



Blue Mountain Labs

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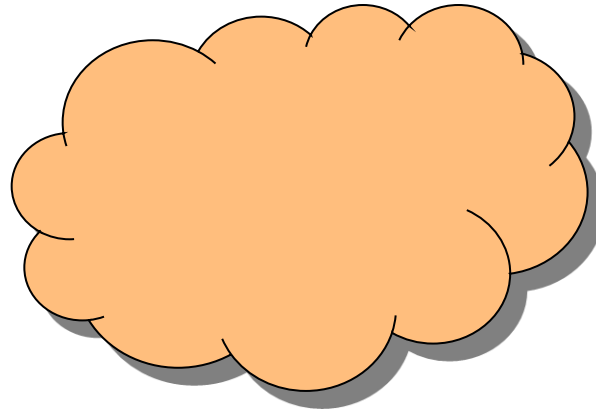
www.bluemountainlabs.com

The Cloud Computing Opportunity

David S. Linthicum



David S. Linthicum is an internationally known thought leader in the EAI, SOA, enterprise architecture, and cloud computing spaces. He is a sought-after consultant, speaker, and writer, and formed Blue Mountain Labs (www.bluemountainlabs.com), a leading consulting organization focusing the use of cloud computing within the enterprise. He is the former CEO of BRIDGEWERX, CTO of Grand Central Networks, as well as CTO of Mercator Software (now a part of IBM) and SAGA software (now a part of Software AG). In addition, Dave was an associate professor of computer science for eight years, and continues to lecture at major technical colleges and universities, including University of Virginia and Arizona State University. He keynotes at many leading technology conferences, and has several well-read columns and blogs, as well as a weekly Podcast. Dave has authored 10 books, including the ground-breaking "Enterprise Application Integration" and "B2B Application Integration."



“Cloud computing is a pay-per-use model for enabling available, convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, services) that can be rapidly provisioned and released with minimal management effort or service provider interaction. This cloud model promotes availability and is comprised of five **key characteristics**, three **delivery models**, and four **deployment models**.”

- NIST

NIST defines cloud computing as a set of characteristics, delivery models, and deployment models

5 Characteristics

- ▶ *On-demand self-service*
- ▶ *Ubiquitous network access*
 - ▶ *Resource pooling*
 - ▶ *Rapid elasticity*
 - ▶ *Pay per use*

3 Delivery Models

- ▶ *Software as a Service (SaaS)*
- ▶ *Platform as a Service (PaaS)*
- ▶ *Infrastructure as a Service (IaaS)*

