

Buy it, Build it, Download it, or Browse it?

Achieving Effectiveness with Enterprise Applications

Michael T. Nygard

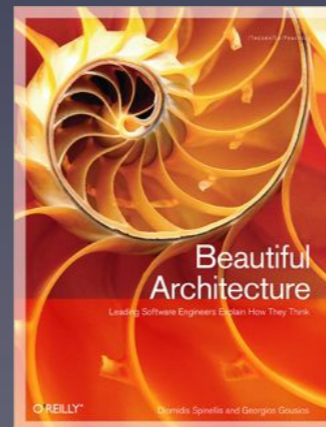
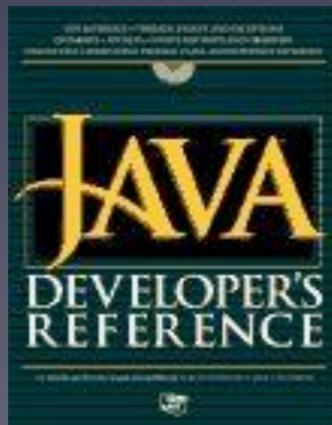
About The Speaker

Application Developer/Architect – 20 years

Web Developer – 14 years

IT Operations – 6 years

IT Services Executive - 4 years



Buy?
Build?

Buy?
Build?
Download?

Buy?
Build?
Download?
Browse?

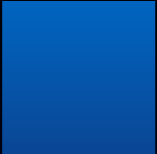
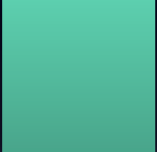
Goal: Reduce Total Cost of Ownership

Goal: Reduce Total
Cost of Ownership



Cost of Ownership

Seen Costs

-  Acquisition
-  Integration
-  Operations

Unseen Costs



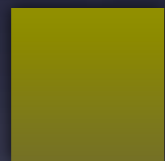
Process Change



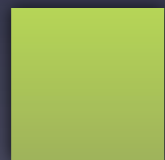
Deferred Revenue



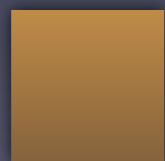
Opportunity Cost



Complexity



Inertia



Fragmentation



Constituencies

Goal: Increase Support and Accountability

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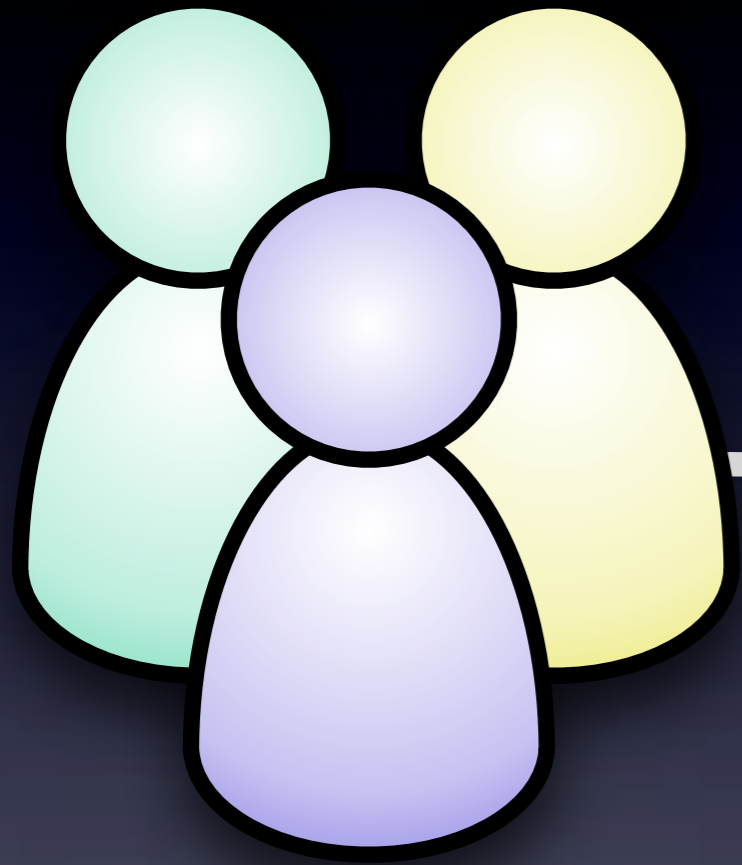


One Throat to Choke?



