

Business Alignment of Technology Strategy

*Doing
Business
in a Cloud*

IT Portfolio Management

- *Definition, Construction,
Operation and Change*
- *Cost Transparency*

*Focus
on
Operations*

Deep, Deep Operational Re-Integration

High
Value
Activity

IT Portfolio Management

➤ **Massive cost structure reduction: 35-50%, 10-24 mon. Horizon** *The Target*

➤ **Cloud = SOA + *aaS + HPC: Crossing the Chasm, 7-24 mon. Horizon** *The Arrow*

Current Optimization Concerns: *Stack & Rack Resource groups form Platforms and contain Business Delivery Environments*

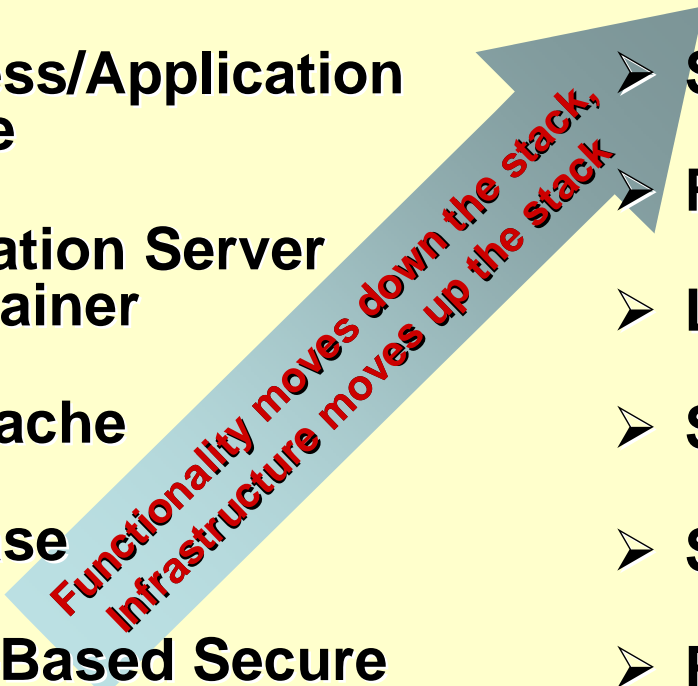
Strategic
IT
(7-18Mo)

□ Stack

- Business/Application Service
- Application Server & Container
- Data Cache
- Database
- Policy-Based Secure Content Aware Network
 - Authentication
 - Authorization
 - Audit

□ Rack

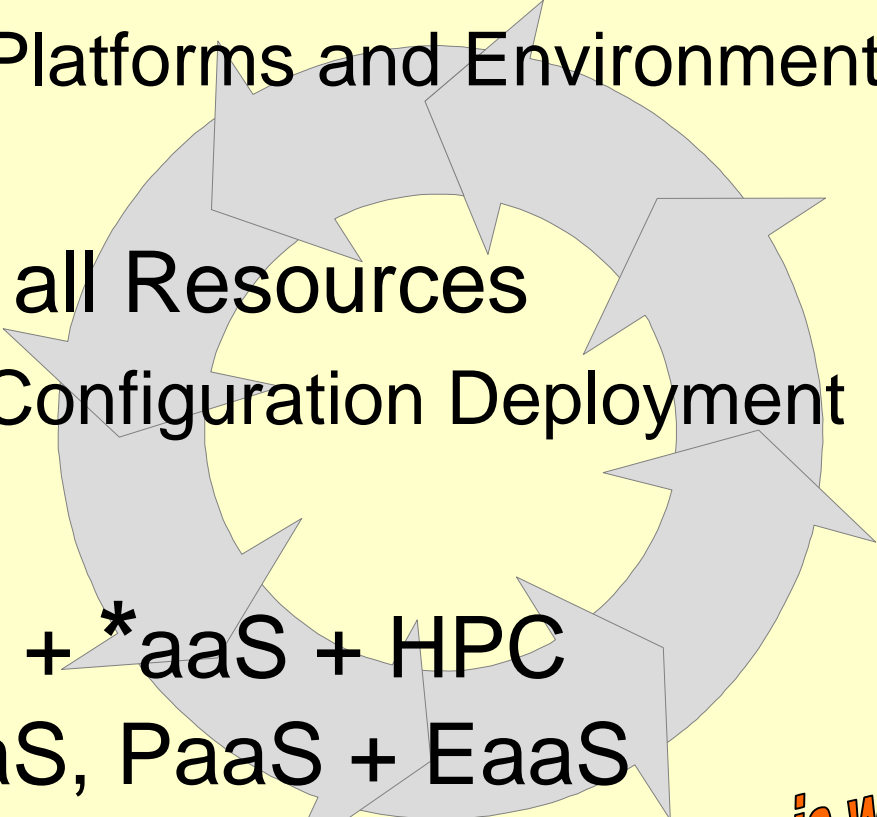
- Switch
- Router
- Load Balancer
- Server
- Storage
- Power Supply
- HVAC