4 Deployment Models

- ▶ *Private Cloud*
- ▶ *Community Cloud*
- ▶ *Public Cloud*
- ▶ *Hybrid Cloud*

Commercial Cloud Formation



Amazon Elastic Compute Cloud (Amazon EC2) - Beta



TAP INTO THE POWER OF NETWORK.COM



MOSSO the hosting cloud



IaaS



Amazon Elastic Compute Cloud (Amazon EC2) - Beta



MOSSO
the hosting cloud

PaaS



SaaS

salesforce.com
Success. Not Software.®

 NETSUITE

Microsoft

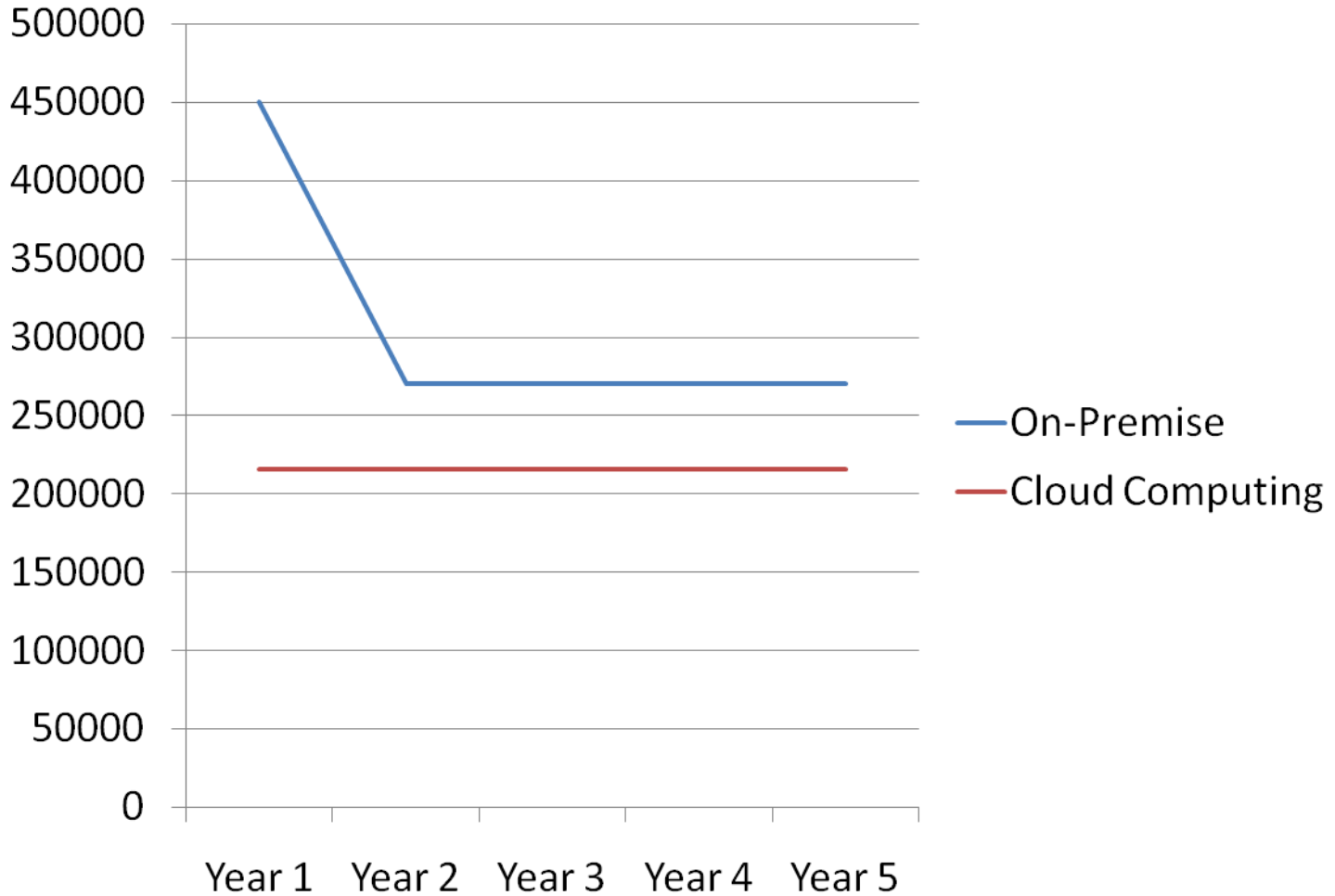
Google™

IT is Skeptical

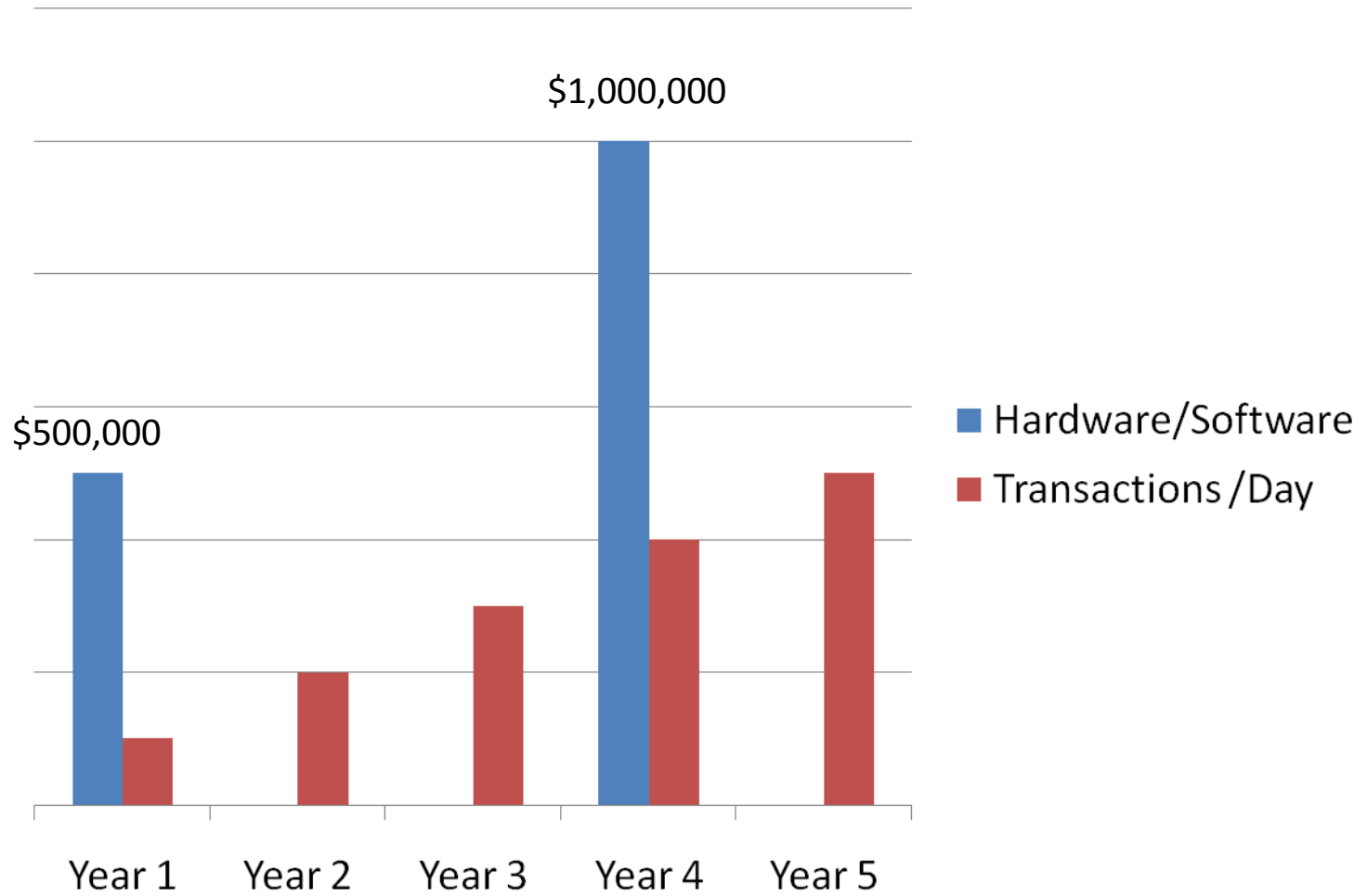


- Enterprise IT is understandably skittish about cloud computing.
- However, many of the cloud computing resources out there will actually provide better service than on-premise.
- Security and performance are still issues.

