

# Surviving the SOA Hype Storm

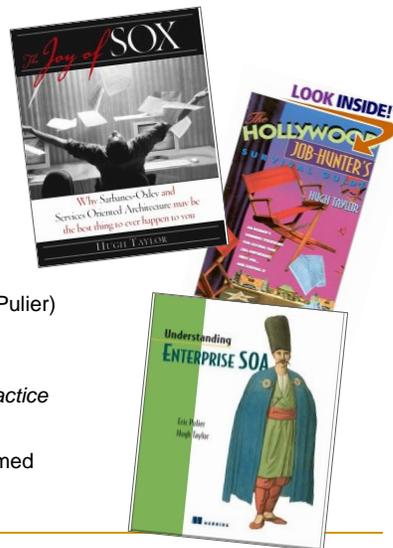
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## About Me

- 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)

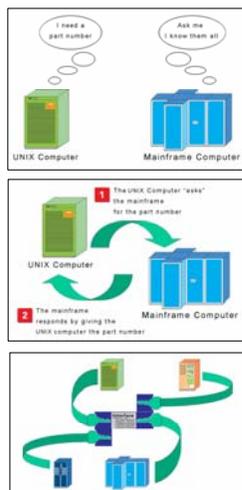
While Manhattan might be the ideal...

*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

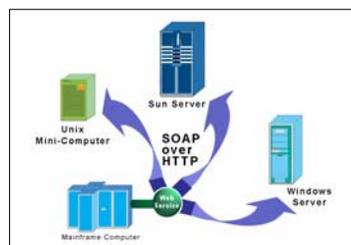
Slide 4

## 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

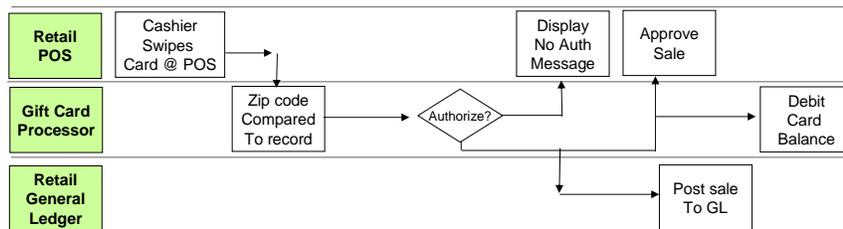
Slide 10

## 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

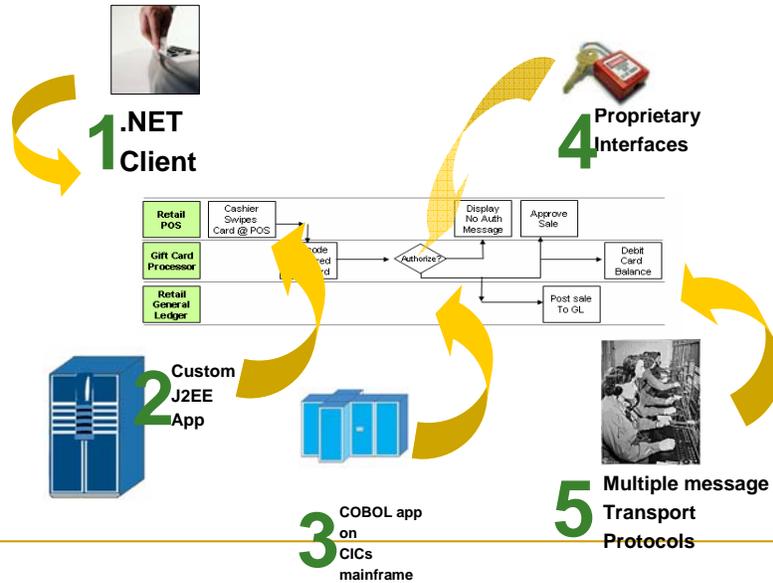
Slide 11

## SOA Example – Gift Cards



Slide 12

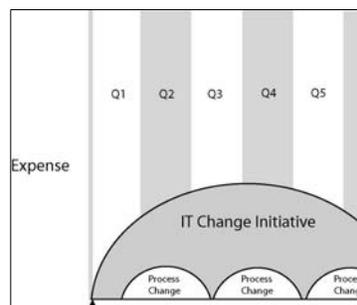
## Tight coupling ties down the business process



Slide 13

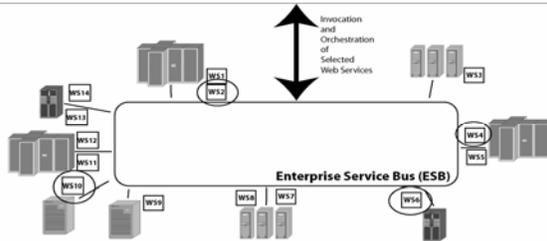
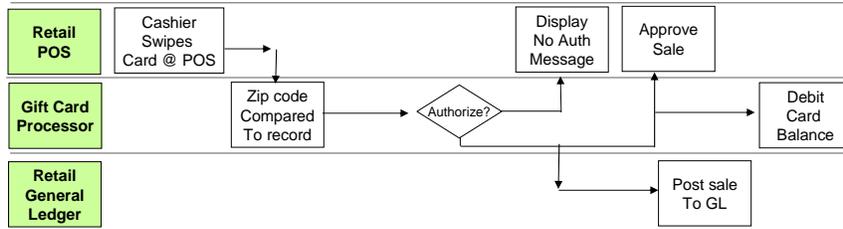
## IT Often Cannot Keep up with Business Process Change

- 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

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