Operational Cycle of Clouds

- ❑ Configurations and Deployments
 - Abstraction of Platforms and Environments

 - ❑ Virtualization of all Resources
 - Abstraction of Configuration Deployment

 - ❑ Clouds == SOA + *aaS + HPC
 - => IaaS, SaaS, PaaS + EaaS
 - Abstraction of Virtualization
- 

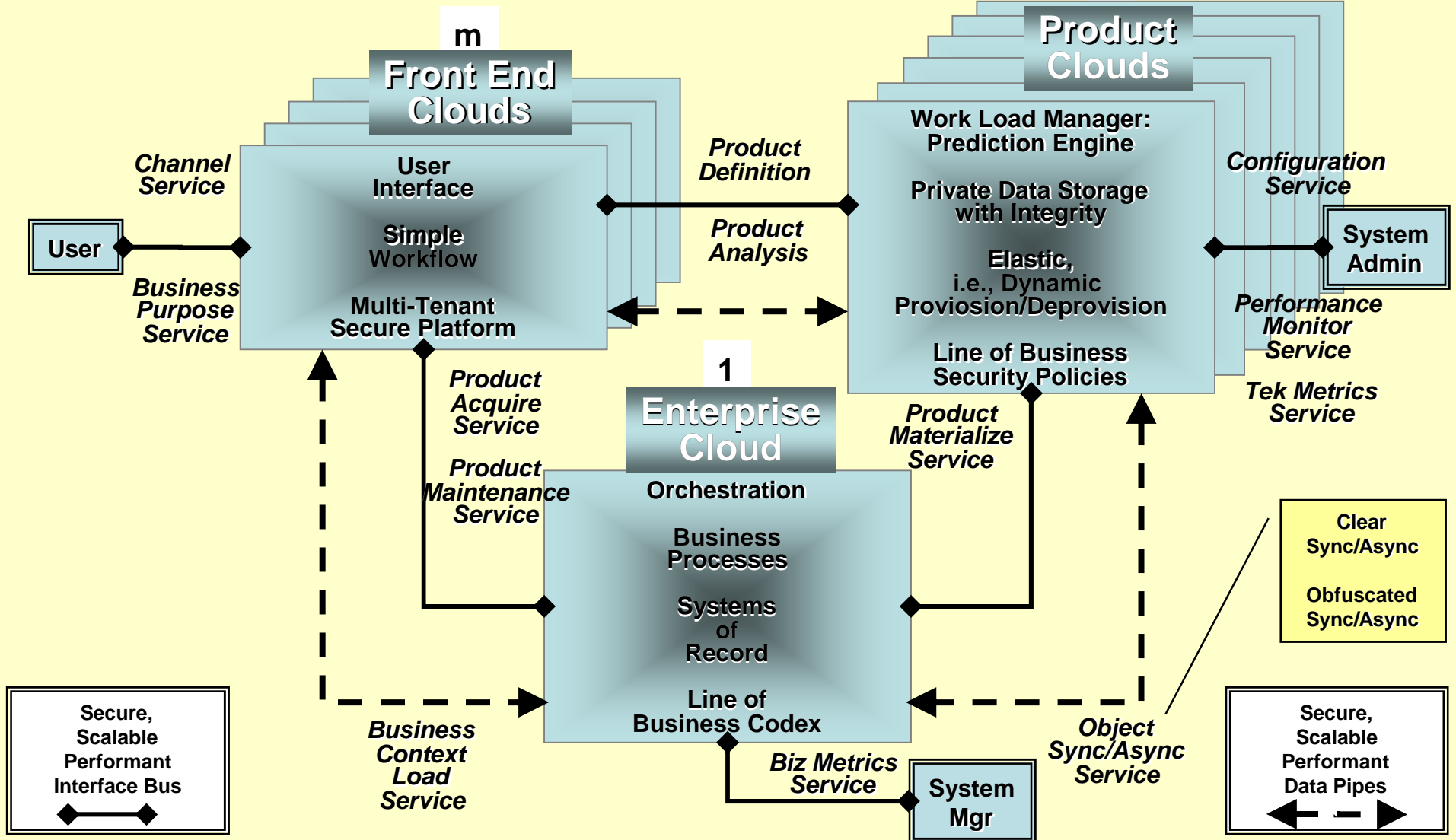
*Business is where
the Environment is*

End2End Business Architecture

Strategic IT (7-18Mo)