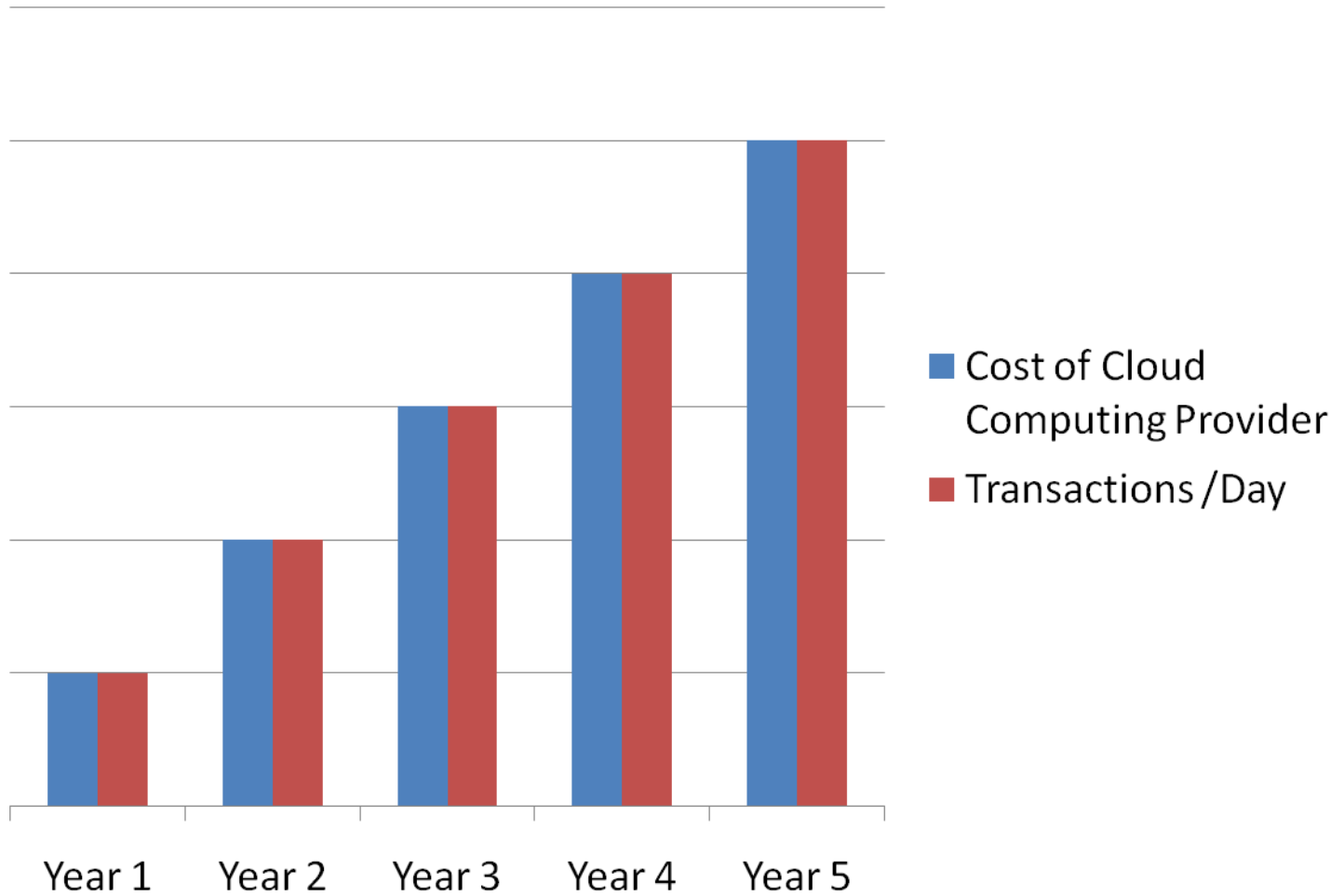
Making the Business Case



On-Premise



Cloud Delivered



However, Not So Fast



- Not all computing resources should exist in the clouds.
- Cloud computing is not always cost effective.
- Do your homework before making the move.

When Cloud Computing may be a Fit

- When the processes, applications, and data are largely independent.
- When the points of integration are well defined.
- When a lower level of security will work just fine.
- When the core internal enterprise architecture is healthy.
- When the Web is the desired platform.
- When cost is an issue.
- When the applications are new.

When Cloud Computing may not a Fit

- When the processes, applications, and data are largely coupled.
- When the points of integration are not well defined.
- When a high level of security is required.
- When the core internal enterprise architecture needs work.
- When the application requires a native interface.
- When cost is an issue.
- When the application is legacy.

