

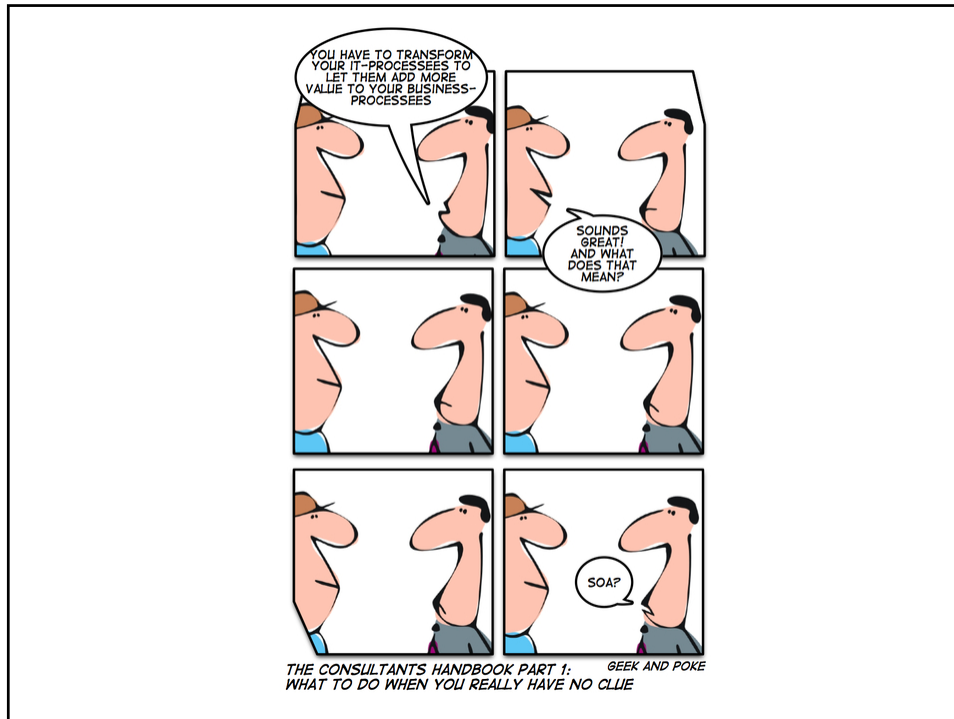
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Leveraging EA Concepts to Make Your SOA a Guaranteed Success

The Basic Idea

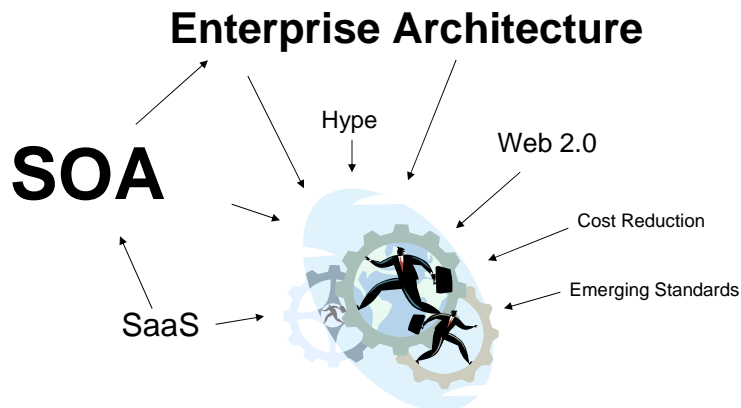
- SOA at a high level is well defined.
- However, the procedures, approaches, tools, technology, to-dos, and expected results are not.
- In this session we'll learn how to view your problem domain holistically, and how to break it down to its component parts, building it up again into a functional SOA that will pay for itself in the shortest period of time.



