

Surviving the SOA Hype Storm

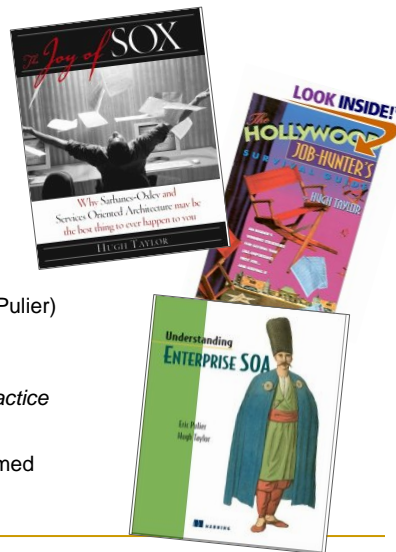
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VP of Marketing Communications, SOA Software

About Me

- VP MarCom at SOA Software
- MBA
- Industries worked in:
 - Enterprise Software
 - Website development
 - Printing
 - Entertainment
- Author of 4 books:
 - *Understanding Enterprise SOA* (with Eric Pulier)
 - *The Joy of SOX*
 - *Hollywood Job Hunter's Survival Guide*
 - *Event-Driven Architecture: Theory and Practice*
- Why I am telling you this:
 - I have seen several industries be transformed (and traumatized) by technology shifts



First, What is “Architecture” in the IT World?

- “Urban Planning” might be a more apt metaphor
- Like Urban planners, a lot of IT Architects deal with fixed assets that are too expensive to replace

It's the art of the possible (and the budgetable)

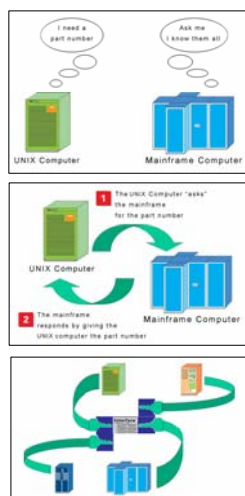
While Manhattan might be the ideal...

You're stuck in Beantown...



Slide 3

What is SOA? First, Understand “Tight Coupling”



- Data and functionality typically resides on more than one system (and application)
- Applications need to be able to “talk to each other”
- Status quo: Proprietary or custom communication interfaces between applications

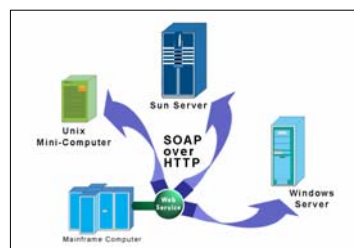
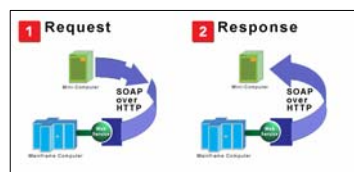
Slide 4

Problems with Tight Coupling

- There is nothing inherently wrong with tight coupling. However:
 - It's costly to maintain
 - Slow and costly to change
 - Cost and complexity compounded by multi-party scenarios such as B2B or integration with the public sector
 - Cost and complexity of managing and changing a tightly coupled architecture translates into IT being a drag on business agility (IT can't keep up with business needs, but it's not their fault)
- Recognized for many years as a challenge the industry wanted to solve
- Many previous attempts to create an SOA
 - CORBA
 - COM
 - EAI
- Reasons they did not work
 - Lack of open standards
 - Proprietary components

Slide 5

SOA: The Ideal of Open Interoperability (Loose Coupling)



SOA – A Definition

- An IT architecture composed of software that has been exposed as “Services” – i.e. invoked on demand using a standard communication protocol.
- “Web Services” – software available as a “service” using Internet protocols.
- One software application talking to another using a standards-based (i.e. non-proprietary) language over a standards-based communication protocol.
- Universal “Dial Tone” between software applications
- An IT architecture that enables “loose coupling” of applications

Slide 6

Core SOA terms

- **XML** – Extensible Markup Language
- **SOAP** – Simple Object Access Protocol
- **WSDL** – Web Services Description Language
- **UDDI** - Universal Description, Discovery and Integration
- **ESB** – Enterprise Service Bus

- Key Concepts
 - Service
 - Network Transparency
 - Virtualized endpoint
 - Self-describing software
 - Universally discoverable software
 - Universally understood software
 - Machine to machine interaction

- Just for added confusion: “Non-SOAP” Web services
 - ACORD XML
 - ebXML

Slide 7

SOA: The Strategic Heart of Major Global IT Players’ Offerings

- IBM: WebSphere SOA Product Suite

- BEA: Aqualogic

- Oracle: Fusion Middleware

- Microsoft: .NET

- SAP: NetWeaver

Slide 8

How is SOA being used?

- Web 2.0
- B2B
- EDA
- EAI
- App to App (e.g. MS office)
- Government

Slide 9

Related, but different concepts

- “On Demand” business
- Software as Service
- Utility Computing
- Business Activity Monitoring
- Business Process Modeling

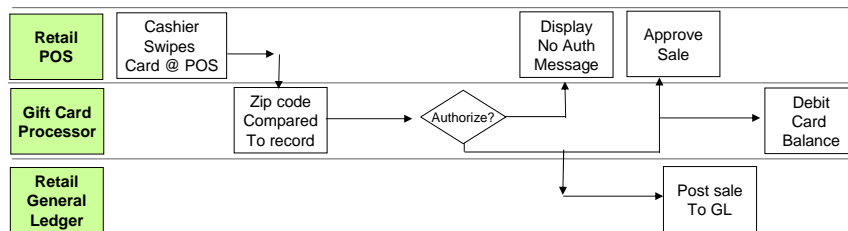
Slide 10

The Potential Benefit of SOA

- Deeper connection between business managers and IT – BPM and SOA create unified language for communicating and executing IT requirements
- Cost effective B2B commerce with agility
 - Faster integration with external partners
 - Ability to change partnerships in a faster cycle than existing technology would allow
- Less reliance on proprietary vendor technologies for maintaining IT architecture
 - Reduced IT cost
 - Increased IT flexibility and ability to serve business needs