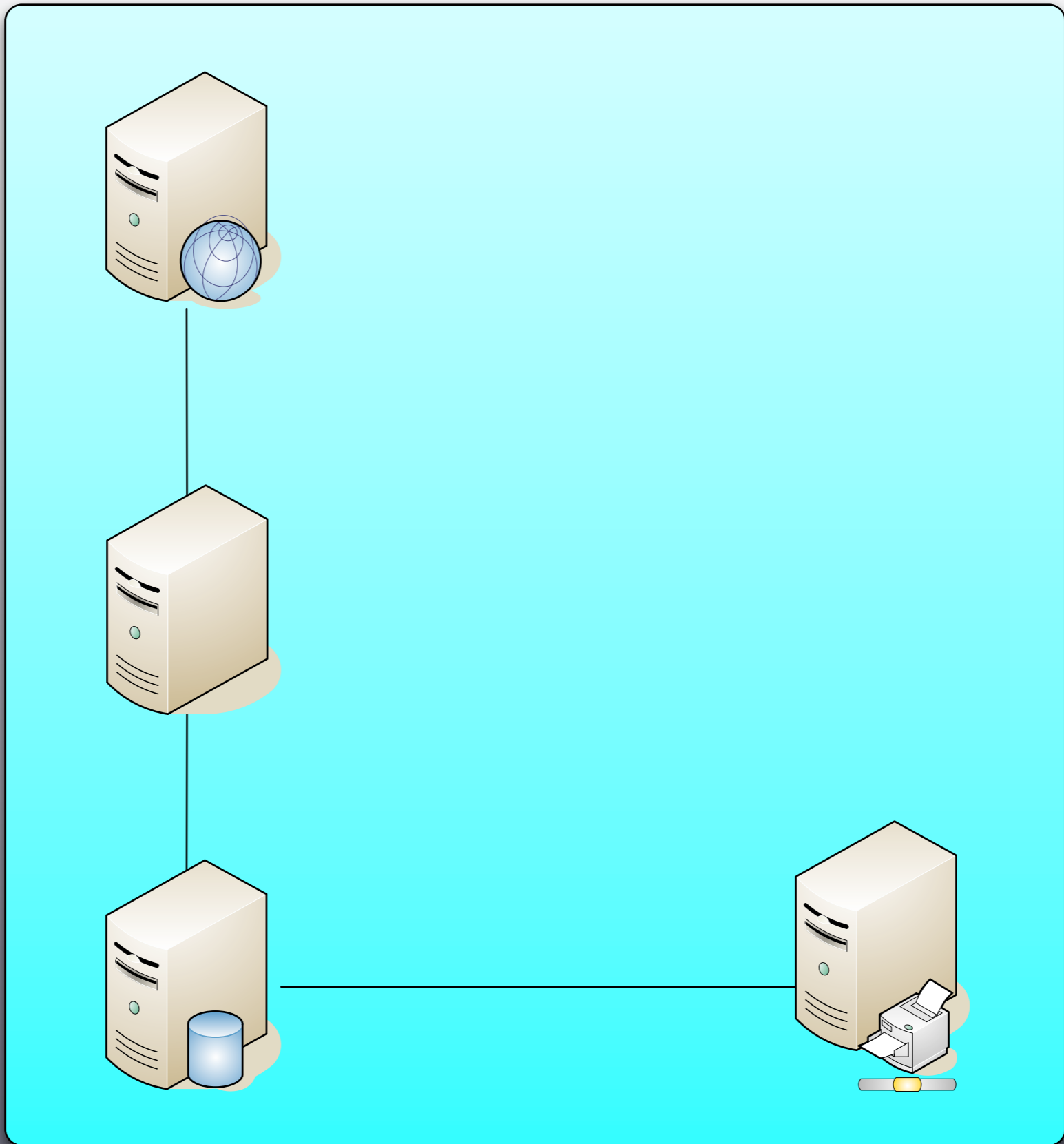
The Reality is More Complex

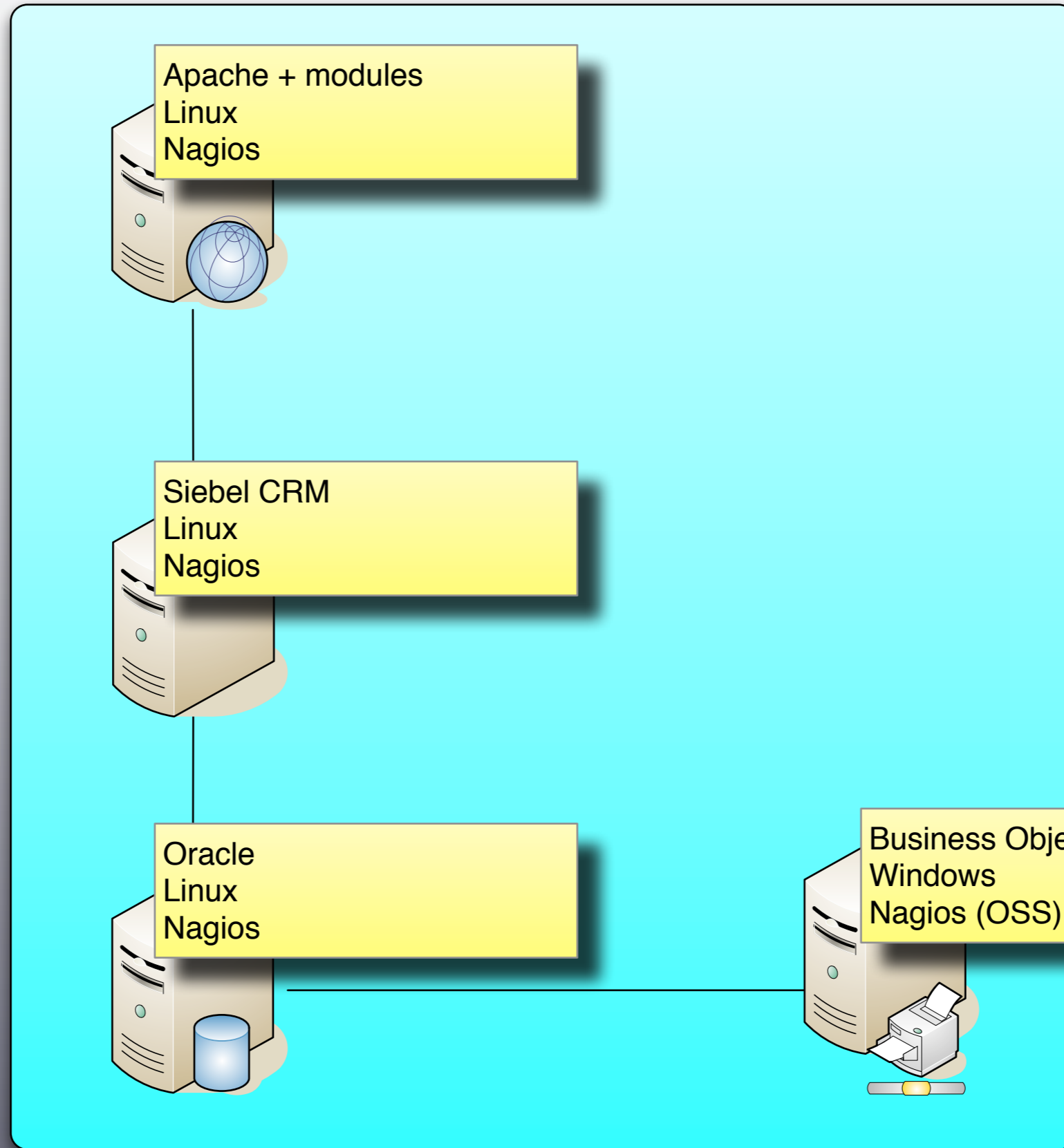


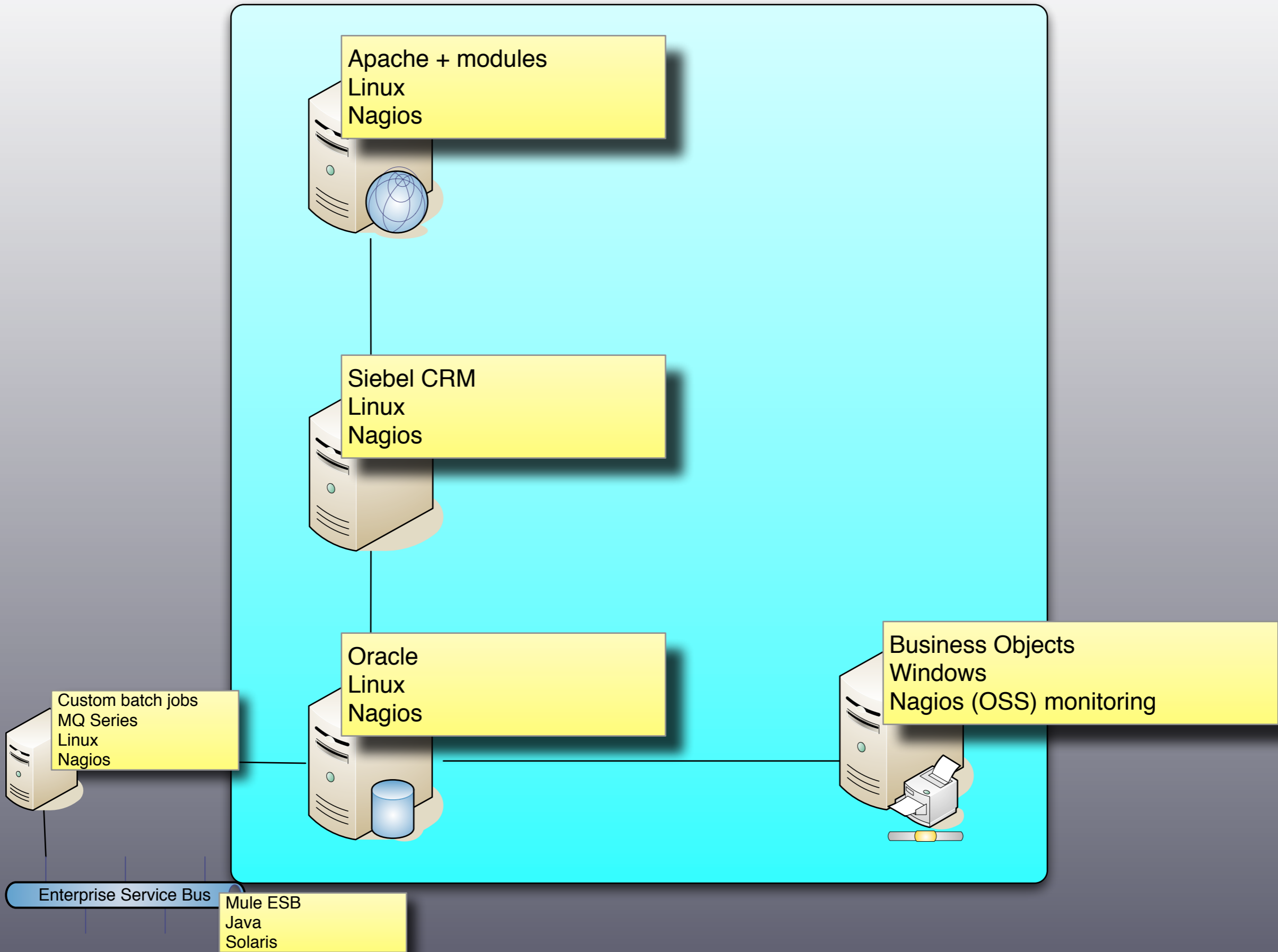


Customer
Relationship
Management

«purchased»

