

SOA: State of the Union

Chris Howard, VP and Service Director
Burton Group



software2008
The Future of Software is Here

SOA

SOA

“Most SOA efforts will fail spectacularly.”

“SO

ve”

“Di

rs

ago

“In the begin

clue what we

“W

ne, but

a

care

“We can't use t

executives any



Anne Thomas Manes, VP and Research Director, Burton Group

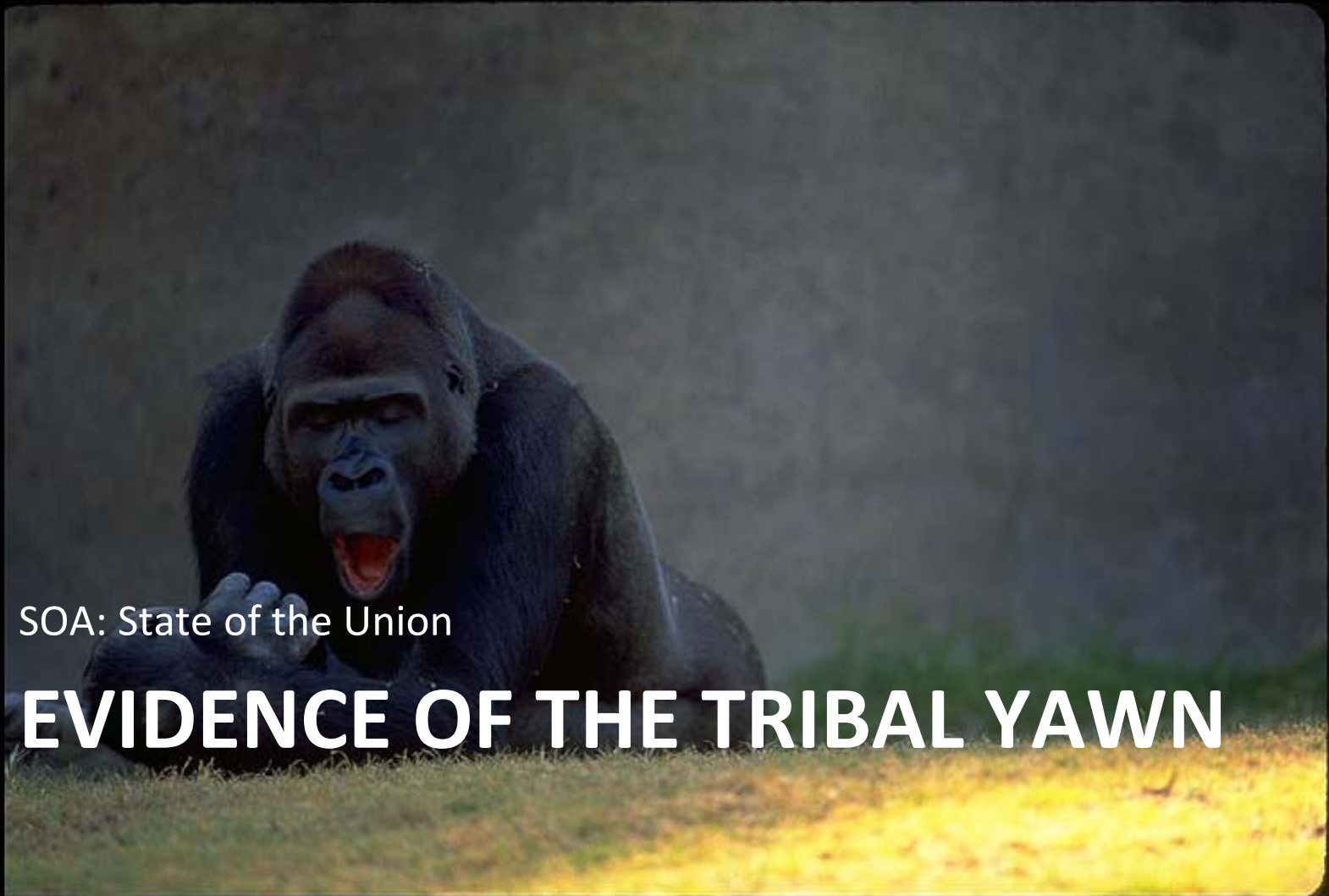
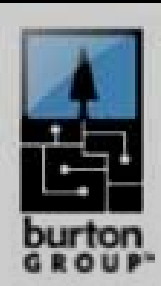
“Reusability is always overpromised”

“Is there such thing as a Complex Object Access Protocol?”