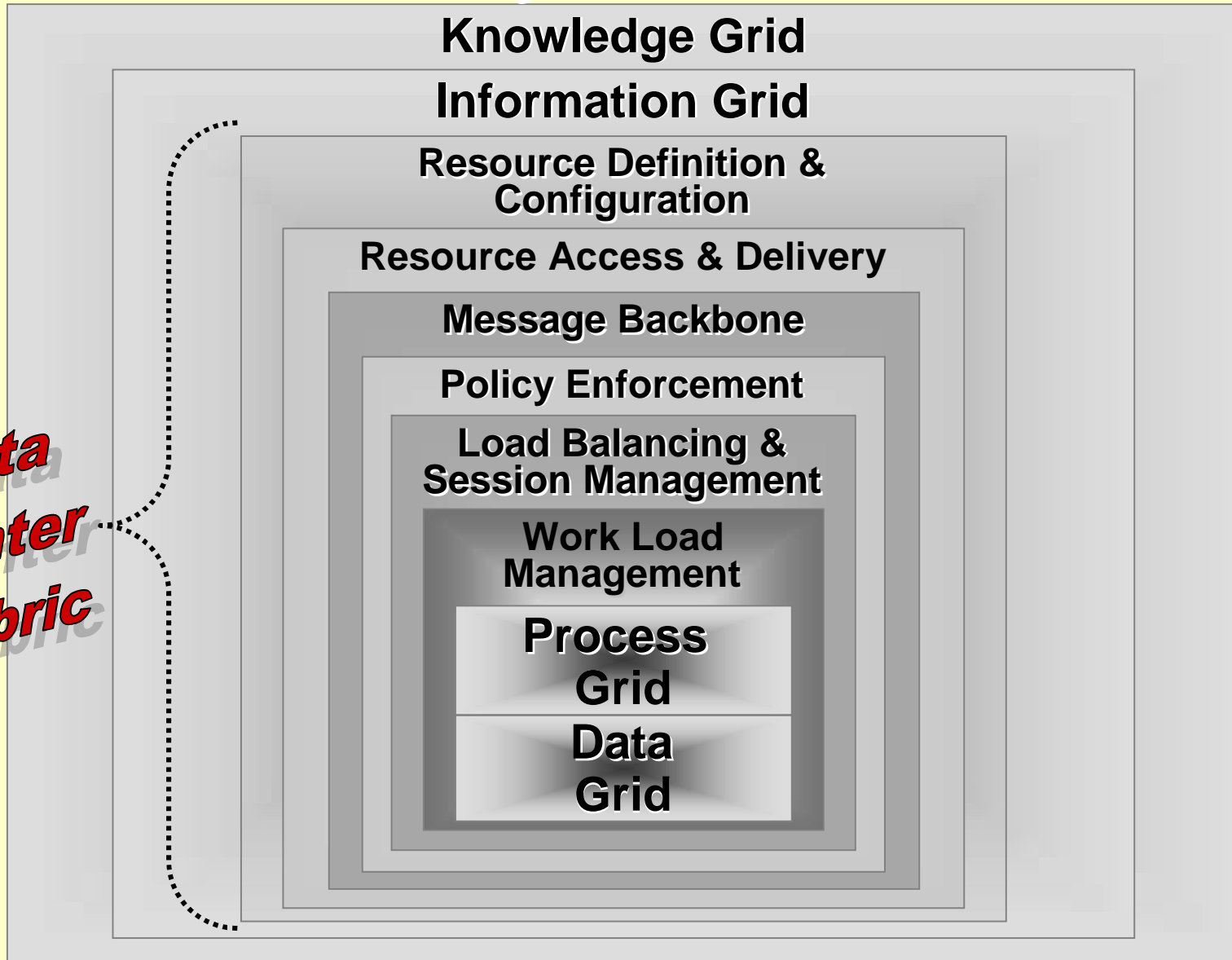
Distribution of LoB Functionality

Inter-Cloud Connections



The Intelligence Cloud Ecosystem Stack

Data Center Fabric



The Cloud Stack

Desperately Seeking Ecosystem and Fabric Suppliers:
Configurations and Deployments

