

SOA and the Next Generation of Business Infrastructure



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Agenda

- Introduction
- Preliminaries
- SOA Standards
- SOA in the Enterprise
- Business Optimization
- Summary, Questions, References



Introduction

- Who am I?
 - Consulting enterprise architect
 - Elected to OASIS Technical Advisory Board
 - Skilled at building standards and products from ideas to adoption
 - Business, marketing, and technical background



Preliminaries

- What is SOA?
- SOA Acceptance Accelerating
- ROI from SOA
 - You don't buy SOA, you *do* SOA
 - Not a product, but an approach to problems



What is SOA?

- “**Service Oriented Architecture (SOA)** is a paradigm for organizing and utilizing distributed **capabilities** that may be under the control of different ownership domains.” [OASIS SOA RM]
- Much more to explain services, capabilities, visibility...
- Practical application is more concrete
 - Binding, assembly, policy, deployment
- Not merely Web services
 - Thomas Erl calls that view *false SOA*



Service Orientation Isn't New

- Services and composition are not new
 - Services architectures decades old
- Service composition hasn't solved all our problems
- Hard problems in factoring and composition
 - Granularity suited to problem and implementation
 - Many choices, many optimizations
- Services require marshalling, unmarshalling, and messages
 - Performance always an issue



SOA Acceptance Accelerating

- Value:
 - Assemble, Aggregate, Repurpose/Reuse
 - Business value, not just technology
- Intersection of
 - Business Process Modeling
 - Need for agile business products
 - Need for more effective development
- Real near-term business value
 - Easier to sell than long-term benefit



ROI from SOA

- Coarse-grained services easier to assemble
 - Also fewer XML/web interfaces required
 - May be easier to repurpose/reuse
 - May be harder to adapt
- Cost of design for repurpose/reuse << Business value for repurpose/reuse
- Pace of business innovation faster



SOA Standards

- Assemble, Aggregate, Repurpose
- OASIS SOA Reference Model TC
- New OASIS Service Component Model TCs, Member Section
 - Simpler component creation and assembly
 - Submitted by Open SOA (osoa.org)
 - Duane Nickull podcast in references



SOA in the Enterprise 1

After Anne Thomas Manes, Burton Group

- SOA Today:
 - Using SOA Technologies for integration
 - Standardizing on runtime infrastructure
 - Adopting enterprise architecture perspective, planning, governance



SOA in the Enterprise 2

- Future of SOA
 - Delivering strategic value
 - Flexible and adaptive systems
 - Supplanting current systems
 - Accelerated innovation
 - Self-optimizing systems
 - Improved business value
 - Simpler management



Business Optimization

- Which kind of optimization?
- EERP as an enabler for optimization
- Business value



Which Kind of Optimization 1

- Self-optimizing can mean many things
 - Increased efficiency
 - Improving performance and agility
 - Continuous business process improvement
- Configuration and optimization to increase business value
 - Policy and assembly instead of coding
 - Innovations are coming in automated improvement
 - Craft components to allow optimization



Which Kind of Optimization 2

- Optimization of
 - Software (assembled components)
 - Reassembly for improved *business* performance
 - Business Quality of Service
 - Intended to address business issues with technical solutions
- Dynamic improvement vs. static configuration
 - Runtime behavior (long and short term) as input
 - Enable self-optimization
- A new way of improving business apps



Business Value

- Best of Breed / Best Value
- Runtime management and monitoring
- Early detection of problems
- Avoid lock-in
- Use business criteria for optimization



EERP—Optimization Enabler

- Framework for optimization
- What are the [business] metrics?
- How can change improve value?
- Competition for components
 - An old dream
- Compose and reconfigure for business value



Summary

- SOA mindset to enhance business value
- Easier composition improves value
- Next generation will enable optimizations
- Keep an eye on
 - Service Component Architecture
 - EERP and optimization enablers



Questions

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References 1

- Information, free newsletter signup at www.CoxSoftwareArchitects.com
- Anne Thomas Manes,
SOA: Recommendations and Next Steps,
infoworld.com/event/soa/docs/SOA_Next_Steps.pdf
- OASIS SOA Reference Model
See www.oasis-open.org/committees/soa-rm/
- OASIS Service Component Architecture TCs
see www.oasis-opencsa.org/committees



References 2

- Duane Nickull, Jeff Mischkinisky podcasts on SCA—see oasisopencsa.org/resources
- Thomas Erl, www.SOAbooks.com, various titles, Prentice-Hall books, 2006-2008. See especially *Principles of Service Design*
- Andy Lee, EERP Tutorial, linked from oasis-open.org/events/symposium/2007/proceedings.php