Core Opportunities for Systems Integrators

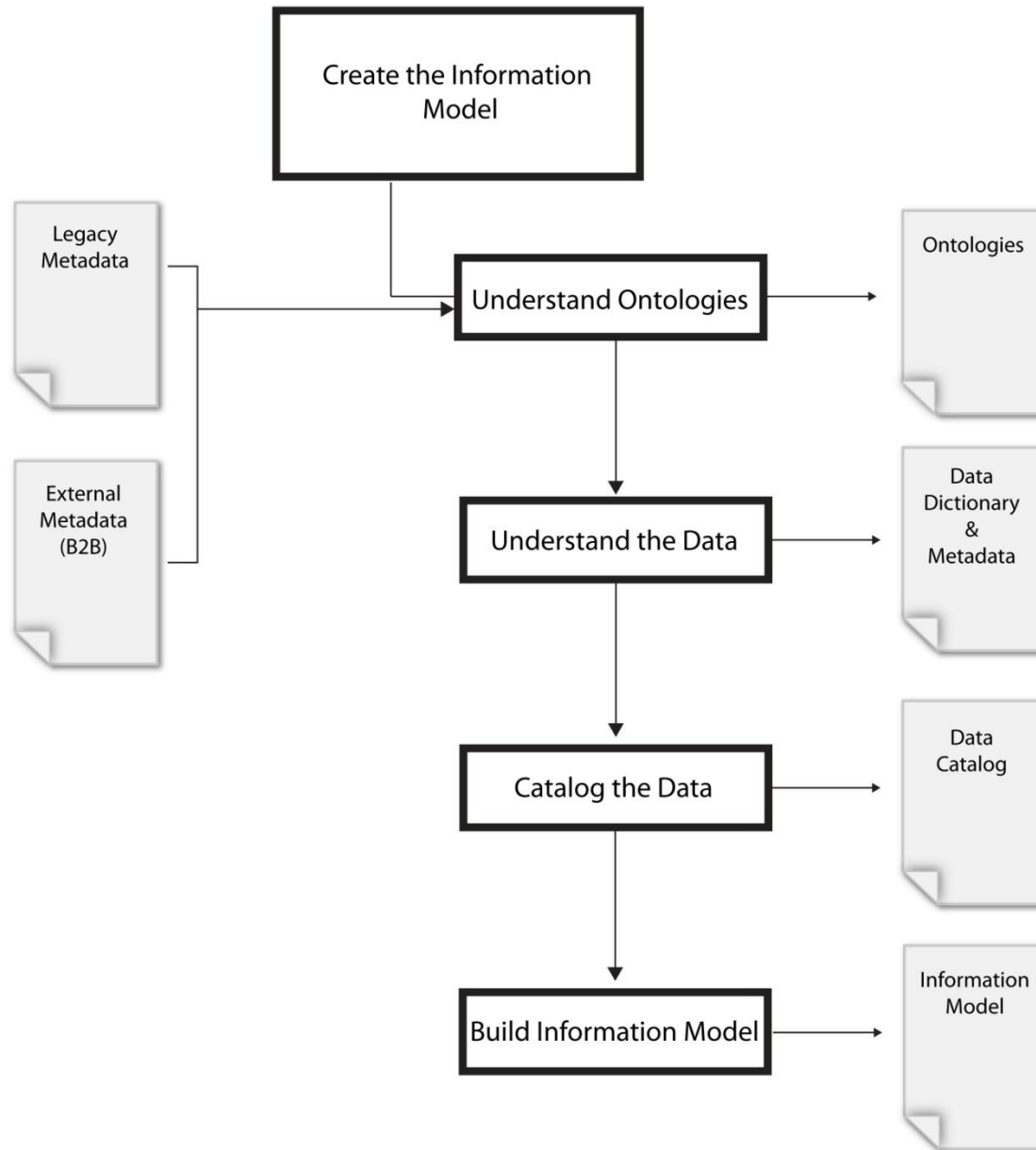
- Migration strategies
 - Creating the “vision”
 - Business case assessments
 - Migration planning
 - Security
 - Governance
 - Performance
 - Provider evaluations
 - Testing and acceptance
- Provider development