“You mean, we're going to spend \$X just to replicate existing functionality?”

CFO to architect: "How much money is this going to save me?"

“If no one is reaching maturity yet, why are we still trying?”



SOA: State of the Union

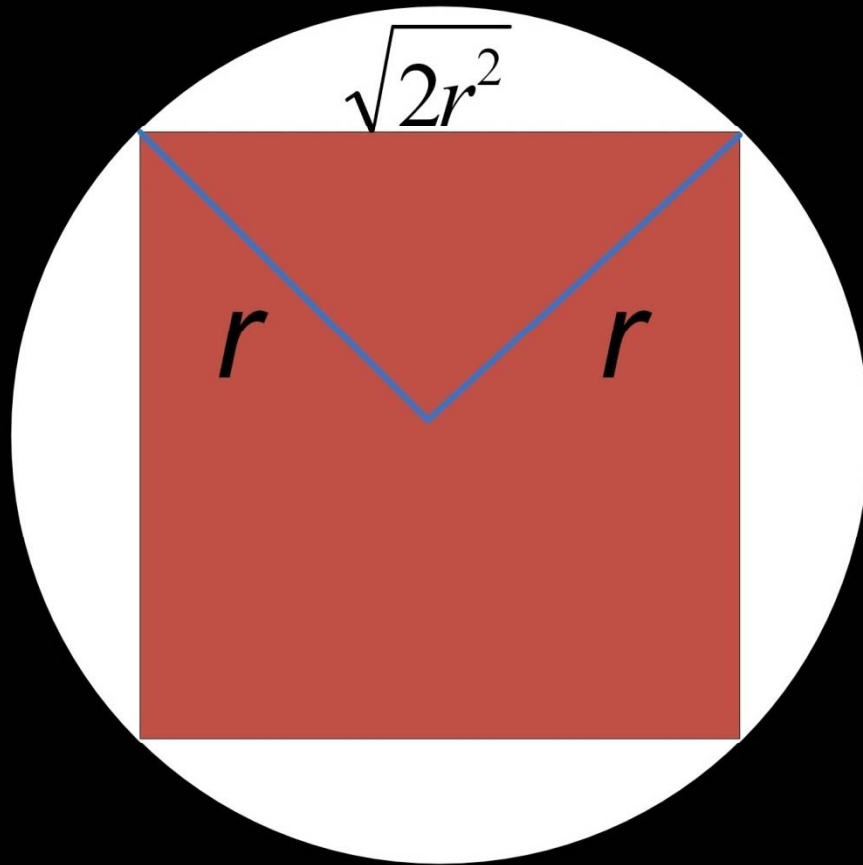
EVIDENCE OF THE TRIBAL YAWN

Vendor Messages

- New branding of old stuff
- “We're 100% SOA compatible!”
- “We offer a complete SOA solution!”