Current Issues

- Competing frameworks/approaches
 - Zachman Framework
 - Gartner/Meta Group
 - Open Group's TOGAF (SOA Reference Architecture)
 - Vendors (IBM, Oracle, BEA, etc.)
 - Roll-your-own
- Hype-driven confusion (e.g., "SOA 2.0")
- Lack of leadership
- Processes moving outside of the firewall
- Departments operating independent of oversight
- More enterprise applications are Web-delivered
- Technology as a business advantage and cost saving mechanism

Understanding the Forces at Work



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EA and SOA...Let's Face Facts

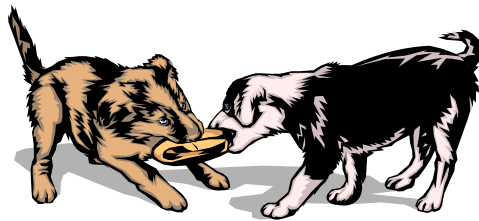
- There seems to be two worlds out there, the world of enterprise architecture and the world of SOA.
 - *“The funny thing is that those in each world thinks that they can do the other world's jobs.”*
 - *“The end result...there is not a lot of synergy there yet.”*



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More good news...

Some traditional enterprise architects have not done a stellar job in understanding the opportunities within SOA, **generally speaking**, and the SOA guys have not figured out how SOA meshes with existing enterprise architecture standards, notions, and practices, **again generally speaking**.



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State of Things

The survey was of 196 Information Technology (IT) decision makers.

"Indicators point to the fact that IT professionals **overwhelmingly support the SOA concept** with 56 percent reporting they **believe their company would benefit from a SOA**. Among those who have experienced a SOA implementation, 73 percent would **recommend other companies follow suit and adopt a SOA approach**."

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But, there is Reality

- Hype is huge, and management by magazine is the way of the world these days.
 - “I got to git me one of them SOAs”
 - “A SOA will fix that.”
 - “SOA 2.0”
- Bad practices:
 - Selecting technology before understanding your requirements and needs.
 - Not linking back to accepted EA best practices.
 - Not creating a business case.
 - Using the wrong people.
 - Lacking funding and empowerment.

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So, Why SOA?

- Improved Adaptability and Agility
 - Respond to business needs in near real-time
- Functional Reusability
 - Eliminate the need for large scale rip and replace
- Independent Change Management
 - Focus on configuration rather than programming
- Interoperability instead of point-to-point integration
 - Loosely-coupled framework, services in network
- Orchestrate rather than integrate
 - Configuration rather than development to deliver business needs

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The Value Proposition of a SOA

- We implement SOA for two major reasons.
 - First is the ability to save development dollars through *reuse* of services.
 - Second is the ability *to change* the IT infrastructure faster to adapt to changing needs of the business, or *agility*.
 - Enhance, not replace, existing EA.

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Reuse... Yes Again

- Under the concept of service reuse, we have a few things we need to determine to better define the value. These include:
 - The number of services that are reusable.
Complexity of the services. The degree of reuse from system to system.
 - The ***number of reusable services*** is the actual number of new services created, or, existing services abstracted, that are potentially reusable from system to system.
 - The ***complexity of the services*** is the number of functions or object points that make up the service.
 - Finally, ***the degree of reuse from system to system*** is the number of times you actually reuse the services. We look at this number as a percentage.

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So, What do you Do?

- In order to determine their value we must first determine the Number of Services that are available for Reuse (NSR), the Degree of Reuse (DR) from system to system, as well as the Complexity (C) of each service.
- The formula to determine value looks much like this:

$$\text{Value} = (\text{NSR} * \text{DR}) * \text{C}$$



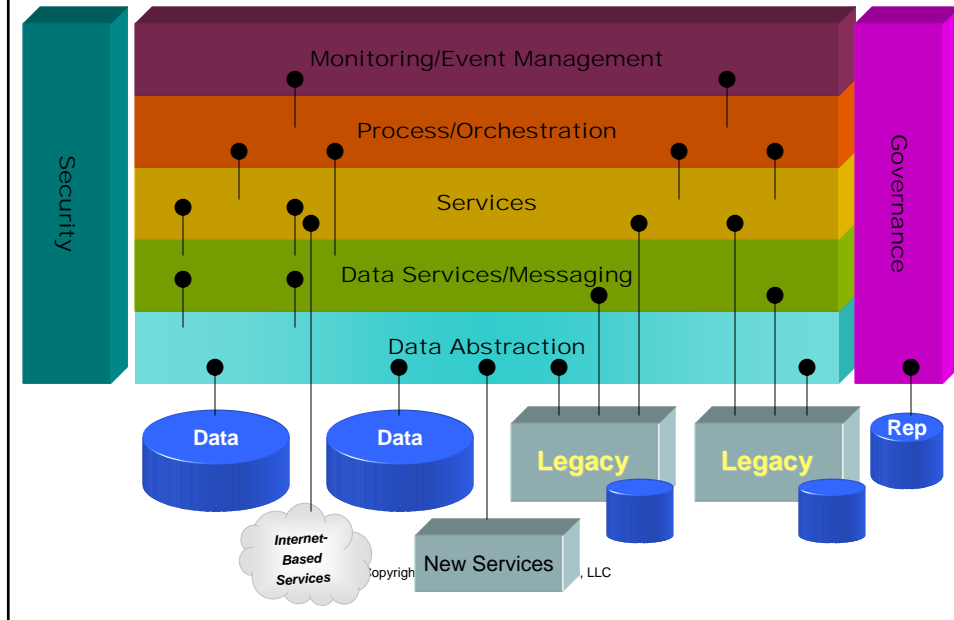
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SOA=Agility

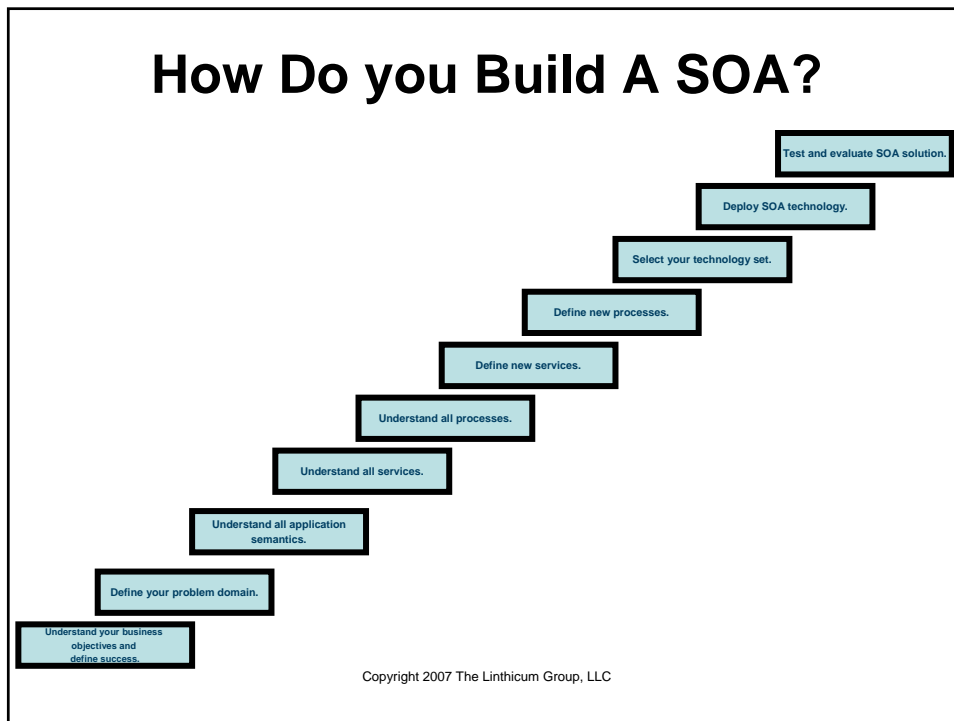
- **Agility is a strategic advantage that is difficult to measure in hard dollars, but not impossible. We first need to determine a few things about the business, including:**
- The ***degree of change over time*** is really the number of times over a particular period that the business reinvents itself to adapt to a market.
- The ***ability to adapt to change*** is a number that states the company's ability to react to the need for change over time.
- Finally, the ***relative value of change*** is the amount of money made as a direct result of changing the business.