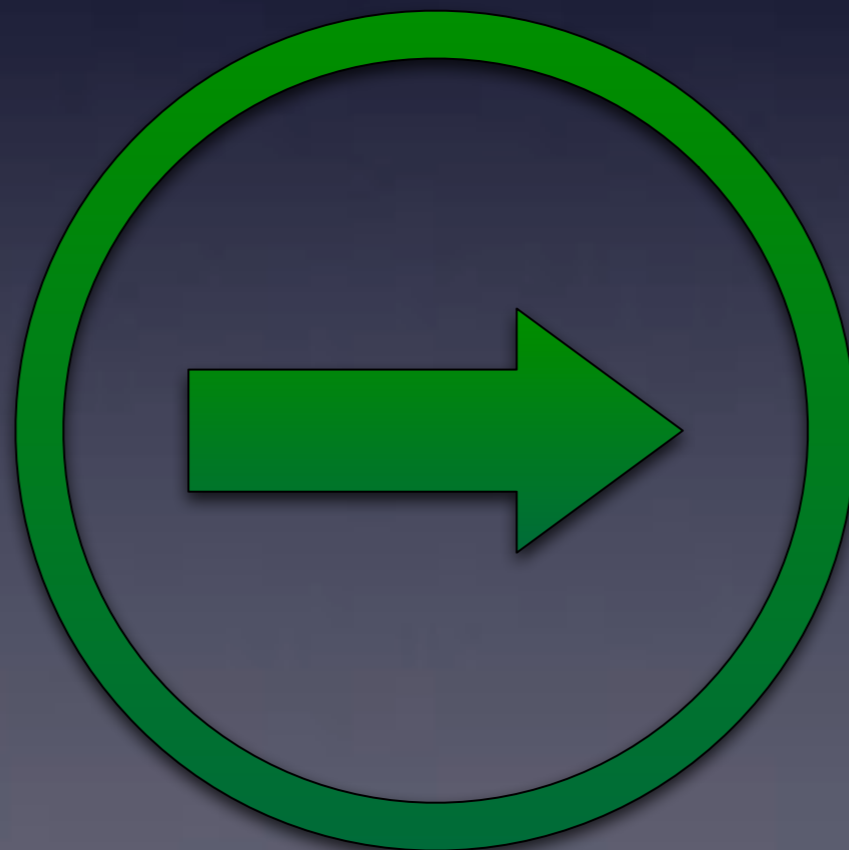






Goals: Increase Tempo
and Adaptability, Decrease
Transaction Cost

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and Adaptability, Decrease
Transaction Cost