Technical Challenges



- Perceived (and actual) complexity
- SOA concepts don't always map 1:1 with topology or tools
- Trying to do too much/wrong things with wrong tools

Design Challenges

- Partitioning design and Separation of Concerns
 - UI
 - Application
 - Data
 - Network
 - Dynamic data center
- Consolidation of functions into platforms
- Modeling is still evolving



Project Challenges

- SOA is a long-term strategic undertaking
- Fixes and point releases trump strategic infrastructure work
- Power/priority struggles
- Many projects are scoped on an annual basis
- Churn in executive leadership



Cultural Challenges

- Business unit/IT coupling
- Shared solutions require shared objectives
- Ownership paradigm changes



- No incentive for collaboration
- SOA and "Cube Farm": Mutually exclusive?
- Business domain "normalization" is politically charged

Management Challenges

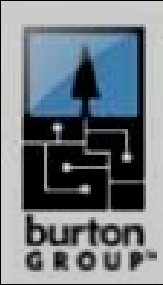


- People may be tasked with unreachable goals
- Advocacy (to management) is complicated
- Great collaboration is required

Real Risks

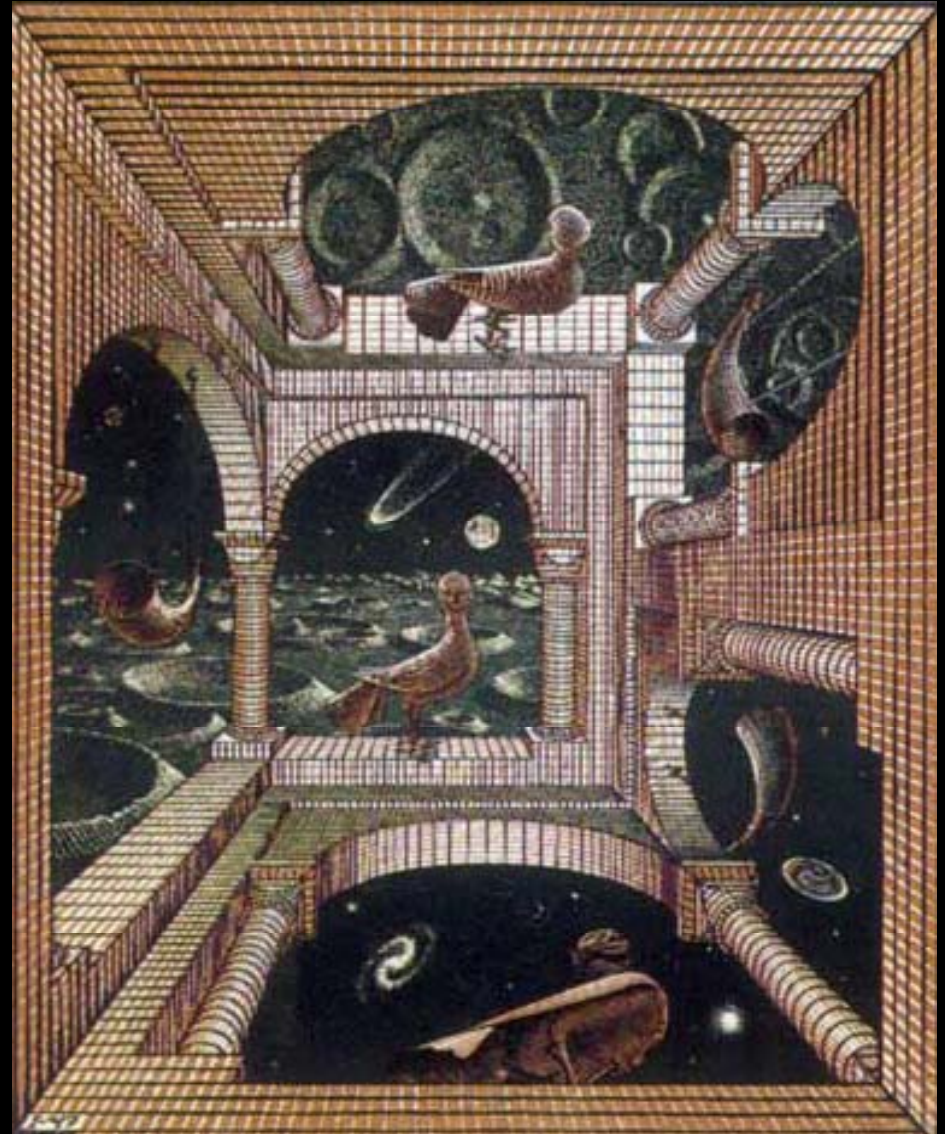
- The best “academic” technical solutions may not be “right” (context and fit)
- If cultural problems are not addressed, outcome is SOA silos
- Assumptions by IT staff about Business Value may be wrong
- Business is used to *not* being engaged with IT