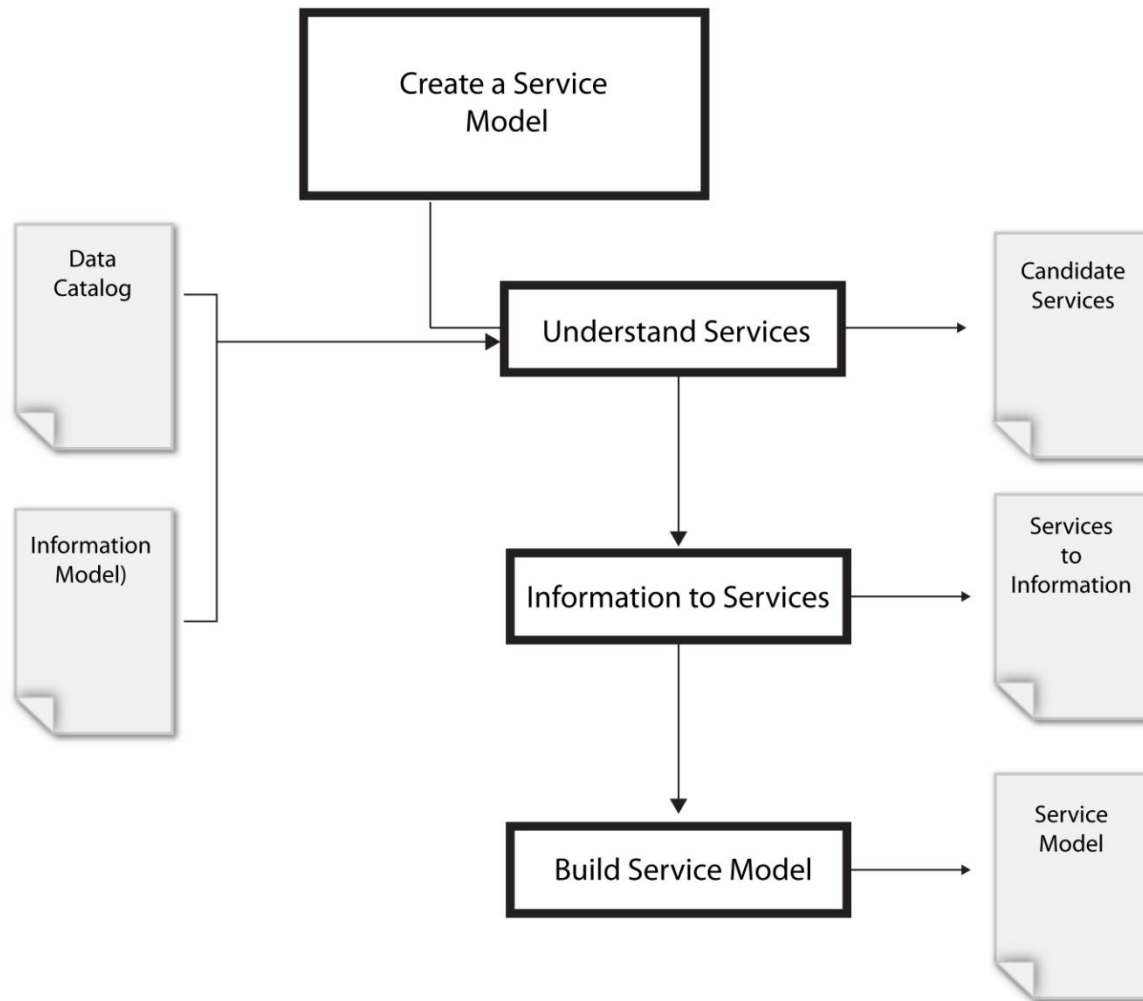
Start with the Architecture