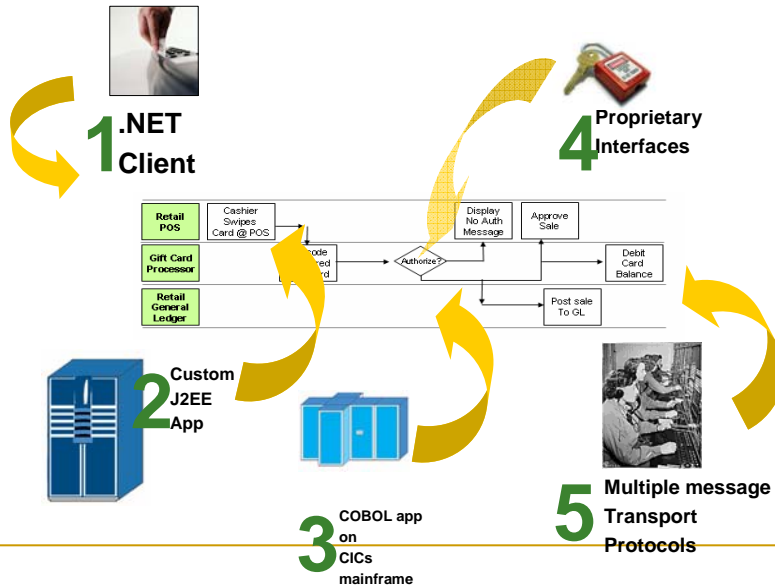
Slide 11

SOA Example – Gift Cards



Slide 12

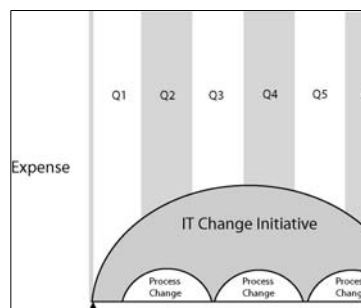
Tight coupling ties down the business process



Slide 13

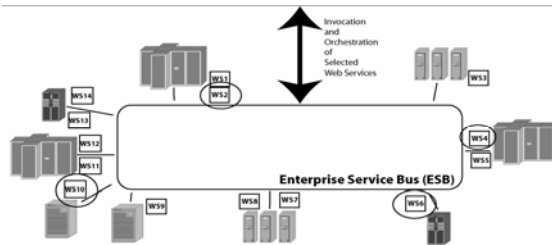
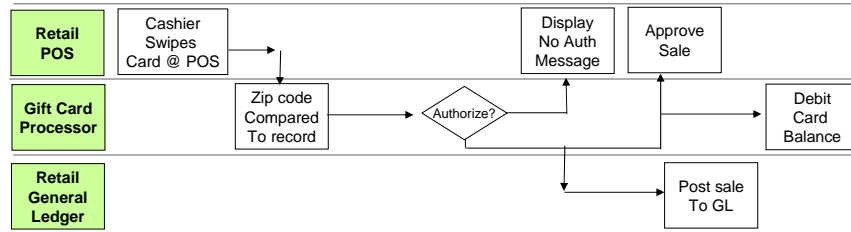
IT Often Cannot Keep up with Business Process Change

- Change cycle for IT may be slower than business strategy demands for process changes
- And,
 - Who's in charge when there are multiple businesses involved? (Hint, it helps to be huge)
 - Who sets the standards?



Slide 14

How SOA Can Improve a Tight Coupling Situation



- IT assets tied to business processes seamlessly and dynamically
- Elimination of proprietary interfaces
- **Agility**

Slide 15

Some Business-Related Thoughts on SOA

- SOA has the potential to drive you out of your silo
- SOA can give you more dynamic control over the IT function as it supports your business
- SOA can give you a more direct and dynamic ability to model business process and map those processes to the underlying IT assets that support them
- SOA can connect you with partners and other stakeholders more easily (that's a good thing, right?)

Slide 16

Let's Get Right to the "But"

- In a profound sense, the industry hype about SOA is actually true.
 - It does work
 - It is being used in major deployments
 - It does cut costs and enable agility
 - It's an incremental shift that is possible to adopt without scrapping earlier IT efforts

■ But,

It ain't that simple

Slide 17

Reality Check

- SOA does not make politics go away
- Your IT organization still has to master it
- SOA does not make data labeling incompatibilities go away
- Your management still needs to know how to make the most out of IT – SOA won't magically make them smarter
- Governance is a major challenge
- Vendors are pushing ESB as a cure all
- Security can be a big issue
- Vendors may not necessarily cooperate in an effort that commoditizes their products
- Vendors may be embedded in your organization, rendering some of the theoretical benefits of SOA moot
- Getting started with SOA may require longer and more expensive project cycles the first time around
- Some SOA standards are still immature, leading to confusion and vendor-driven proprietary creep



Have I
got a
technology
paradigm
for you!

Slide 18

Some Questions

- It SOA a strategic shift of just a change in the nuts and bolts?
- What is the scale of a such a transformation?
- What opportunities does SOA provide to business and public sector?
- Will SOA provide the vehicle for a more rapid shift of Internet applications to the mobile space?
- Is SOA the backbone of the realtime enterprise and the dawn of a volcanic shift, or is it just another expensive technological fad that will disappear into the woodwork?

Slide 19

www.soa.com

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