Strategic IT (7-18Mo)

- ❑ Adequate Security is the Prime Enabler for Clouds
- ❑ Strategic IT Portfolio Management

Single Sign On

IT Competencies



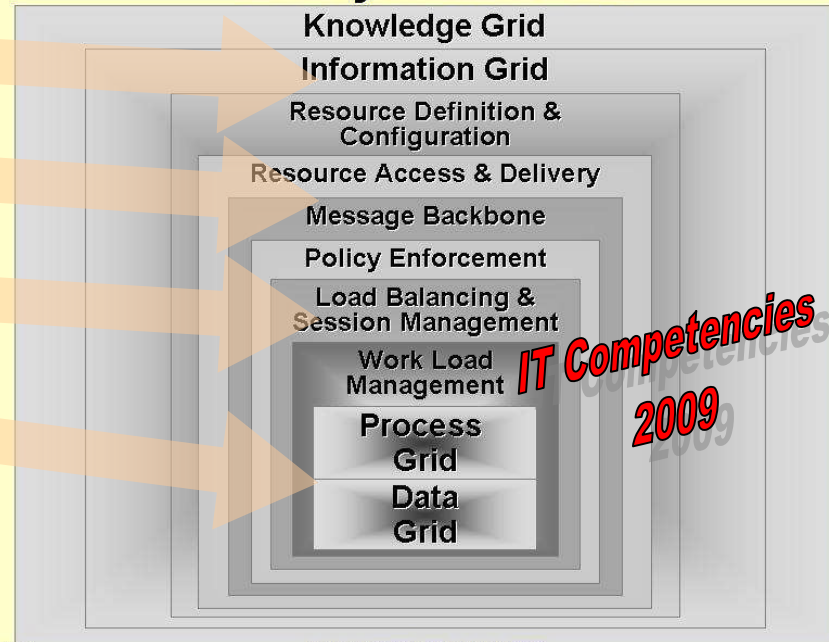
The Intelligence Cloud Ecosystem Stack

Strategic (7-18Mo)

- 18++ months
- 7-18 months
- 4-6 months
- 0-3 months

Single Sign On 2009

Analytics and Web Hosting need Grid-Like Infrastructure especially Data



IT Competencies 2009

2008Q3 10/5/2008

CloudComputing-v3.0-Vision © Copyright 2008, New Global Enterprises.

Security is The Prime Enabler

*With
Adequate Security,
Cloud Computing
is a
viable business choice*



**Provisioning
Trust and Privacy
with
Strong Policy Enforcement**

Evaluate *Multi-Tenant, Multi-Landlord Platforms* for Fitness for Business Purpose Environments *IT Operational Sourcing*

Strategic
IT

(7-18Mo)

How Hard
is it?

- ❑ Provides Zones of Privacy & Trust
 - Identity Management
 - Access Policy Enforcement
 - Auditability
 - Integrity of communications and data storage
 - Non-repudiations of actions

How Secure
is it?

- ❑ Process Management
 - Segregation
 - ❖ SOX, HIPAA, Industry Regulatory Oversight
 - Standard Interaction Protocols
 - ❖ Service Invocation
 - ❖ Event Dispatch
 - ❖ Data Distribution

- ❑ Virtual Data Stores
 - Data Persistence Transparency
 - ❖ Services are delivered data on an as-needed basis
 - ❖ All external references are in a single namespace
 - Data are Specifically and Generally Locatable
 - ❖ Accommodate sovereign regulations
 - ❖ Replication
 - ❖ Caching
 - ❖ Segregation

How Easy
is it?

- ❑ Development Capabilities
 - Specification
 - Realization
 - Deployment
 - Instrumentation
 - ❖ Environment
 - ❖ Application Work Flow
 - ❖ Business Process
 - Testing/QA