Tempo

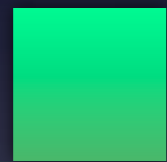
Tempo



Pace of operations



Rate of change generated

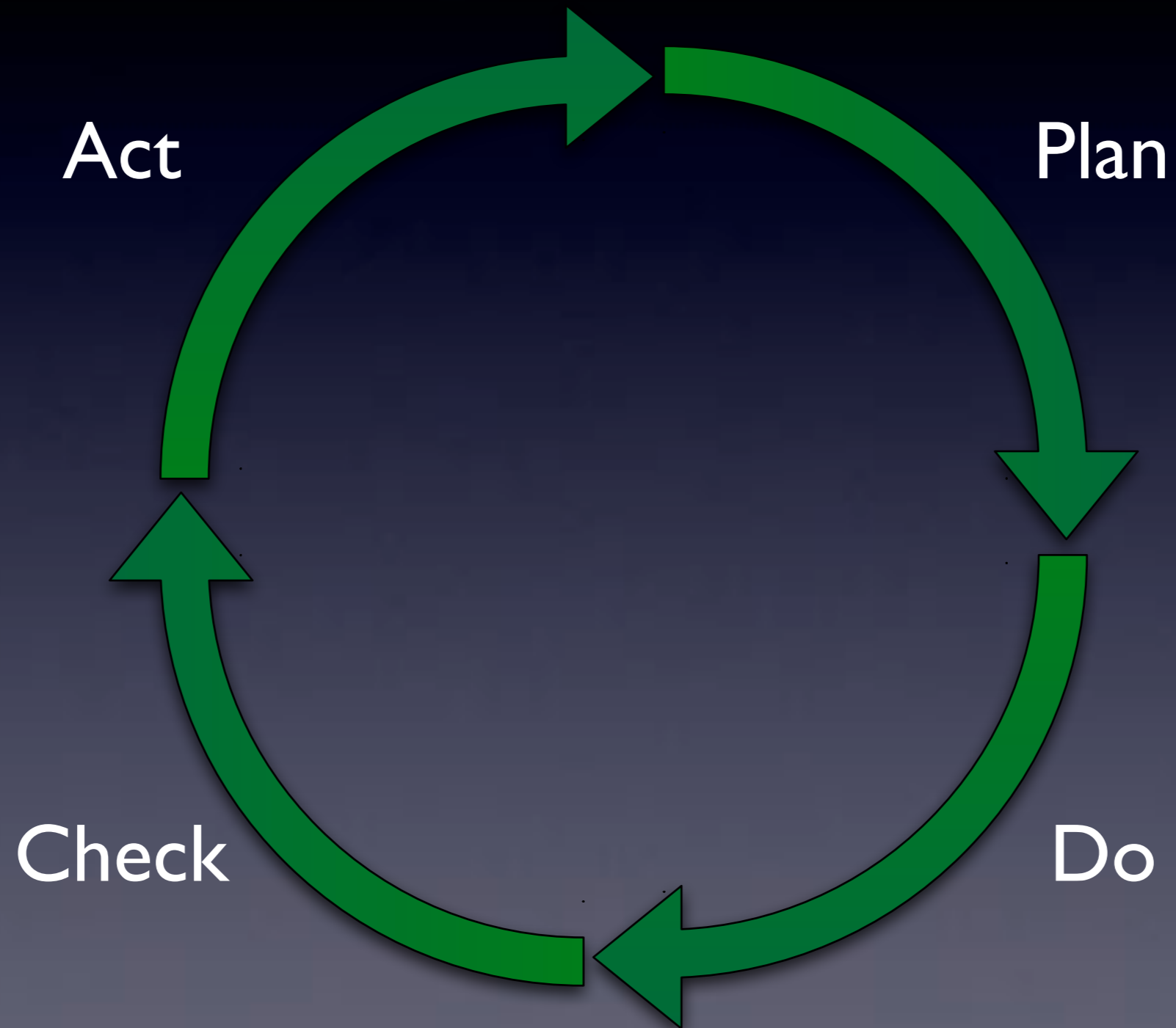


Turnovers in material

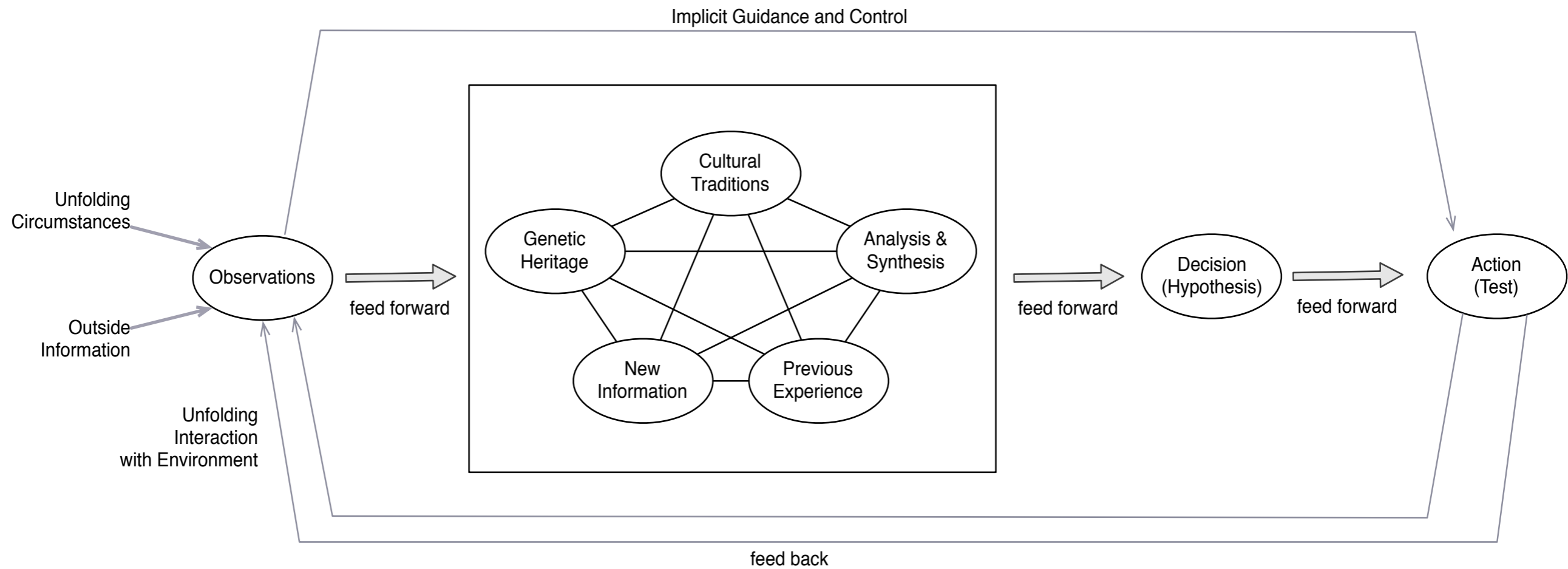


Speed of decision loops

Deming Cycle

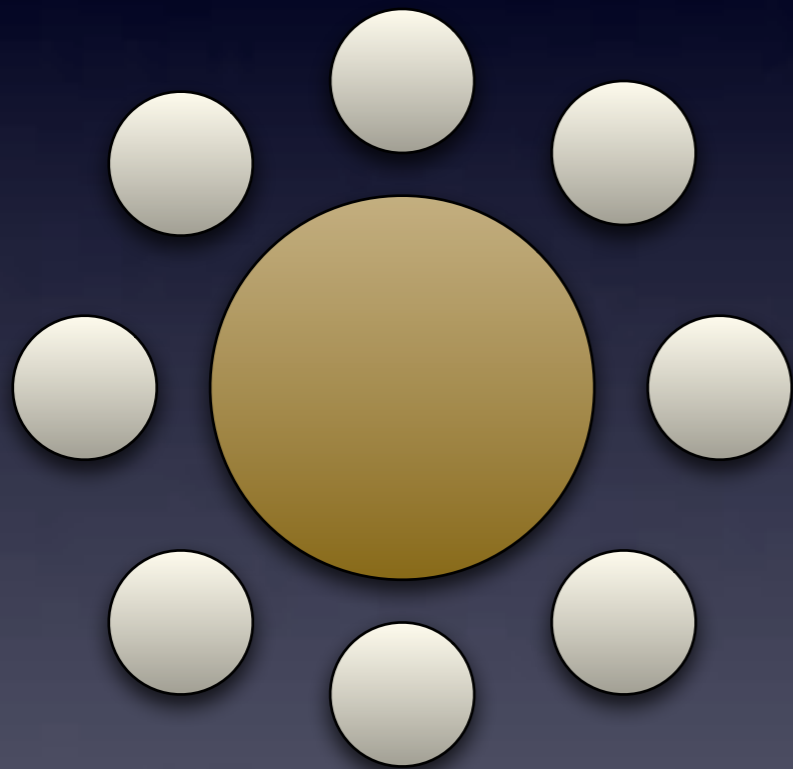


O-O-D-A Loop



Adaptability

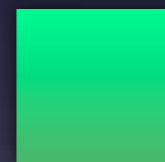
Centralized Adoption



Slow but uniform



High leverage



Less integration cost

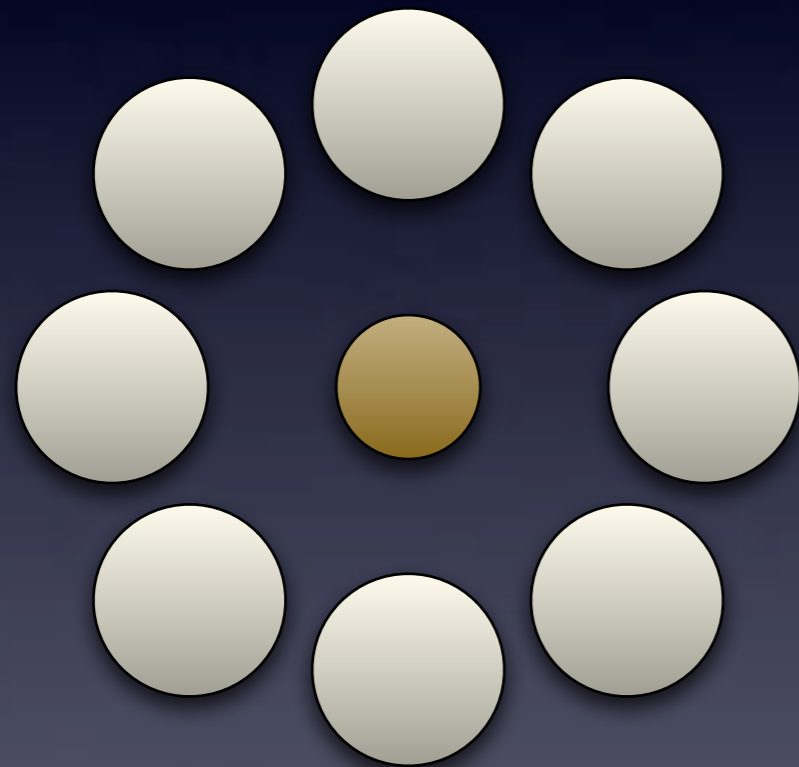


Easiest to manage



Often unsatisfying

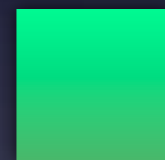
Decentralized Adoption



Fast tempo



Highly adaptable



Invisible



Hard to manage



High integration cost

Chaordic

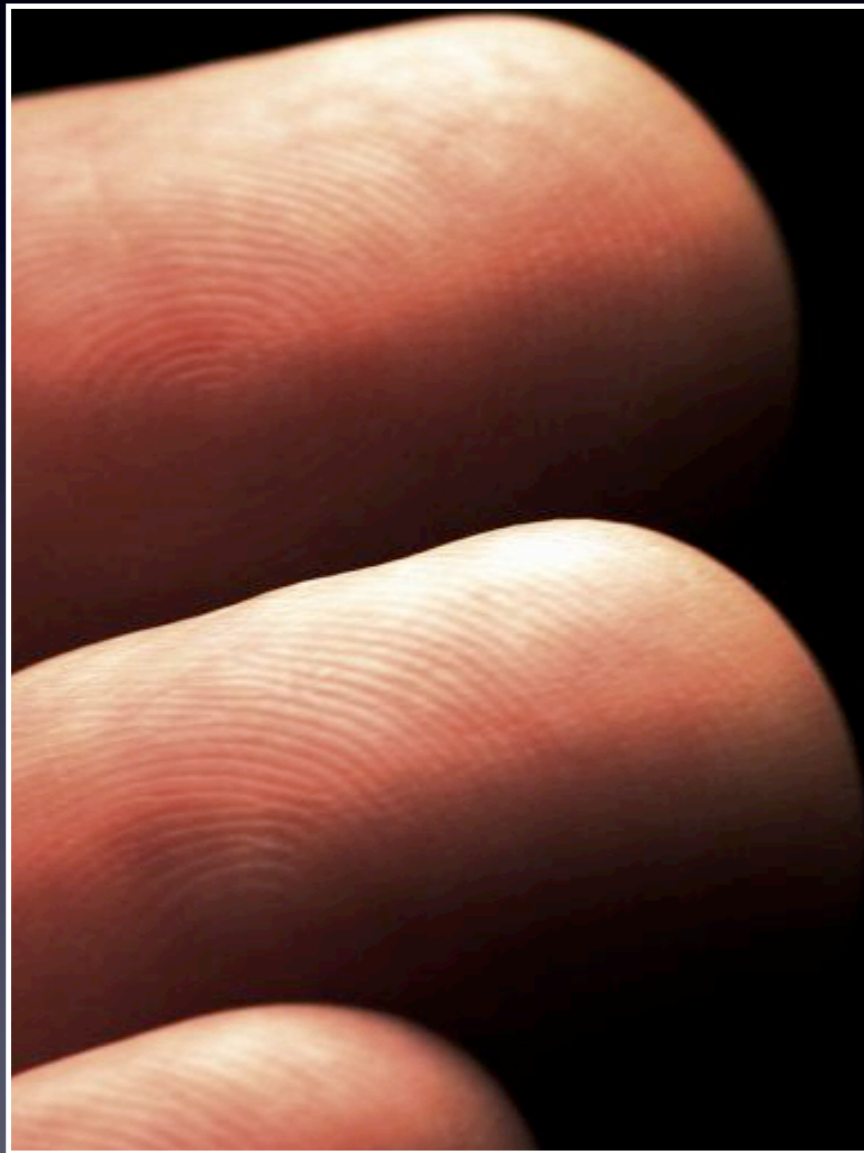
- System that blends characteristics of chaos and order
- Neither hierarchic nor anarchic
- Present in Boyd's "maneuver"

Commander's Intent

- Desired end state
- Two levels down
- Not a specification
- Centralize strategy
- Decentralize execution



Fingerspitzengefühl



Grasp of detail



Ever-changing situation



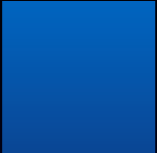
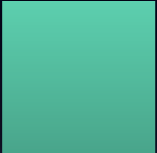
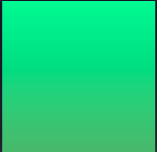