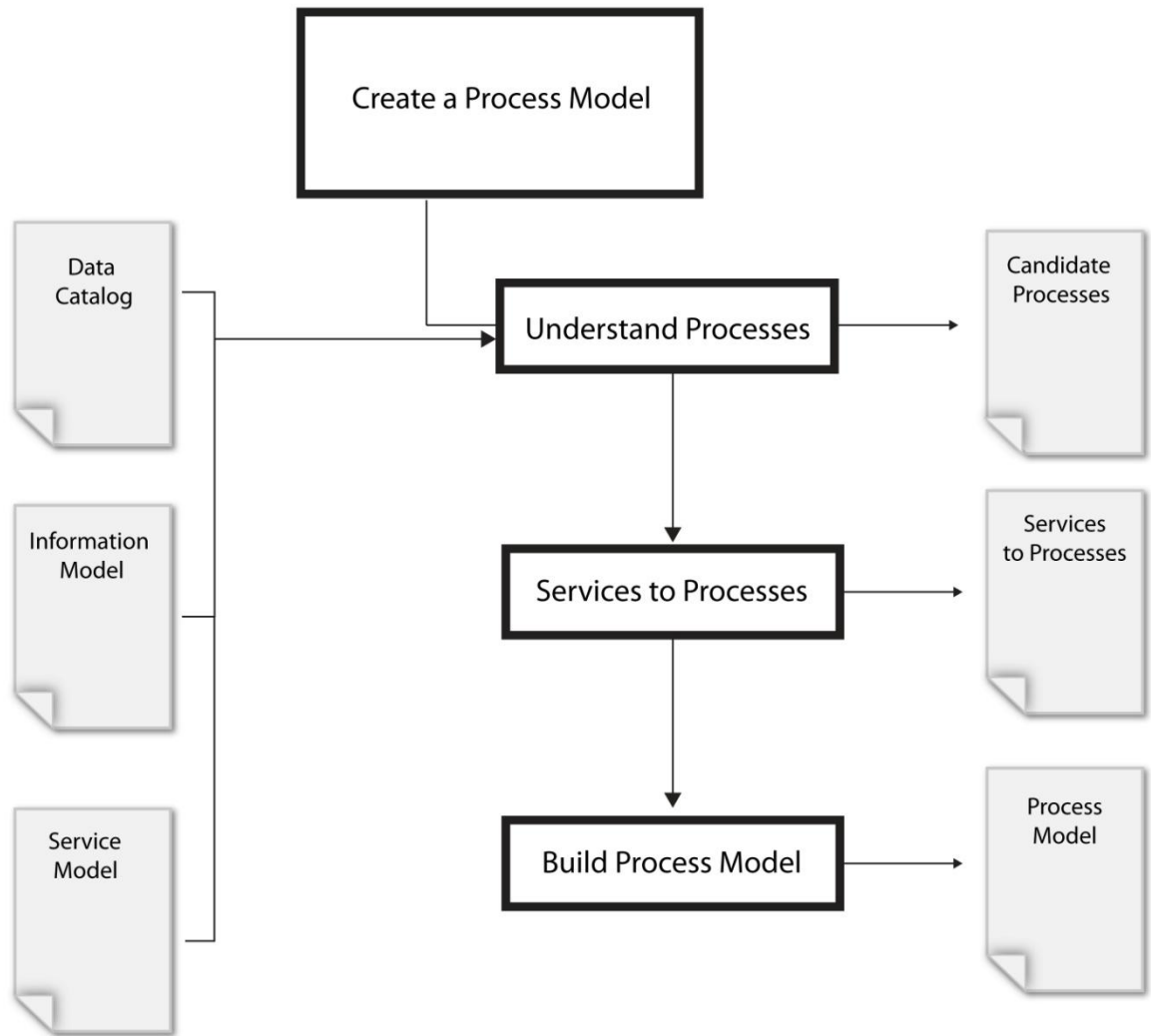


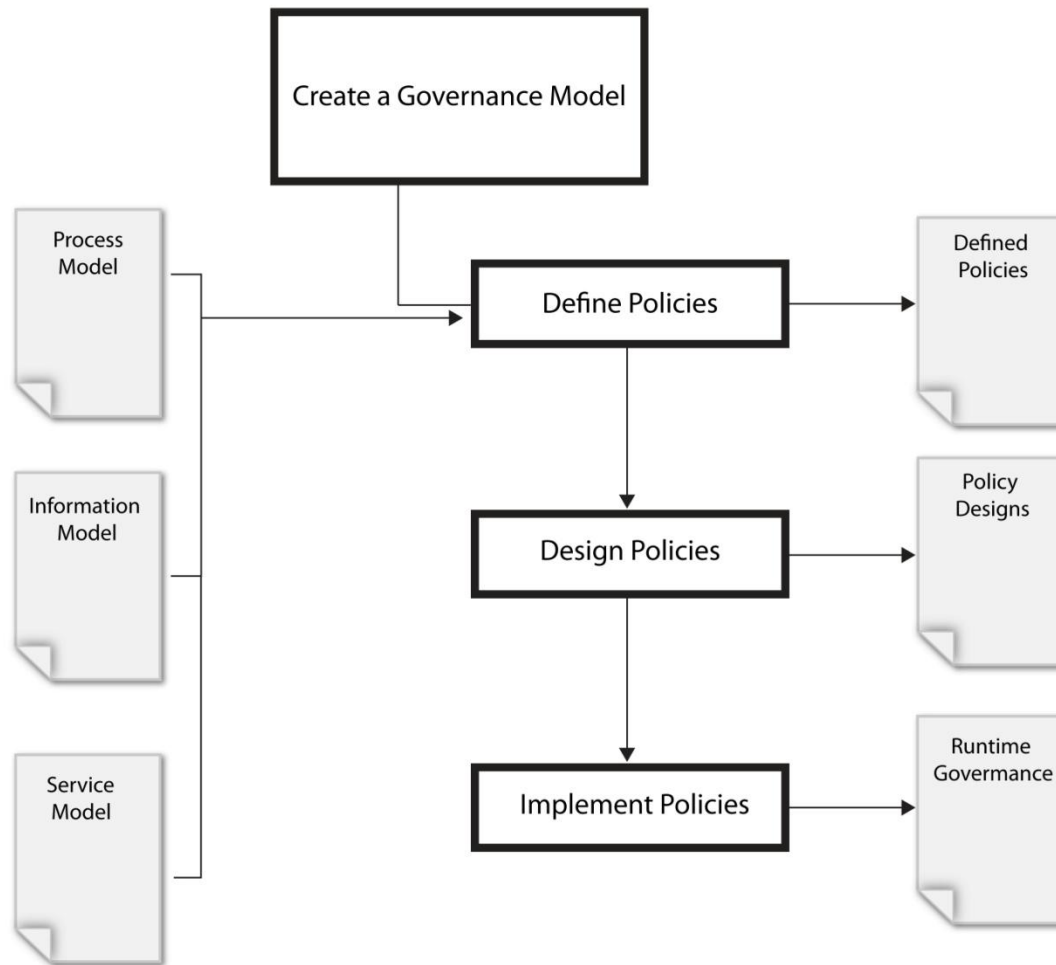
Understand:

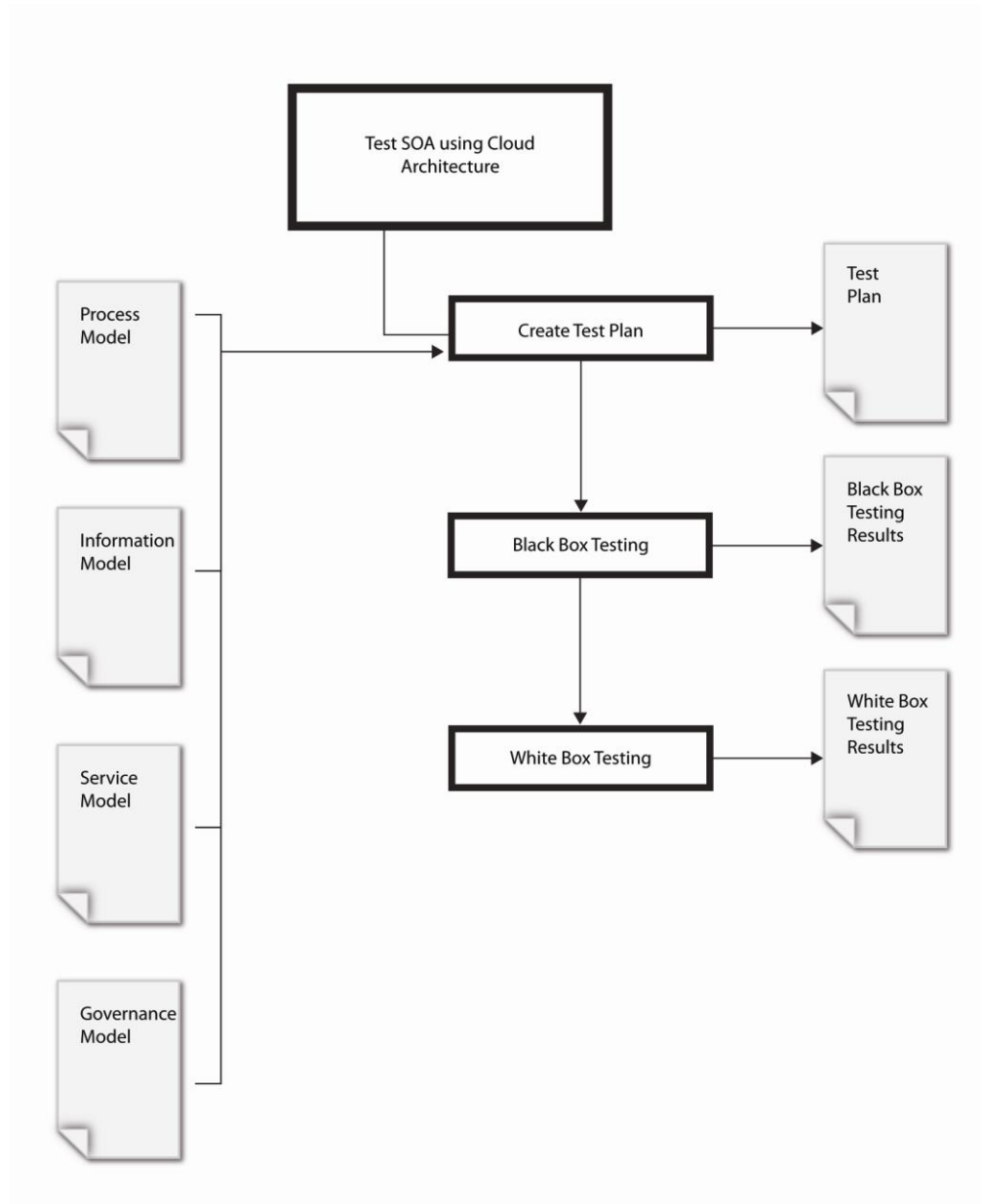
- Business drivers
- Information under management
- Existing services under management
- Core business processes