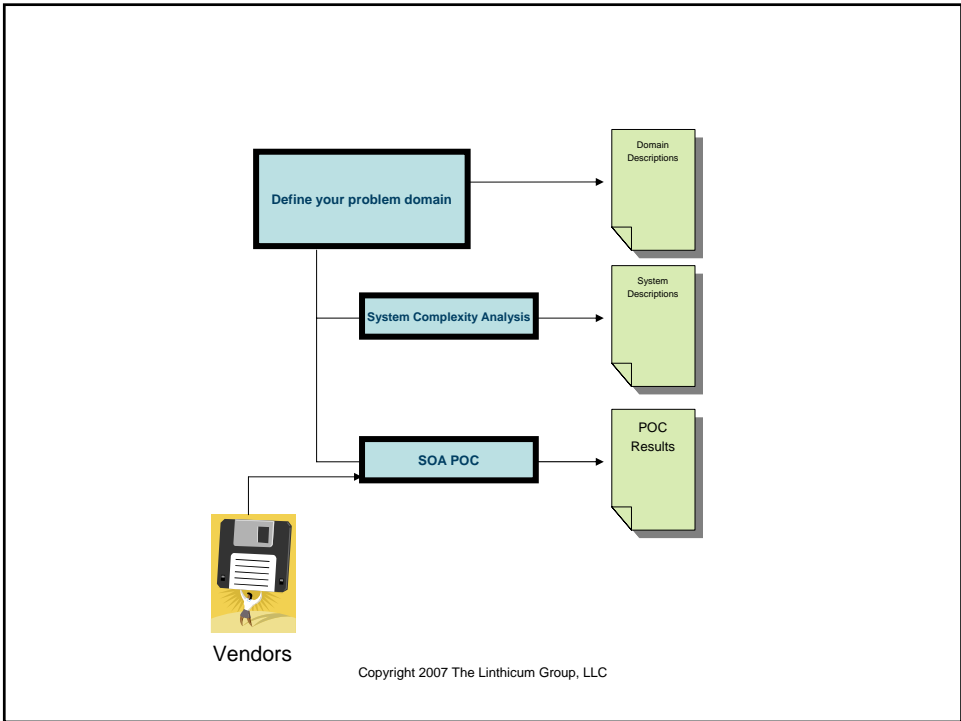
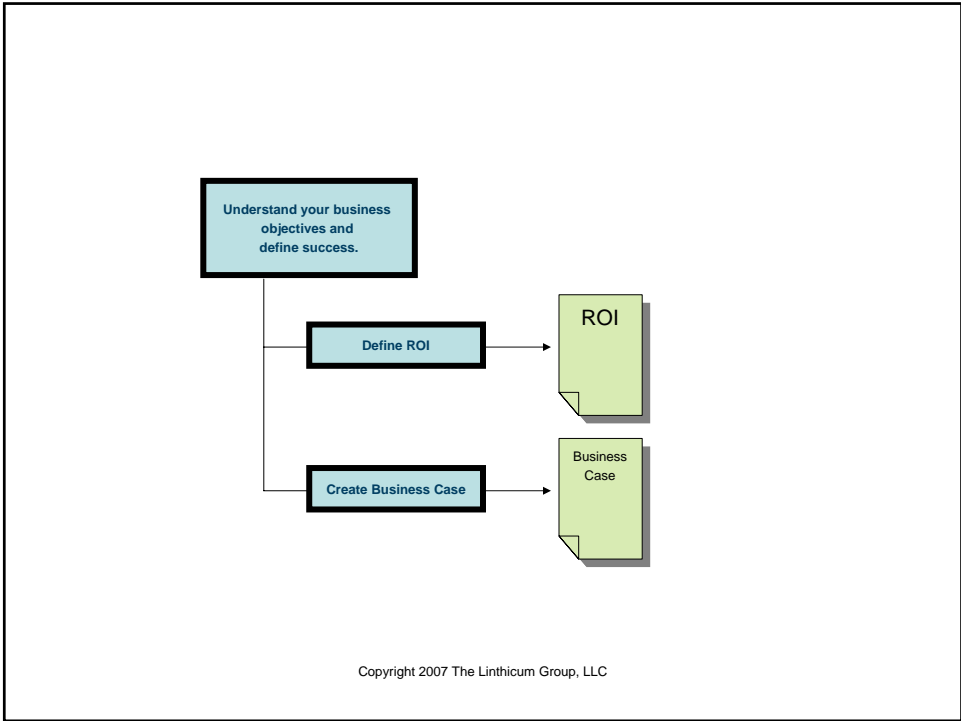
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