Diminishes with altitude

Transaction Costs



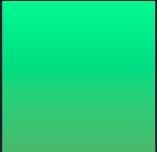



The Nature of the Firm

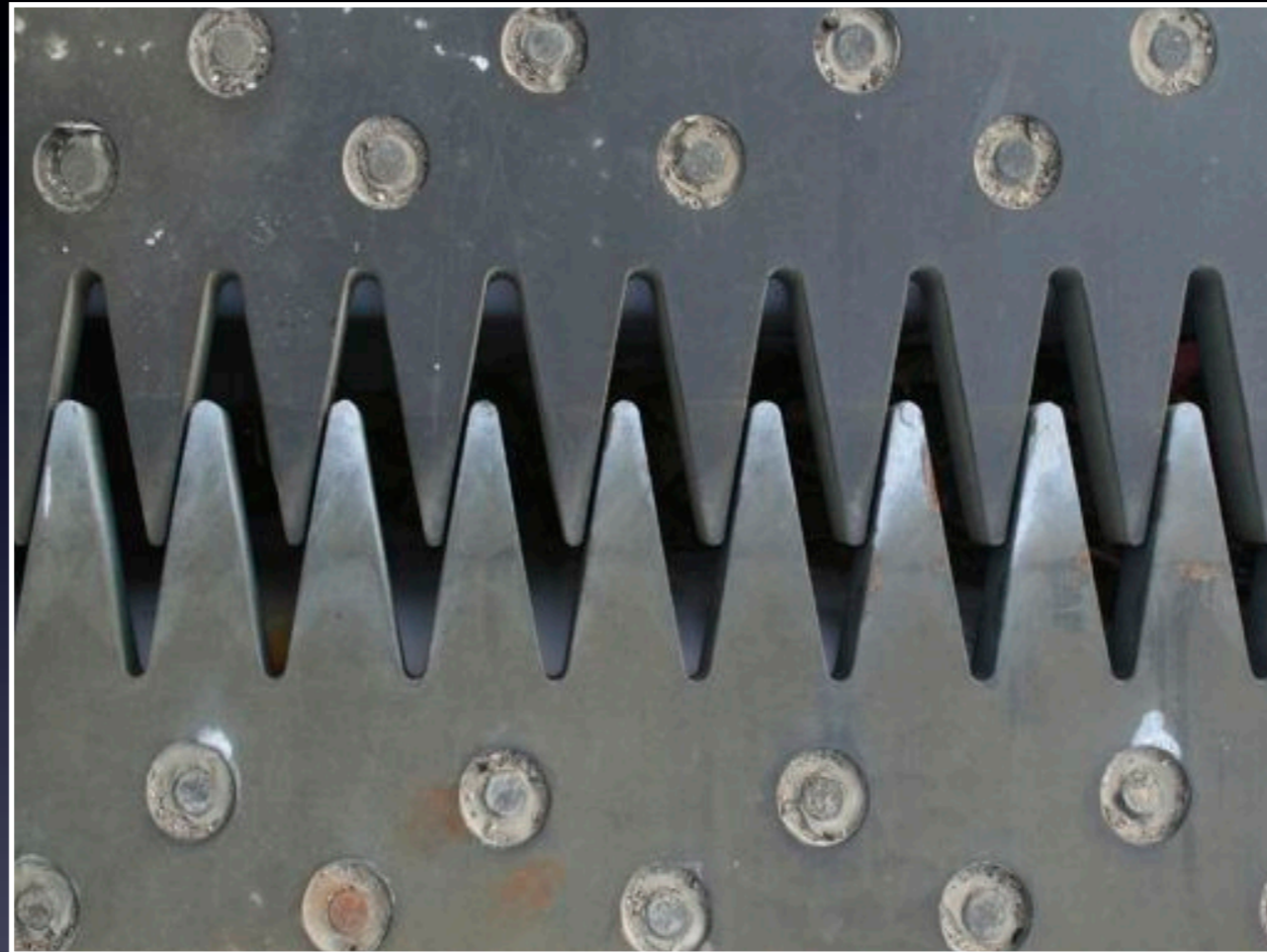
Boundaries of Firm

-  Search and information cost
-  Bargaining cost
-  Risk to trade secrets
-  Policing and enforcement




Boundaries of Firm

-  Search and information cost
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-  Policing and enforcement

Automation is Value-Neutral



Automating to Reduce Cost

-  Rigid
-  Quickly Outdated
-  “Supplemented”
with manual work



Automating to Empower



Zero to production
in 15 minutes

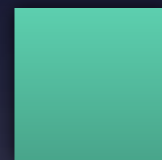
Automating to Empower



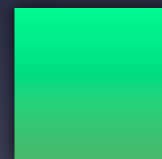
Zero to production
in 15 minutes



Increase Tempo



Improve Adaptability



Decentralize Change

Build
Buy
Download
Browse

“Buy”

COTS Considerations

Procurement, Implementation, and Integration Costs



Premature Customization

- Implicit processes
- Expensive to customize
- Chosen under the least knowledge!



Constituencies



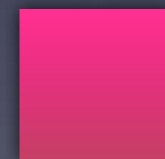
Adherents to the
chosen technology



Allegiance to vendor



Inhibits future
optionality



Tech selection is
an org change

“Build”

Bespoke Considerations

Enterprise Software Sucks

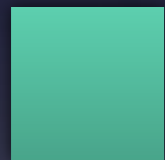
Misplaced Focus

Drudgery

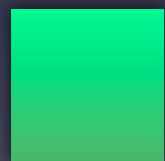
Voice



Users



Developers



Operations



“Download”

FOSS Considerations

Free Software?
Open Source Software?

Viral Licensing!

Free Software?
Open Source Software?

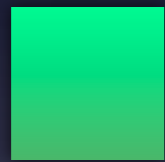
Not really.