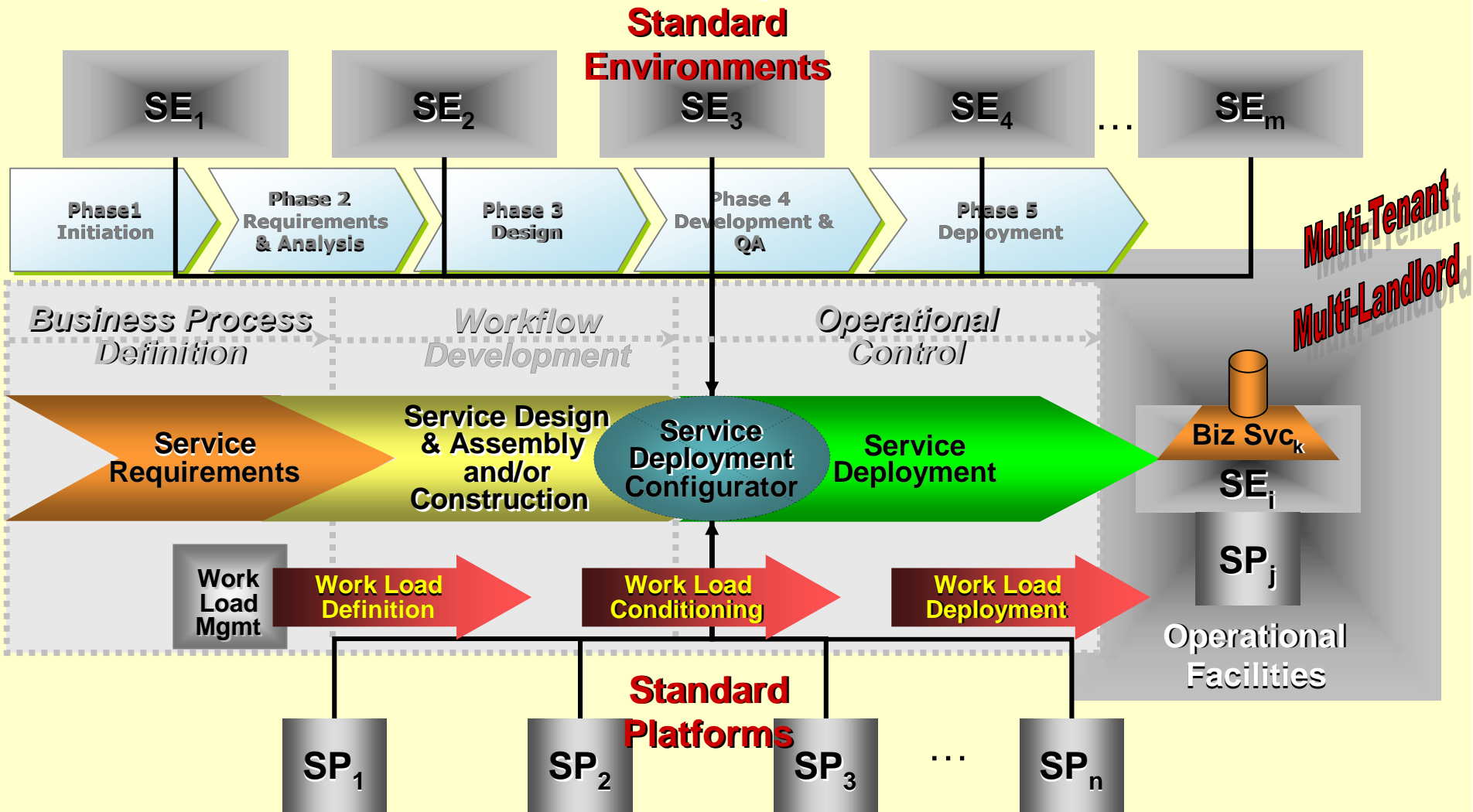
Another
Prime Enabler

- ❑ Operational Risk Management
 - Misfeasance
 - Malfeasance
 - Piracy

Operational Conditioning

Deploying Business Service Configuration Suites within Standard Environments upon Standard Platforms

Strategic IT (7-18Mo)



Cloud Computing: Business Relevance

Converting Resources into Results

- Inside a Cloud, implement Functions within particular Environments provisioned within and across specific Grid enabled Platforms

Tenants live in, Landlords build in Environments

Resource Grids

➤ All with the **Cloud Provider** handling the operations of Platforms and providing **Appropriate Service Levels** within Environments

Business Results

➤ While the **Cloud Services Consumer** provides the Business Processes to support desired **Value Producing Capabilities**.

Clouds Hide Complexity

The **Business** and **Technical** Foci

- ❑ Functions support Business Processes within Business Domains which operate within and across specific Environments
 - The focus of **Environments** is **fitness for business purposes** which drives the **requisite service level requirements**.
 - The focus of **Platforms** which provision the Environments is technology stacks and racks which have their **price performance** characteristics for **Capacity, Availability, Scalability, Efficiency and Security** levels.



