

# Unlocking Mainframe Potential with SOA

Jason Bloomberg  
Senior Analyst  
ZapThink, LLC

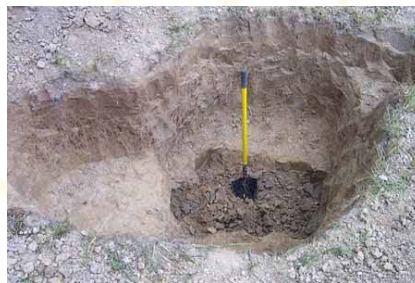
Take Credit Code: MAINPOT

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## If you are in a Hole, Stop Digging!



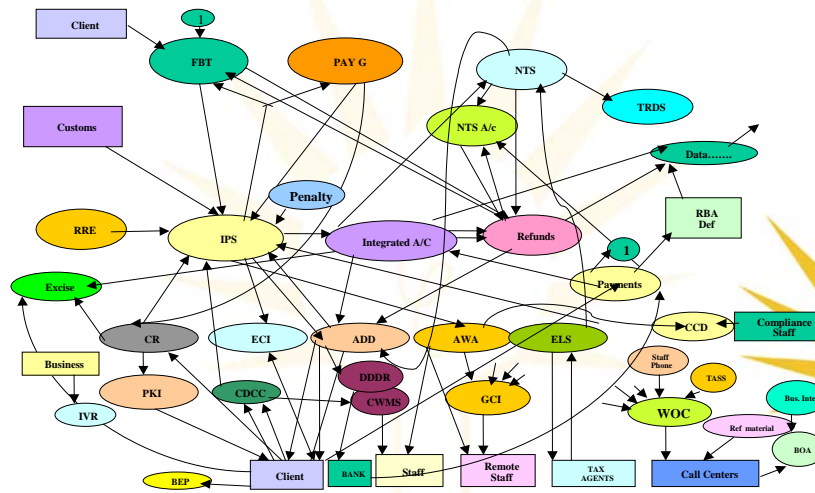
- IT Decision Making's Fatal Flaw:
  - Choice between "take some extra time & money and do it right" vs. "give me what I want the cheapest & fastest way" – guess which wins?
- Repeat enough times, leads to the IT "Rat's Nest"...

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## The IT "Rat's Nest"



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## The Business Inflexibility Trap



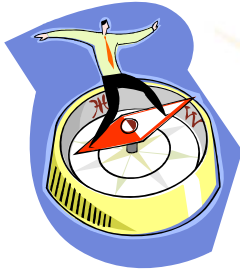
- *Inflexibility* is the Mother of All Business Problems
  - If you're flexible enough, you can solve all the other problems
- IT is an impediment to business change
  - It wasn't supposed to be that way!

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## Business Agility

- Companies require *Business Agility*...



- » Responding quickly to change,  
*and*
- » Leveraging change for  
competitive advantage

***Agility is the key to innovation***

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## The Continued Value of Legacy



- Definition of legacy:  
"anything that works"
  - Sometimes old, but not necessarily
- Expensive & risky to replace
  - Often contains mission critical business logic
- Expensive & risky to keep around
  - Maintenance consumes major portion of IT budget

***"Rip & Replace" rarely a viable option***

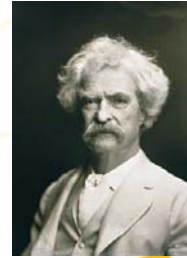
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## Mainframes Continue to be Important Assets

- Well understood levels of Quality of Service (QoS)
- Existing application capabilities
- Existing skill sets



***Rumors of the mainframe's demise have been greatly exaggerated!***

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## Problem: Mainframes Impede Agility

- For all the familiar reasons –
  - Lost source code
  - Unavailable experts
  - Proprietary technologies
  - Spaghetti code
  - ...



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## Legacy Modernization & Reuse

### Legacy Migration

- ✓ Retire legacy applications & systems
- ✓ SOA abstracts interface, easing replacement



### Legacy Enablement

- ✓ Expose legacy capabilities as Services
- ✓ Maintain value of legacy



### Legacy Rejuvenation

- ✓ Leverage mainframe as active SOA participant
- ✓ Extract additional value from legacy

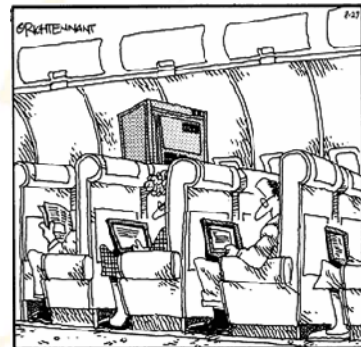
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## Legacy Migration

- Pros:
  - Reduces ongoing costs of maintenance
- Cons:
  - System still provides value
  - High cost and risk



"In preparation for takeoff, we ask that you turn off all electronic devices, laptop computers and mainframes ..."

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## Legacy Enablement

- Pros:
  - Lowers risk and cost of migration
- Cons:
  - Inflexible



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## Legacy Rejuvenation



- Pros:
  - Squeeze more value out of existing assets
  - Increases business agility
  - Non-invasive
- Challenge:
  - Requires new architectural approach to legacy

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## The New Role of Legacy

- Rethink the way existing IT assets can meet new requirements
- Leverage SOA to abstract legacy assets as Services



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## Introducing Service Mediation

- Translate between transport protocols (e.g., MQ to HTTP)
- Translate between message protocols (e.g., SOAP to "Plain old XML")
- Handle transformations on the fly
- Negotiate between different security domains (e.g., PKI to Kerberos using WS-Security)

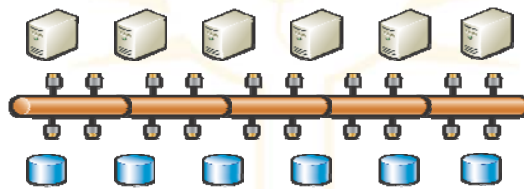
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## The Mainframe as Service Intermediary

- Introducing the mainframe "Service Bus"
  - Transformation engine to distributed environment
  - Standards-based interfaces
  - Support for multiple data sources



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## Mainframe as SOA Participant

- ✓ Mainframe as Service provider and Service consumer
- ✓ Mainframe Service Bus – Mainframe as Service intermediary
- ✓ Best of both worlds!
  - Mainframe QoS in a distributed, Service-oriented environment

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## Service Orientation: A Business Approach

- It's not about connecting things, it's about enabling business processes & continual change
- The core business motivation is business agility
- Rather than "rip and replace" old systems – make them work better together
- It's not about technology, integration, or middleware



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## Thrift: The New Normal

- SOA enables *thrift*: getting more value out of existing assets
  - Reduce the cost of integration
  - Squeeze more value out of legacy apps
  - Embrace heterogeneity
  - Increase business agility
- Wrapping as Web Services only the first step
- Enables "replace" without the "rip"



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## SOA – Is It Right for You?

- Rejuvenation of legacy assets
- Leverage mainframe QoS within SOA implementation
- Mainframe as first class SOA participant



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ZapThink is an industry advisory & analysis firm focused exclusively on Service-Oriented Architecture and Enterprise Web 2.0.

Read our new book, *Service Orient or Be Doomed! How Service Orientation Will Change Your Business.*



## Thank You!



Jason Bloomberg  
jbloomberg@zapthink.com

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