SOA: State of the Union

ARCHITECTURE REVISITED



Simultaneous Rates of Change

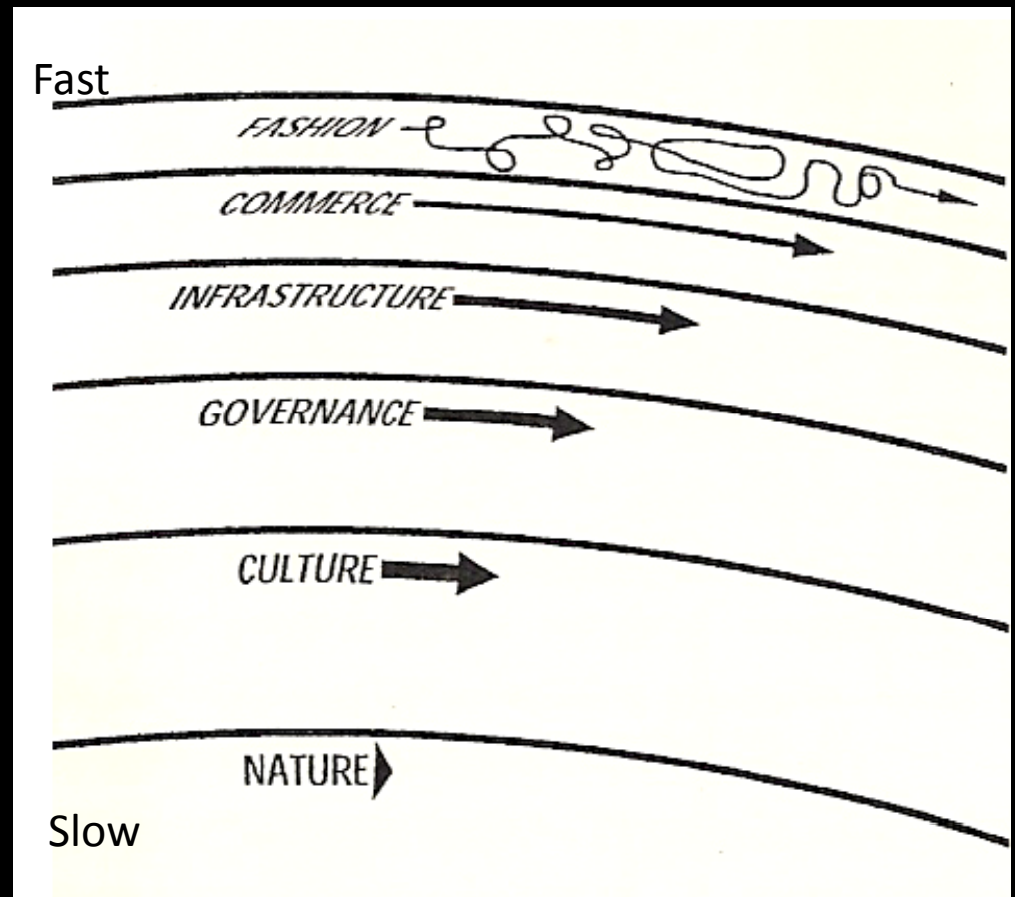
Varying rates of change = sustainable adaptation

Fashion screams: “Try this!
No, no, try *this!*”

