management applies to functional changes as well as changes to service level agreements (SLAs). Releases of services are scheduled and announced so that projects can anticipate them and modify their schedules accordingly.

ENTERPRISE ARCHITECTURE (EA) GROUP

- **SOA Strategy and Enterprise Architecture**. EA champions and governs the SOA strategy and enterprise architecture. EA is also responsible for promoting strategies to address redundancies and gaps, and mediating between business unit and enterprise needs.
- **Infrastructure Services Portfolio Definition**. EA ensures that the portfolio of infrastructure services supports the integration and SOA vision and strategy as well as current and planned projects, manages the evolution of these services, and (in coordination with the program management office) keeps stakeholders informed on the status of enhancement requests, plans and schedules.

INTEGRATION COMPETENCY CENTER

- **Integration Architecture and EIF**. The Integration Center of Competency (ICC) champions and governs the integration architecture (within the larger context of the enterprise architecture set forth by EA) and ensures compliance to it and related standards, best practices, design patterns, tools, and other reusable components of the EIF.

SERVICES DEVELOPMENT GROUP

- **Services Librarians**. The services development group maintains the catalog of services. It implements and maintains service repository tools, builds consensus around service publication to establish corporate policies and standards, enforces policies and standards for service publication, fosters communication between service producers and consumers and develops mechanisms to monitor service usage and reuse.

Governance Processes and Procedures

Processes and procedures, and related collateral (document deliverable templates/examples, checklists, forms, etc.) need to be defined for the following:

1. Each governance area shown in Figure 2
2. Each phase of the implementation project life cycle
3. Each activity of the services life cycle
4. How implementation project teams will be formed
5. How metrics will be collected and analyzed to measure governance and organizational effectiveness

Existing methods should be reviewed and a gap analysis performed to determine what's missing and/or won't work for SOA. Based upon the results of this analysis, processes, procedures, and collateral should be modified or developed to meet the needs of the organization. These need to be tailored to the organization, environment, culture, business/IT strategy, etc. There is certainly no "one size fits all" in this area. Some organizations have a culture of very detailed procedures, while others have a culture and attitude that higher level and looser processes work well.

Enterprise Integration Framework (EIF) Governance

An enterprise integration framework consists of SOA and integration technical standards, best practices, design patterns, tools and other reusable components. EIF governance is performed by the Integration Competency Center (ICC) and is critical to enabling effective usage and reuse of integration and SOA components. Benefits of effective EIF governance include:

- Promotes consistency, repeatability, lower costs
- Accelerates delivery of solutions
- Facilitates adoption of technology, standards and best practices
- Enables stakeholders to more easily identify the benefits of the technology
- Improves development of integration skills and experiences
- Enables new approaches to application / business functionality design
- Promotes shared use of new technology capabilities across multiple business areas and project teams
- Provides foundation that facilitates capturing of ROI measurements

There are five areas of EIF governance that the ICC is responsible for: 1) ownership 2) application 3) compliance 4) maintenance and evolution 5) distribution.

EIF OWNERSHIP

Some group must have ownership of adding, updating and improving EIF components proactively and based upon feedback and lessons learned from project teams.

EIF APPLICATION

EIF application is about ensuring that upfront design and architectural activities select the optimum components of EIF for use on each project and include these in its architecture and design documents. The ICC should have a review body and methods in place to make sure that this is happening effectively.

EIF COMPLIANCE

EIF compliance is ensuring that the EIF components selected for use on a project are applied correctly and most effectively. Processes should be in place to make sure this happens for not only in-house development efforts, but those performed by third parties as well.

EIF MAINTENANCE AND EVOLUTION

Governance is not just about determining applicability of standards and ensuring compliance. It must also include an effective method of maintaining and evolving the EIF. Feedback and lessons learned from completed projects must be incorporated into existing EIF components and newly developed components that have reuse potential must be cultivated and then harvested for reuse by project teams across the organization.

EIF DISTRIBUTION

Finally, there must be an effective method of distributing and ensuring quick and easy access to all elements of EIF by the project teams across the organization that require them.

For More Information

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