Developer enthusiasm



Product maturity



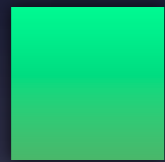
Community strength



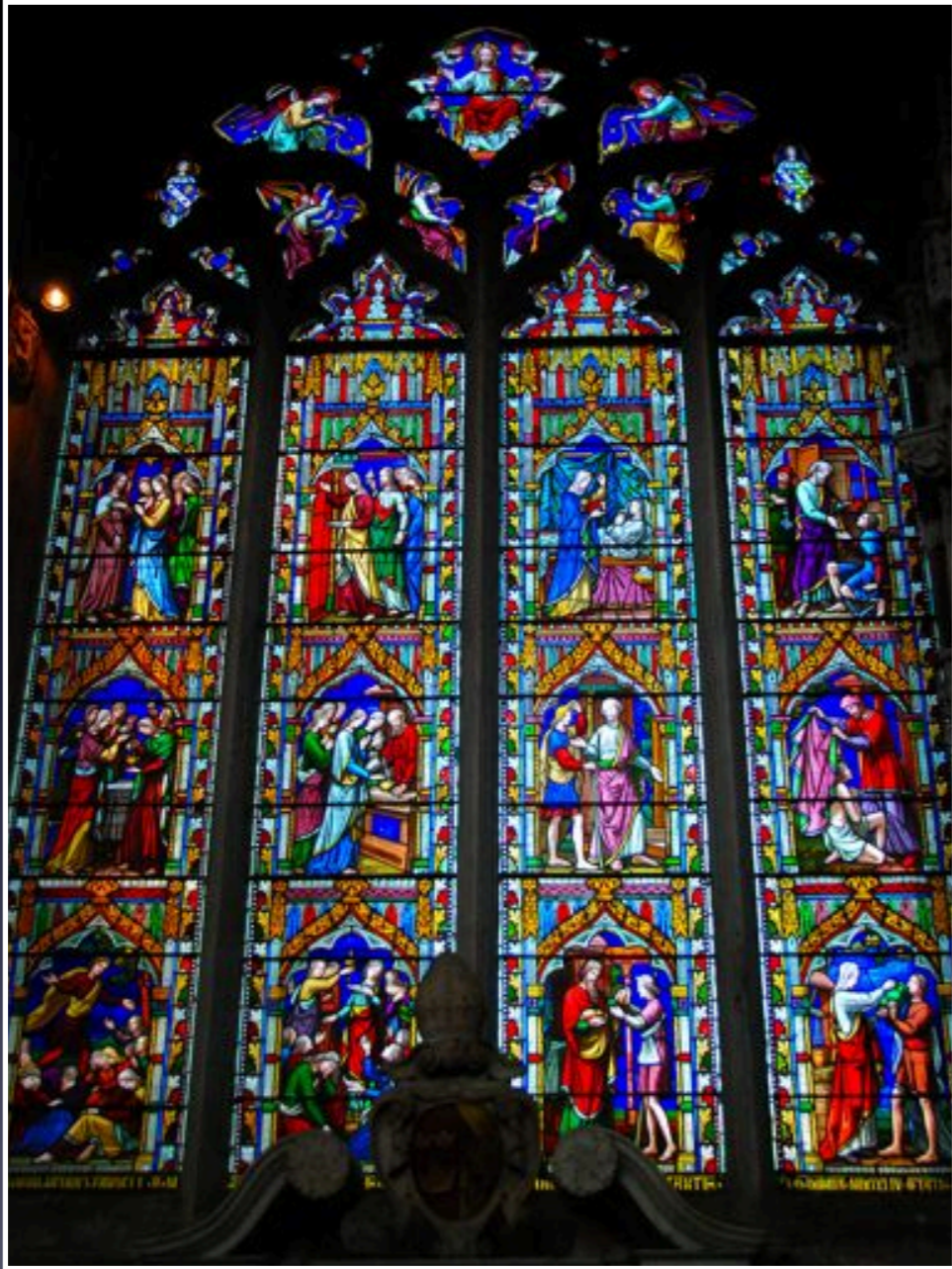
Versioning



Interface style



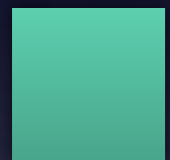
Architecture features



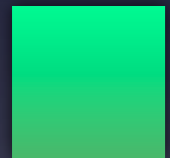
Gaining Advantage



Mix both models



Leverage but separate



Contribute



SaaS Considerations

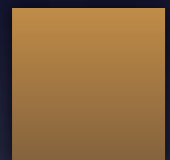


Data Islands

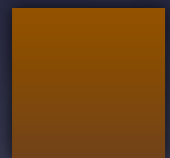
Perceived Risks



Confidentiality



Compliance



Control



Real Risks



Control plane



Patent shutdown



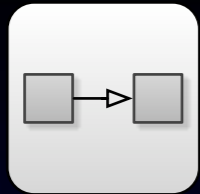
Lack of risk
management info

Self-Defeating Behaviors

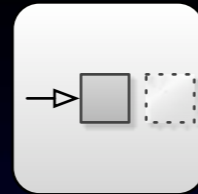
Sourcing can drive
selection, perhaps adversely