Commerce absorbs and exploits
the pace of fashion, creates
work and wealth

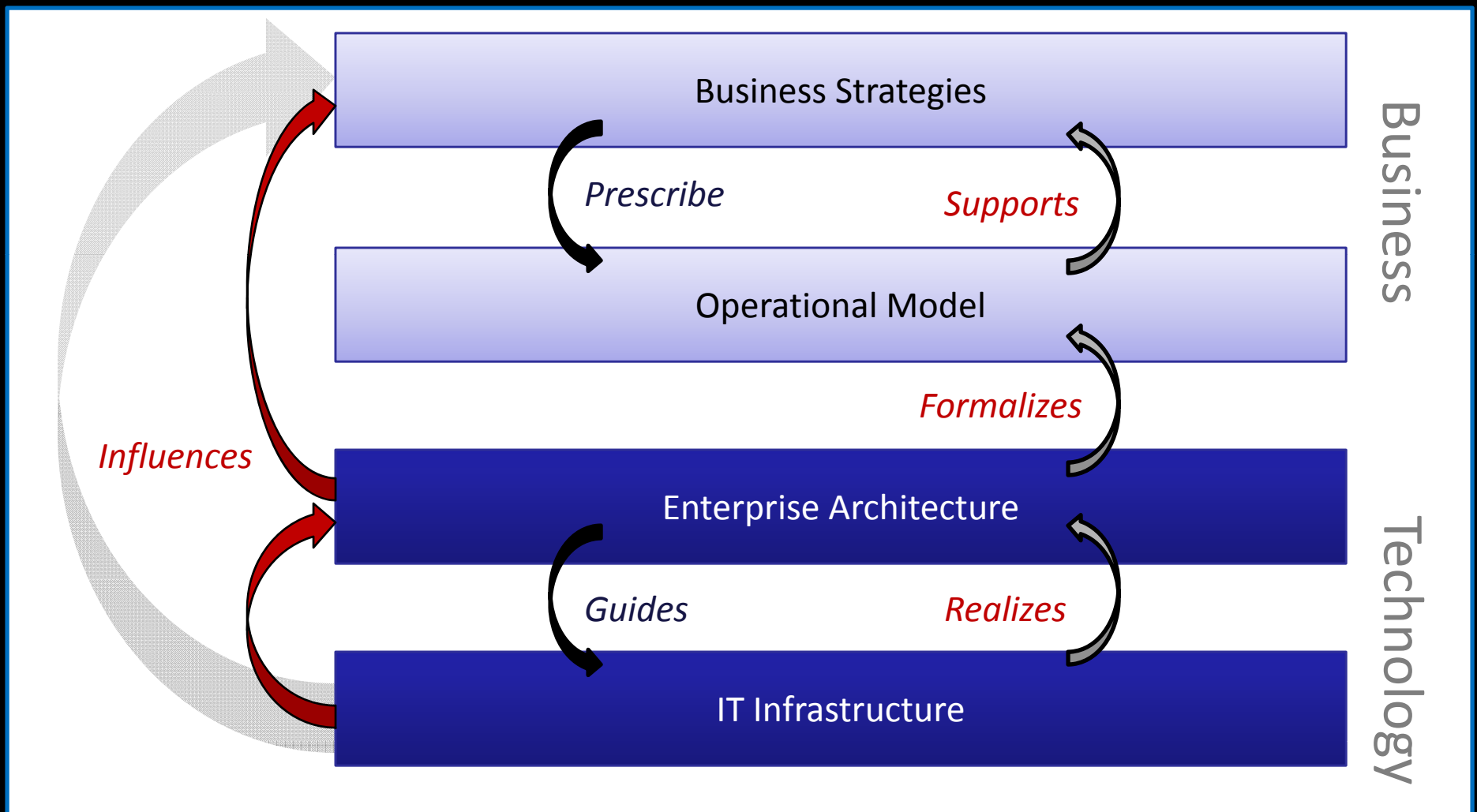
Infrastructure supports commerce
and fashion. Its long-term
payback isn't justified in strictly
commercial terms

Governance is empowered to
take on the cost and disruption
of creating infrastructure



Enterprise Architecture

Facilitates simultaneous rates of change



Chaos to Order (town planning)



Chaos to Order (town planning)



Simplicity: Not as simple as it seems.