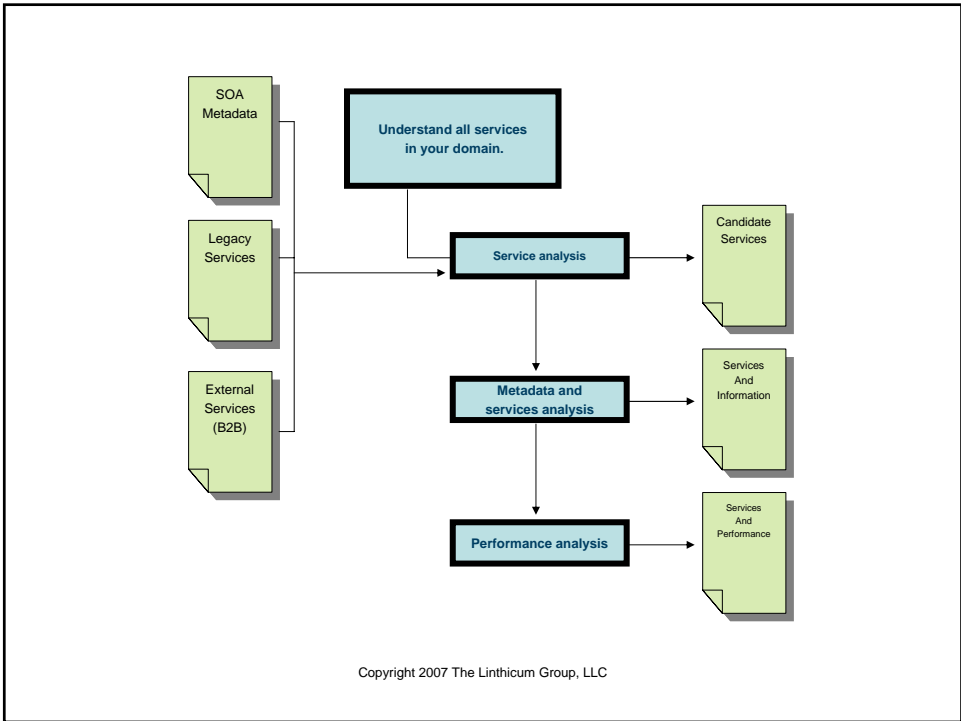
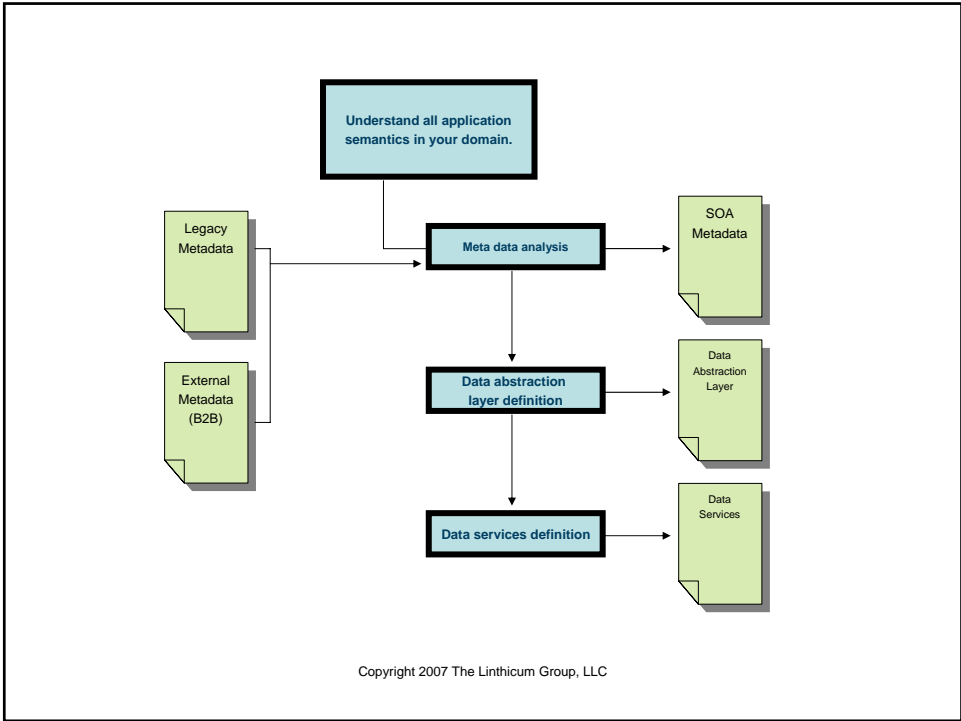
SOA Meta Model