Thinking Styles



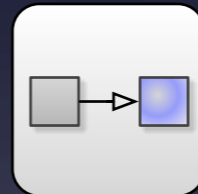
Reactive



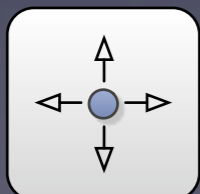
Corrective



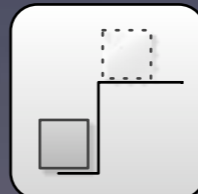
Systems



Improvement



Creative



Planning

Altitude-Induced Arrogance



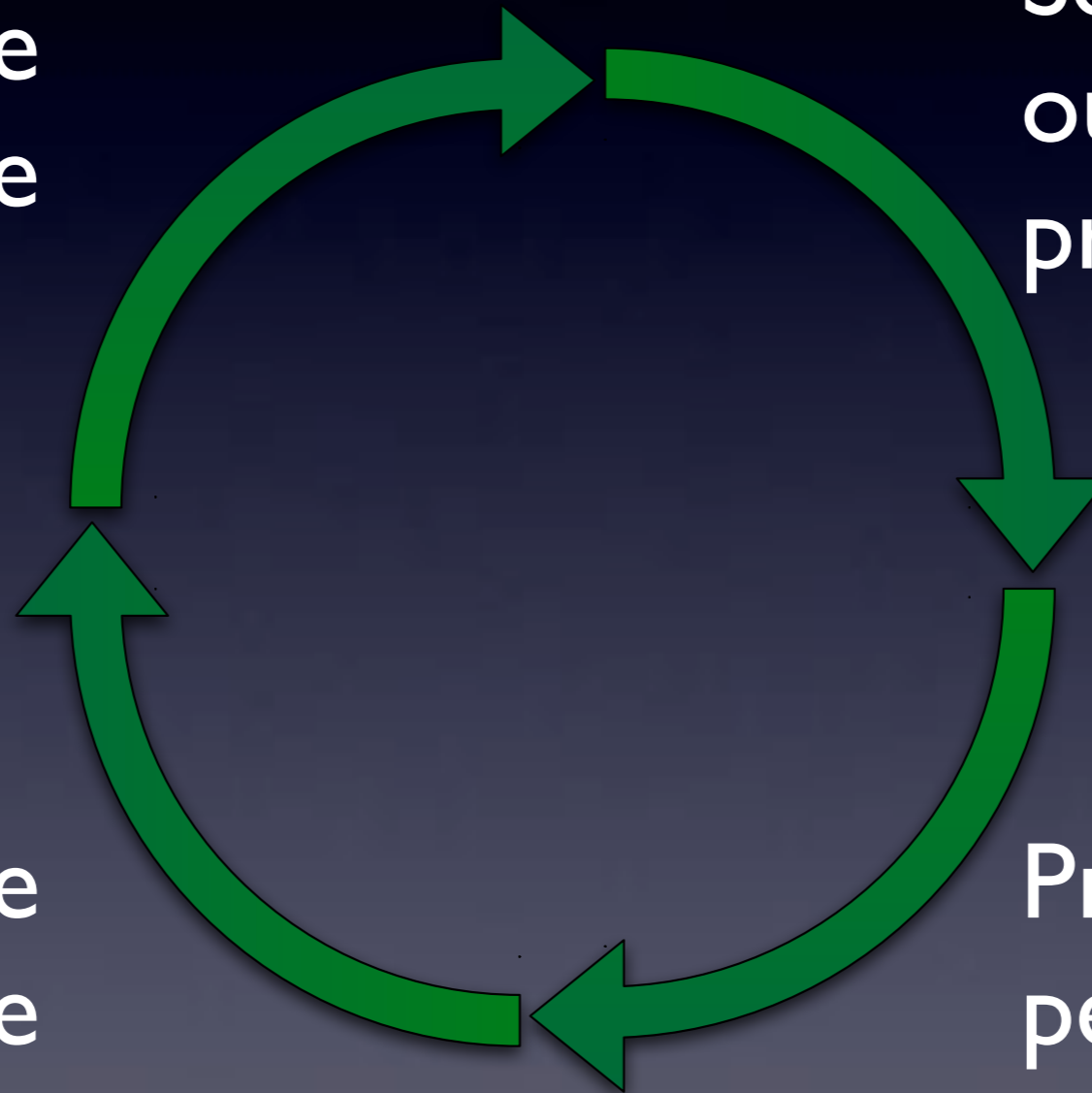
Services Death Spiral

Consumer unable
to change




Squeeze cost
out of service
providers

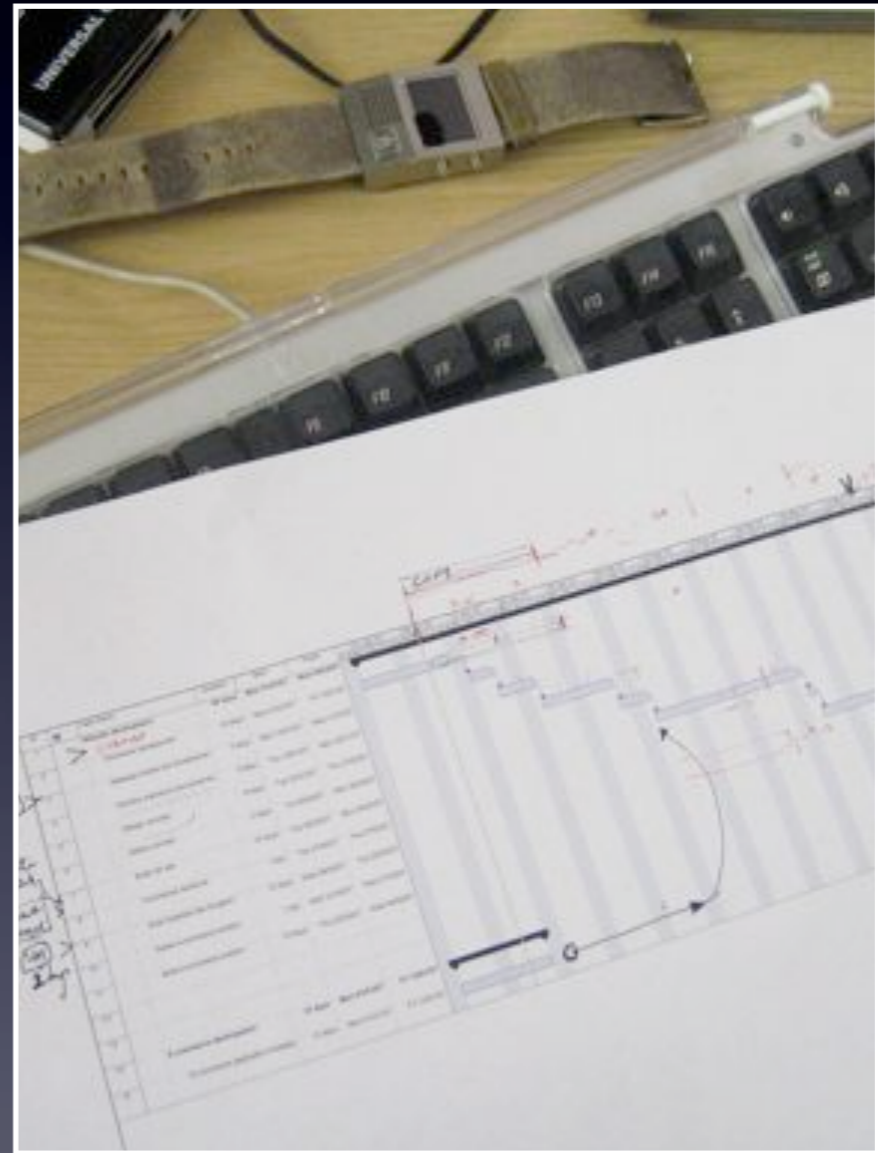
Provider unable
to execute

Provider's skilled
people filtered out



Project-Based Funding



-  Schedule pressure
-  Architecture decay
-  Increasing friction and inertia

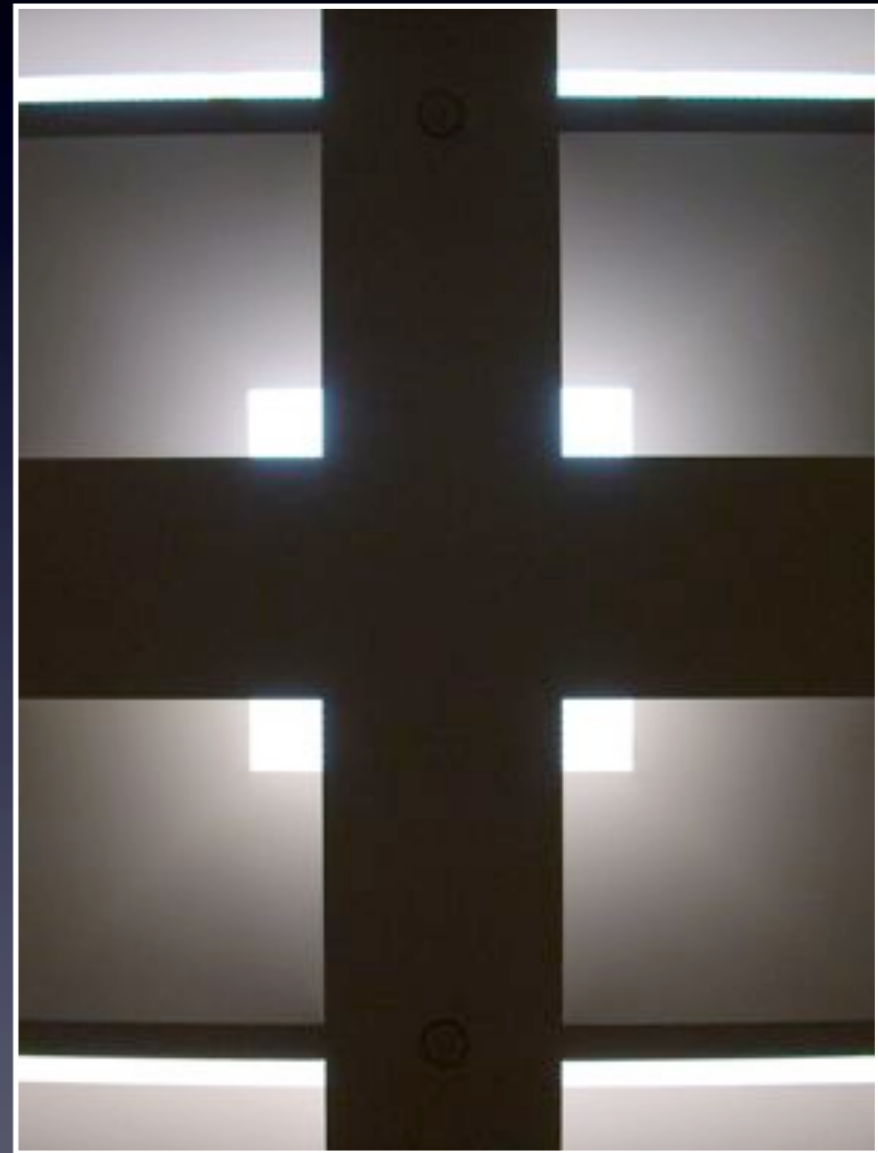


Budgeting & Accounting

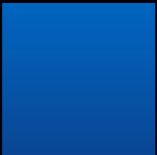

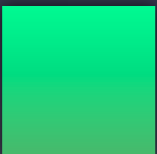
Refactoring Your Organization

Invert the Community

-  Center on users
-  Connect users
-  Distribute power to edges of org
-  IT builds platform; doesn't control use

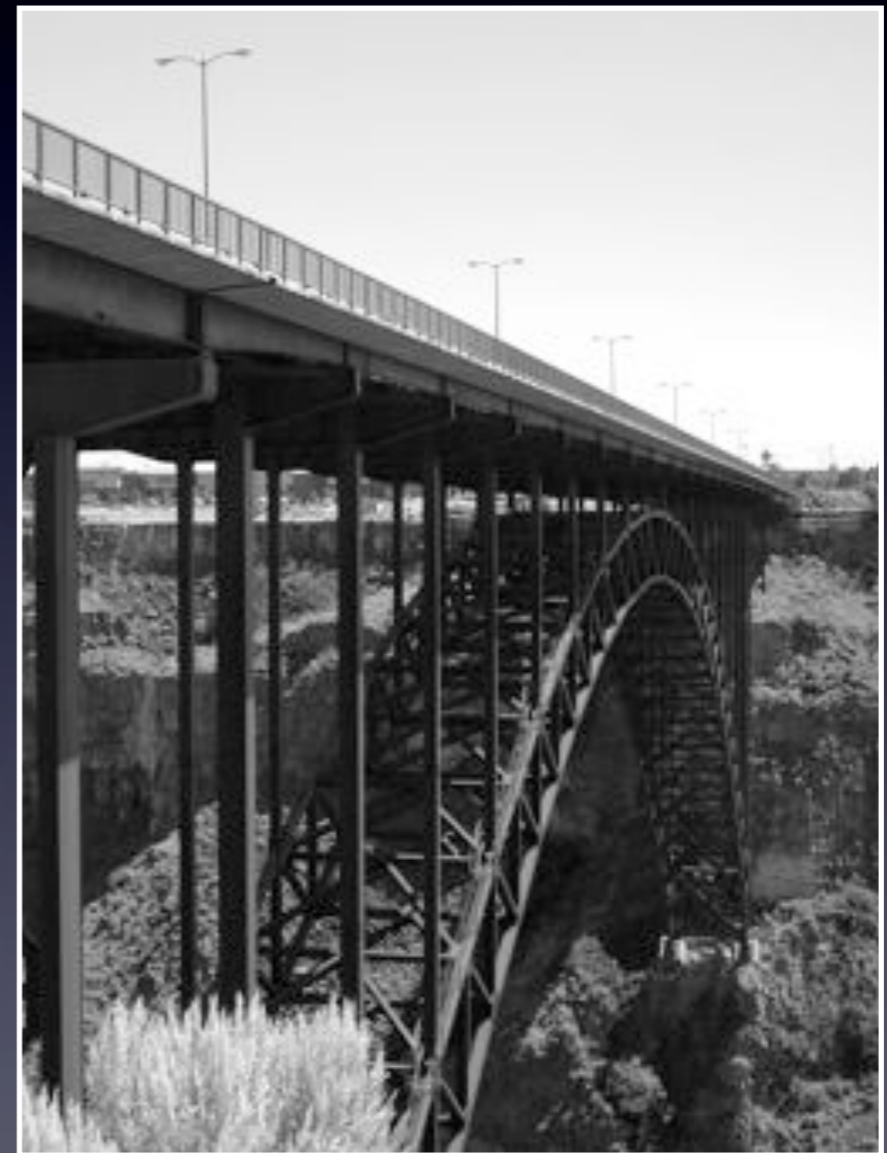


Close the Loop

-  Blog, forum, bug tracker on every application footer
-  Source of bad inputs should experience their own pains
-  “Give them the button”

