### **SOA Blueprint**

A structured blog by Yogish Pai

The SOA evolution model helps enterprises develop a roadmap to achieve their target state.

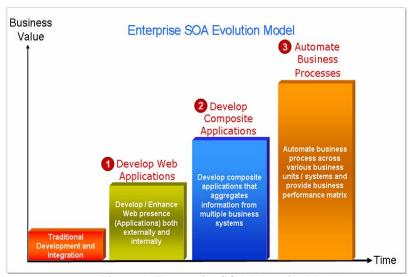


Figure 1: Enterprise SOA Maturity Model

The above diagram illustrates the stages of the enterprise SOA maturity model.

# **Web Application Development Stage**

At this stage, teams focus on providing rich client and browser-based business solutions to both internal and external users. They might choose to roll out web-enabled CRM, ERP, or custom applications that support connected and occasionally disconnected operations. In addition, IT organizations typically deploy enterprise-based solutions and services such as content management, search, instant messaging, blogs, Wikis, discussion forums, and white boards.

## **Business Requirements**

Typically most enterprises would have already deployed external web sites as well as multiple internal web sites and applications to support the diverse needs of each of the business units. The first step is to standardize, share, and integrate these siloed solutions through an infrastructure that provides a common look and feel. This makes it easier for customers, partners, and employees to find the information they are seeking.

During this phase, the team should focus on:

- Unifying user experience on the external site, making it easy for potential users, partners, customers, and analysts to find information they need
- Standardizing the look and feel across all sites (internal and external) as well as across
  processes and procedures for publishing content
- Creating one my<company name> such as <a href="http://my.company.com">http://my.company.com</a>, site for all employees, contractors, partners, customers to personalize services and content
- Providing secure access to confidential information for all internal and external sites
- Providing a highly reliable, available, and scalable environment
- Enabling the site operations with AJAX to increase performance and user experience.

### **Key Challenges**

The key challenges for this phase include development of:

- Application support escalation path
- Support for numerous parallel activities
- Leadership and technical quality of team
- Physical environment for development through production, with release management processes and skilled staff resources
- Dedicated production support processes and staffing
- Hosting.

### Exit Criteria

The team can consider this phase complete when:

- External web site is up and running
- Portal front end has been developed for one or more packaged applications
- One or more custom applications is accessible through the portal site
- Most enterprise services have been deployed
- Business users can request information from multiple applications
- Establishment is complete for the program management office (PMO) and and LOB governance model for deploying application portals
- Business has confidence in delivery timeline and consistently approaches the program office for all major initiatives.

### Success Factors

This phase is successful if:

- Business involvement at LOB level is high
- Sponsorship/executive oversight has been established for all composite applications
- Web-based applications can be rapidly developed and delivered
- Project management is in place, and the team has leadership and a sense of urgency and direction
- Processes have been standardized across the LOB for development, deployment, and status reporting
- The team has developed identified and created experienced resources.

## **Develop Composite Applications**

Composite applications aggregate and provide information and data from a variety of sources and channels, and make them available to internal and external users as appropriate. Enterprise Mashup and Web 2.0 services can provide appropriate levels of SLA.

### **Business Requirements**

The business requirement is for IT to adapt to changing business needs. Several business units may approach IT to develop custom applications, enhance their own branding, increase productivity, or provide additional information to their customers, partners, or employees.

Business requirements may include:

- Branding and exposing multiple applications through the portal
- · Accessibility of information from multiple applications
- A web-based desktop for users
- Personalized service based on roles and responsibility of the user
- A single standardized look and feel, which can reduce user training requirements
- Reduced maintenance costs from standardizing on one platform
- Reduced operations and support cost, to enable IT to deploy scarce resources for new functionality.

### Key Challenges

The key challenges for this phase include development of:

- Application support escalation path for shared services
- Support for numerous parallel activities across multiple LOBs
- Governance for shared services
- · Leadership and technical quality of team
- Physical environment for development through production, with release management processes and skilled staff resources
- Dedicated production support processes and staffing
- Hosting.

### Exit Criteria

This phase is complete when:

- A Program Management Office (PMO) has been created that spans multiple LOBs, and an enterprise-wide governance model for deploying shared services has been established
- Business has confidence in delivery timelines, and uses the program office for all major initiatives
- Multiple deployed application portals leverage the SOA foundation
- Business units debate integration timeframes for applications or data.

### Success Factors

This phase can be considered a success when:

- Business involvement and sponsorship, including executive oversight, is in place for all composite applications
- The team has developed a rapid development and delivery approach
- Project management has developed leadership, a sense of urgency, and direction
- Processes for development, deployment, and status reporting have been standardized across the enterprise for shared services
- The company has developed experienced resources in agile (parallel development) methodology.

### **Automate Business Processes**

This is the stage where the applications, data, and infrastructure help users to perform their roles effectively by providing the right information at the right time. At this stage, the enterprise can start achieving higher ROI by consolidating multiple business systems into a single system. Business organizations should now be ready to abandon their point solutions and transition to the target state of end-to-end business process management.

### **Business Requirements**

The basic requirements for this phase are as follows:

- Business is interested in standardizing the business process across the enterprise
- Infrastructure is consolidated on standards-based technology, reducing costs
- Standardize globally the business processes and provide capability to modify them locally to meet their objectives.

### **Key Challenges**

The key challenges for this phase include:

- Accomplishing business and IT transformation
- Establishing appropriate governance and organization models
- Implementing packaged applications for perceived short-term gain.

### Success Factors

This phase is successful when:

- Business involvement and sponsorship and executive oversight enable both business and IT transformation
- A dedicated team focuses on business processes
- Business process is the primary focus for the enterprise
- Remix existing services to provide new business functionality

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