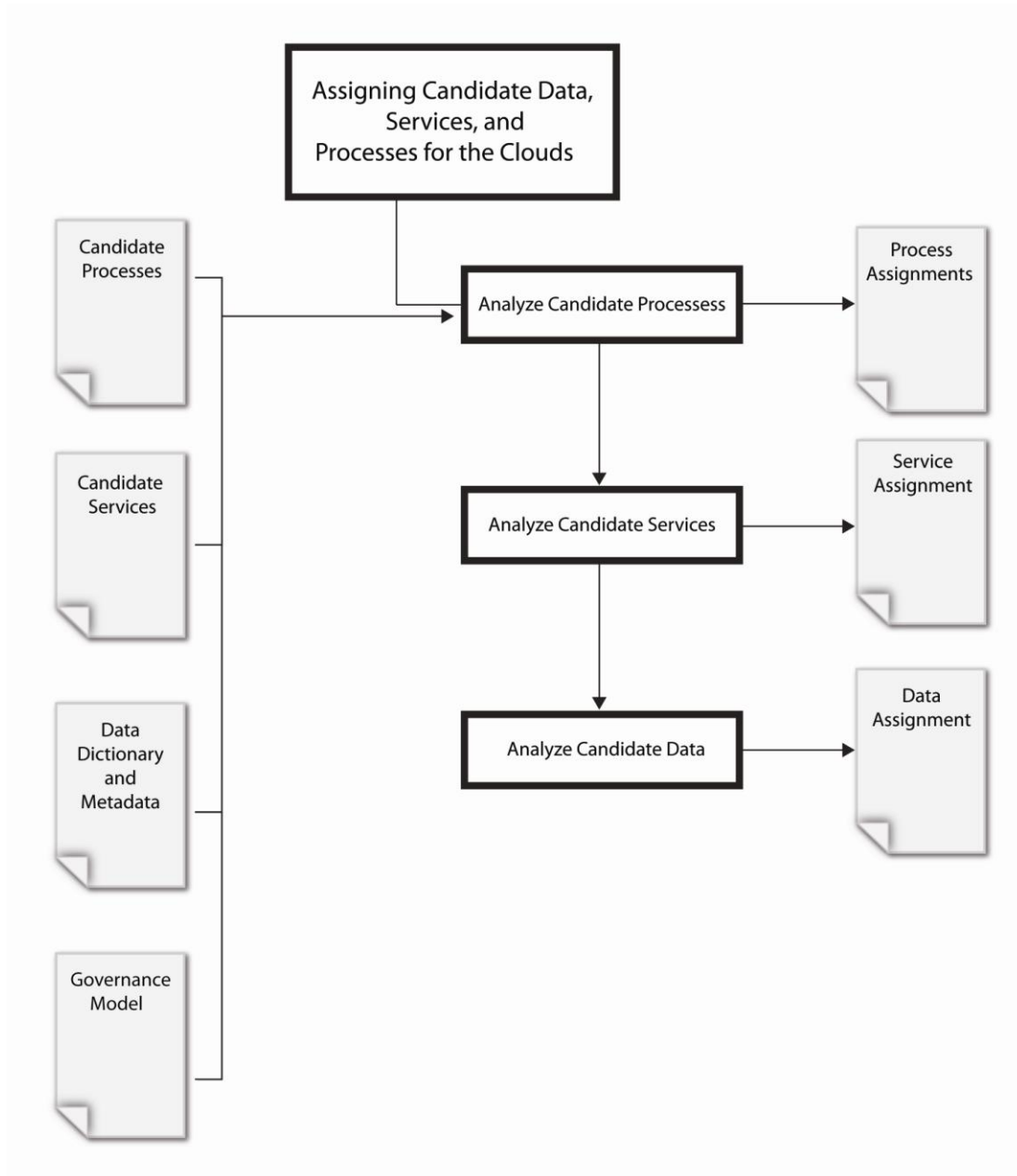


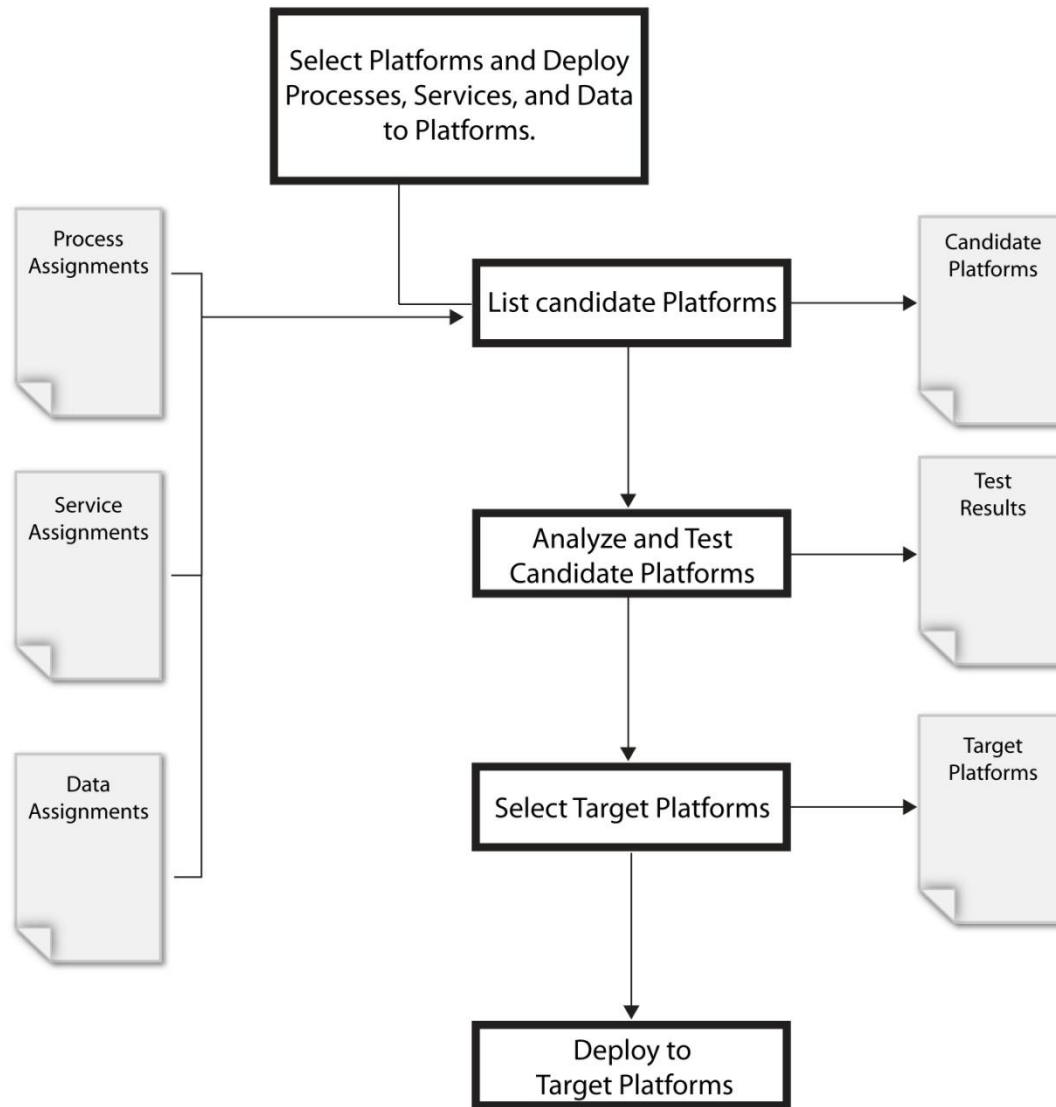












Other Thoughts

- External cloud services should function like any other enterprise application or infrastructure resource.
- You should evaluate cloud providers using similar validation patterns as you do with new and existing data center resources.
- Cloud resources should appear native.
- Consider Private Clouds.
- Watch the hype, the resources are new, but the patterns of architecture are familiar.