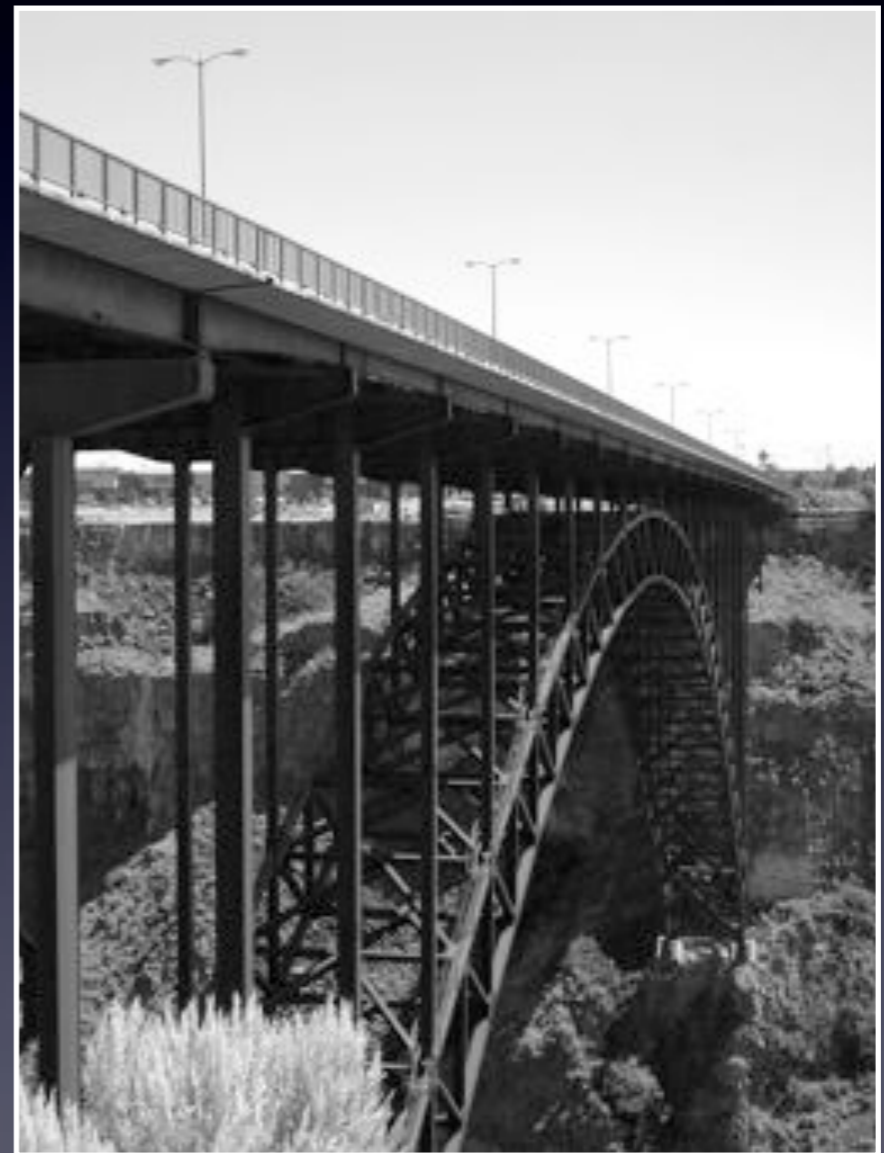
Bridge Dev and Ops

- Ops is a stakeholder
- Dev needs the Ops perspective
- Collaboration over checkpointing
- Replace review with automated testing

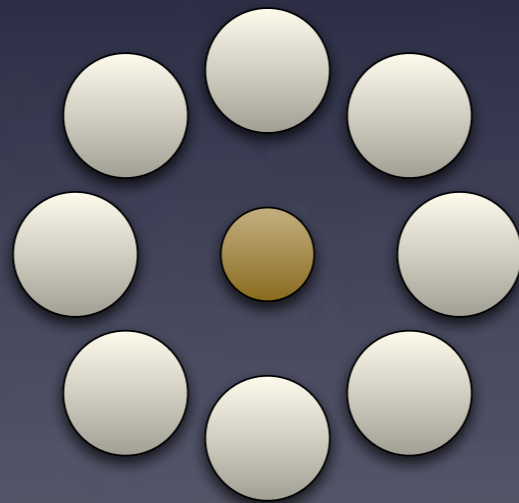
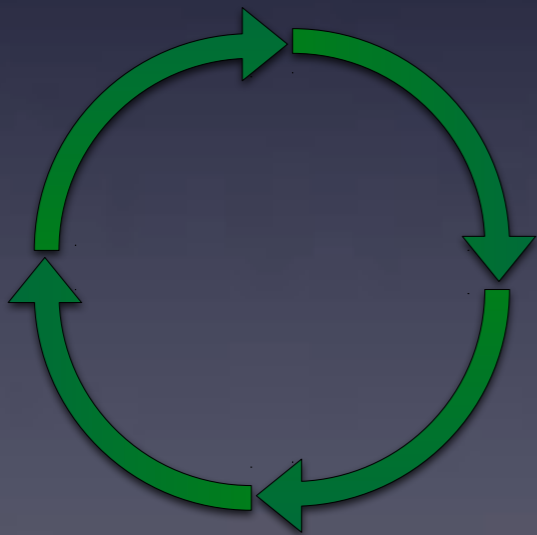


Bridge Dev and Users

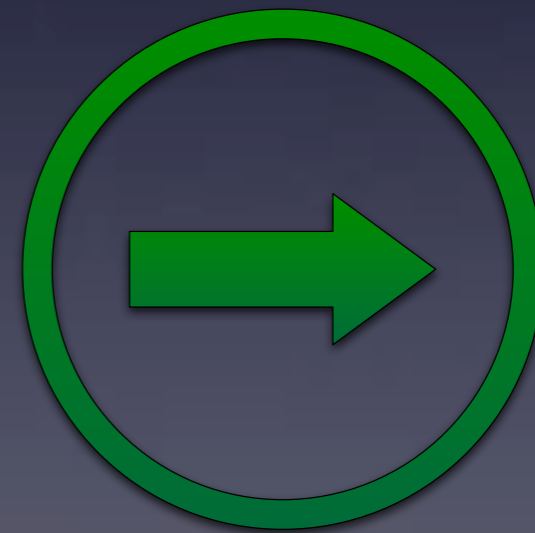
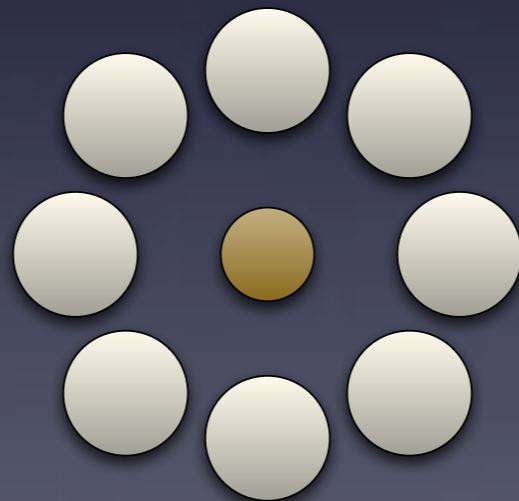
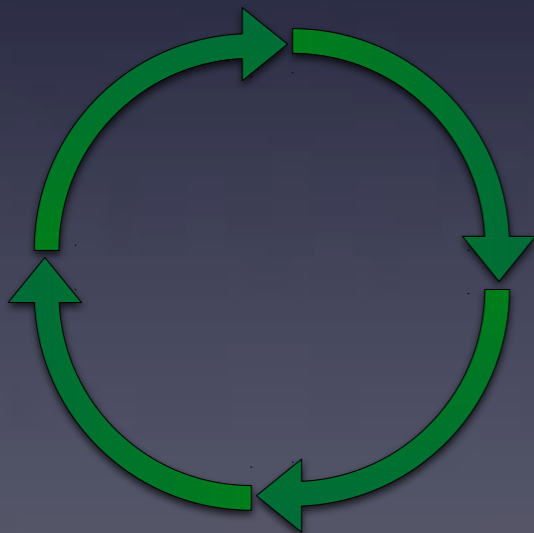
- App communities
- Users passionate about apps
- Forums, bug tracker, developer blogs
- Real use of feedback



Tempo. Adaptability. Transaction Costs.



Tempo. Adaptability. Transaction Costs.



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