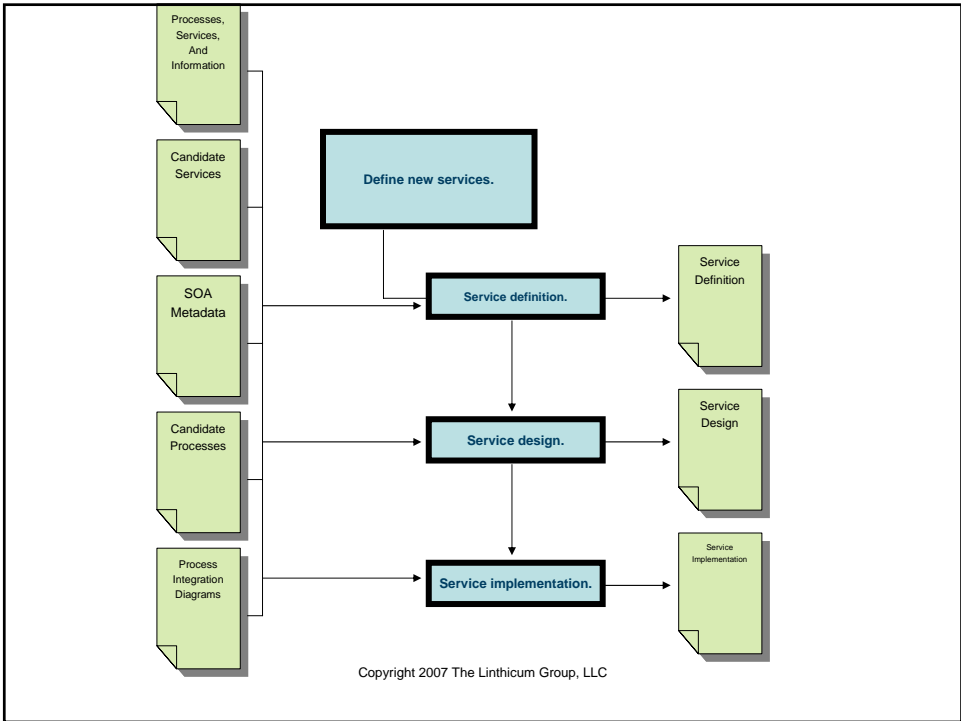
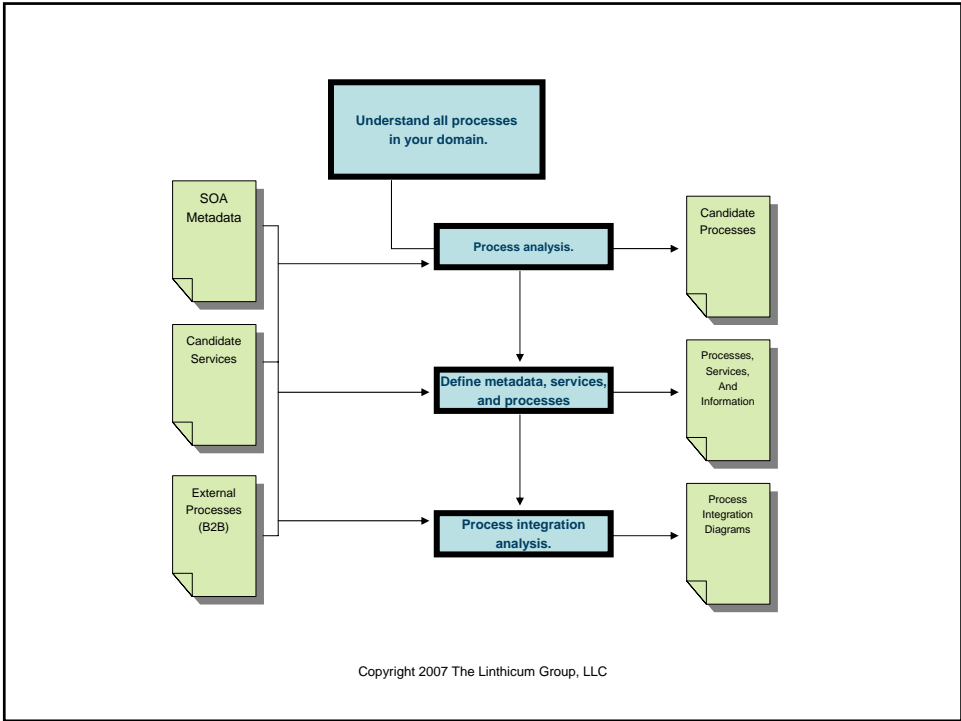