The Intelligence Cloud Roadmap

Strategic IT (7-18Mo)

The Ecosystem Stack Pipeline

Ecosystem Categories to own



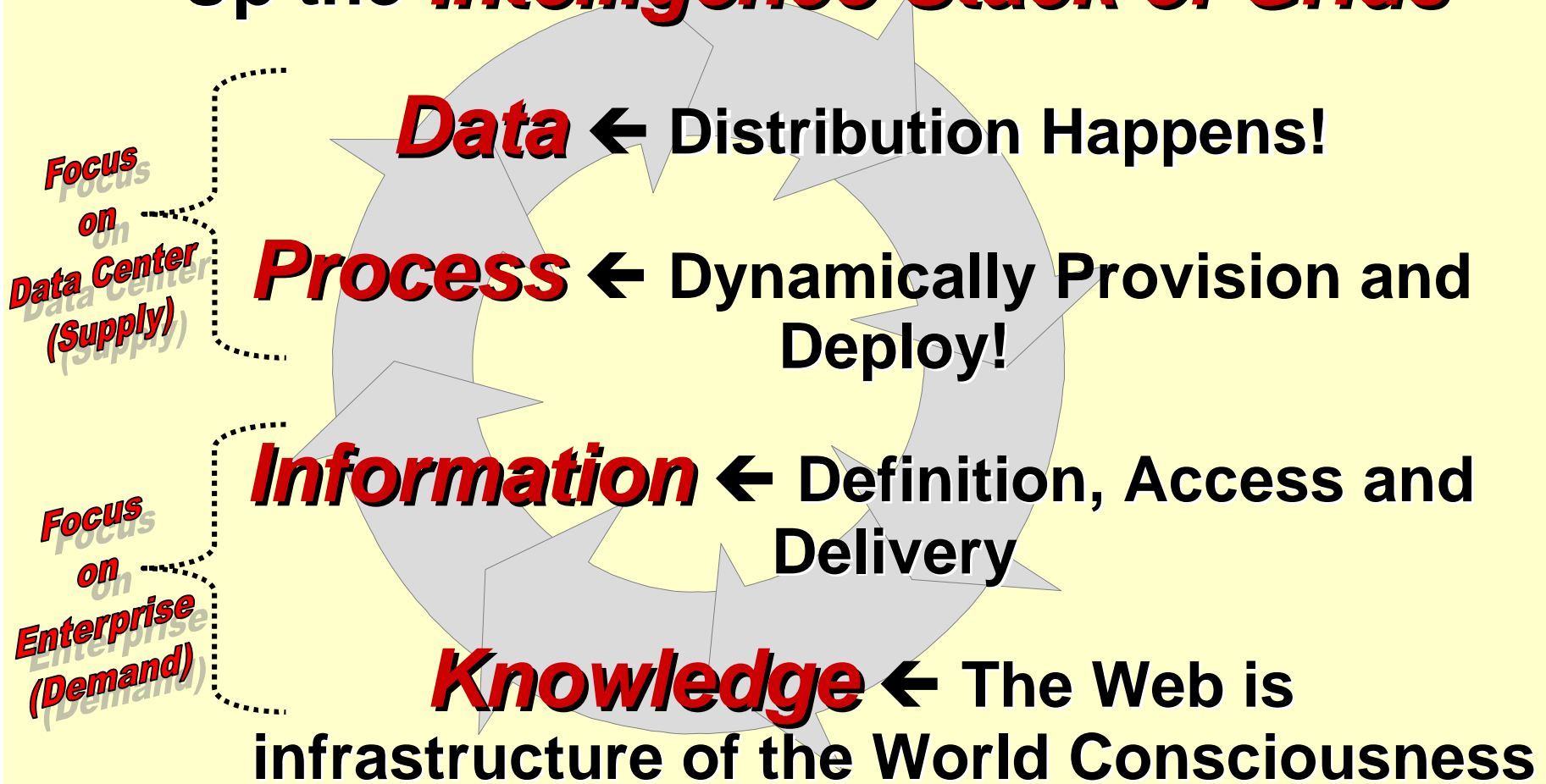
Illustrative Example Only

To Infinity and Beyond!

Buzz Lightyear, ***A Toy Story***

The Long View Technical Strategy

Up the *Intelligence Stack of Grids*



After Grids & Clouds, then *Mist* The Next **Next** Step



A

Virtual Intelligence Cloud
surrounding distributed

Physical Computing Locales

with

Fully Operational Grid Infrastructure
that delivers
Spectacular Consumer Experiences