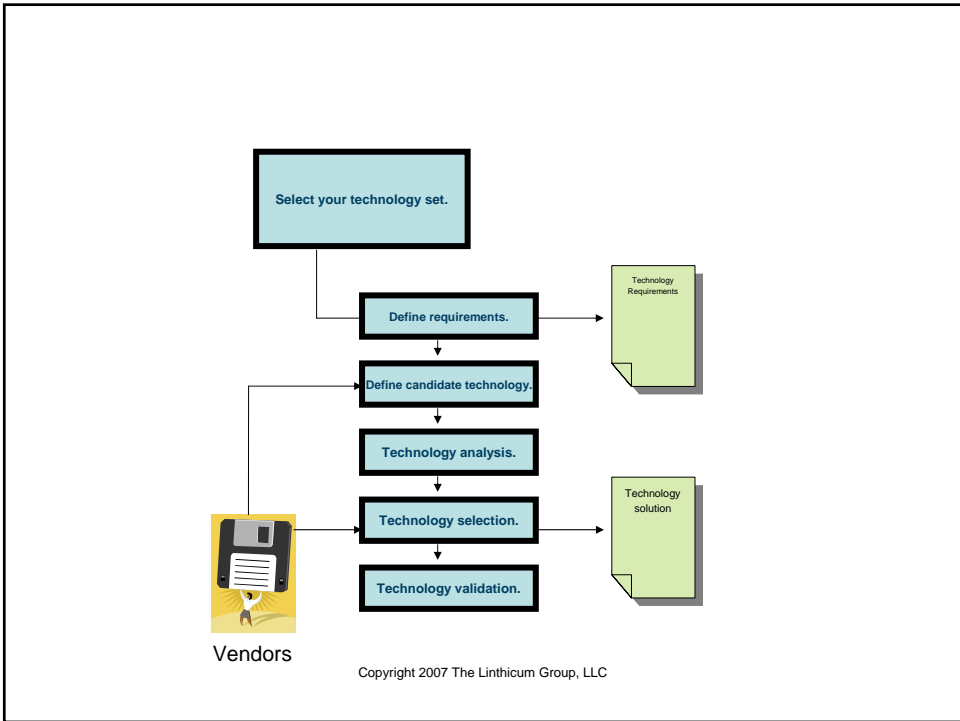
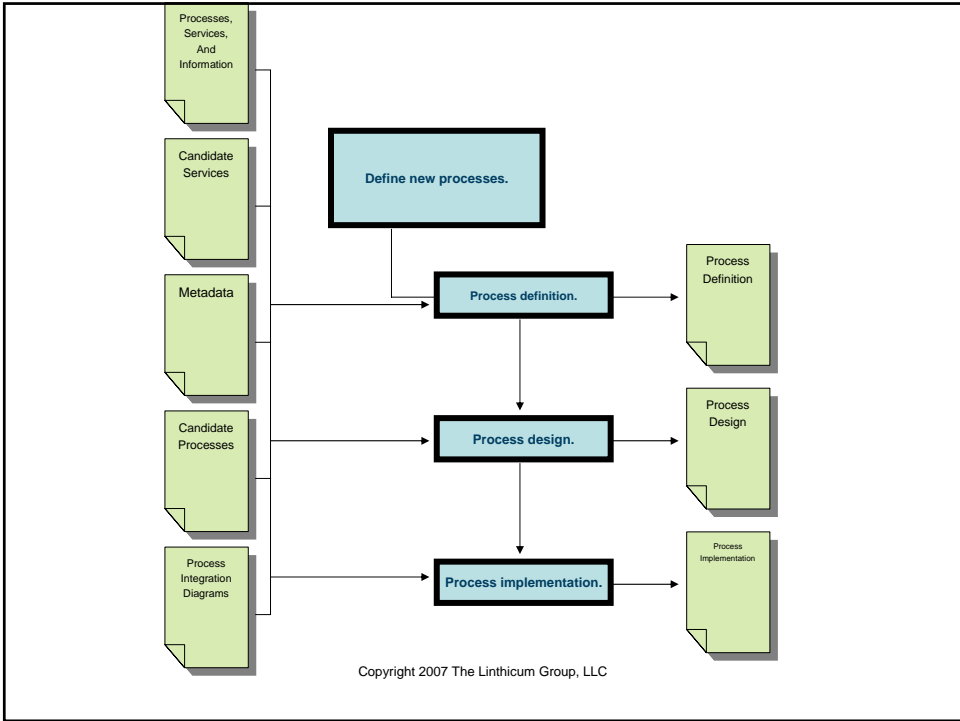
How Do you Build A SOA?











“SOA is Good EA...”

- Pay me now, or pay me later. Make sure you do it right the first time...get the help you need.
- Don't be afraid to experiment, and admit you're wrong...backup and try again.
- Keep your vendors working with you.
- Empower those working, so they can work to get things done. Avoid politics, if possible.
- Learn all you can, but don't get caught up in the hype.
- Put standards in their proper place.
- Small battles win the war...Keep that in mind.
- Give yourself plenty of time, never skimp on any of the steps.

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Thanks!

- Blogs:
 - eBizq.net “Linthicum Channel”
 - InfoWorld “Real World SOA”
 - Intelligent Enterprise “SaaS Advisor”
- Weekly Podcast
 - InfoWorld SOA Report
- Columns
 - Web Services Journal
 - eBizq.net



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