Most technology goes through cycles of development and change in both internal and external complexity.

As the technology matures... devices become easier to use, although usually by becoming more complex inside.



Donald Norman, *The Invisible Computer*

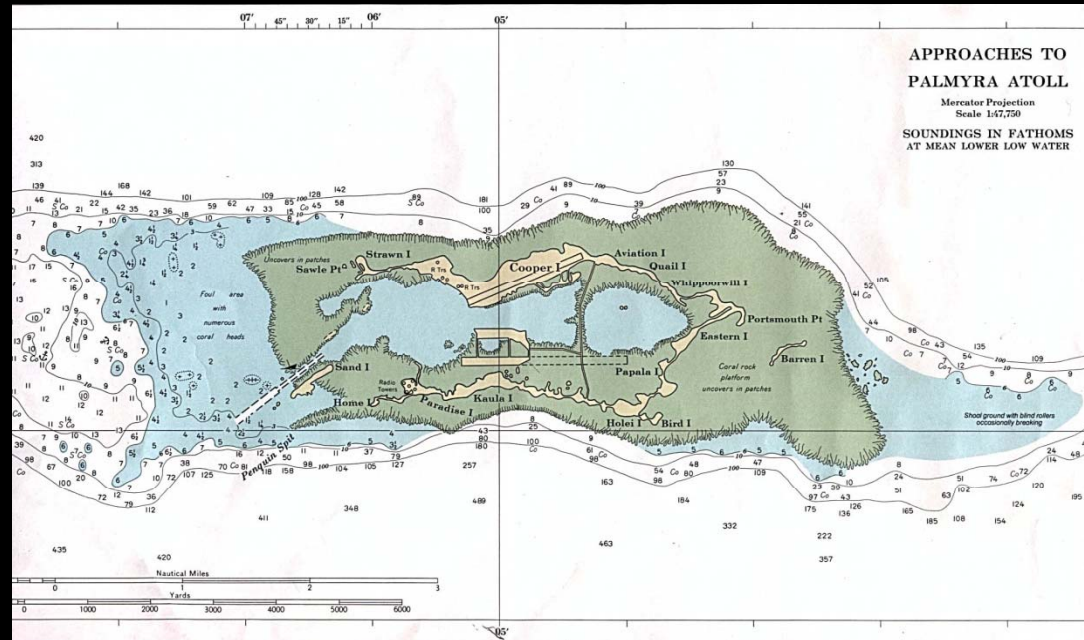
Simplicity = Managed Complexity

Governance + Architecture = Managing Complexity

- Provide safety
- Know where you are, where you are going, and risks to avoid

“The proper role of [governance] ...is to represent the interest of the future to the present.”

Lester Thurow



Jryhuopbr.

Wrs Cgrzc

Uhwulfwtrq

Ryhukhdg

F'rowro

Wd'br

Op'wvtrc

Wd'p'dg

Uhxwvtrq

Uxbr



Enterprise Architecture loses control when...



- It is ignored
- It is undervalued
- It is disconnected from reality
- It is frozen
- It is inconsistent
- It is circumvented
- It inhibits

... don't ask—it's forbidden to know—what end the gods will give me or you.

Even as we speak, envious time is running away from us. *Carpe diem*, for in the future you can believe the minimum.

Developerus Heroicus

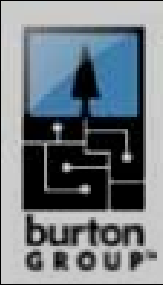
Empowered Architecture

- Is outcome-oriented
- Prescribes the *shape* of things
 - Fit (requirement)
- Describes the *place* of things
 - Context (dependencies)
- Makes good design easier
- Runs interference
- Takes advice



“No one can use rehearsal time as well as Simon Rattle. He's absolutely disciplined, but also inspiring. He urges you to do things you hadn't thought you were capable of.”

Musician, Berlin Philharmonic



SOA: State of the Union

ENGAGING THE BUSINESS



Enter the Conversation

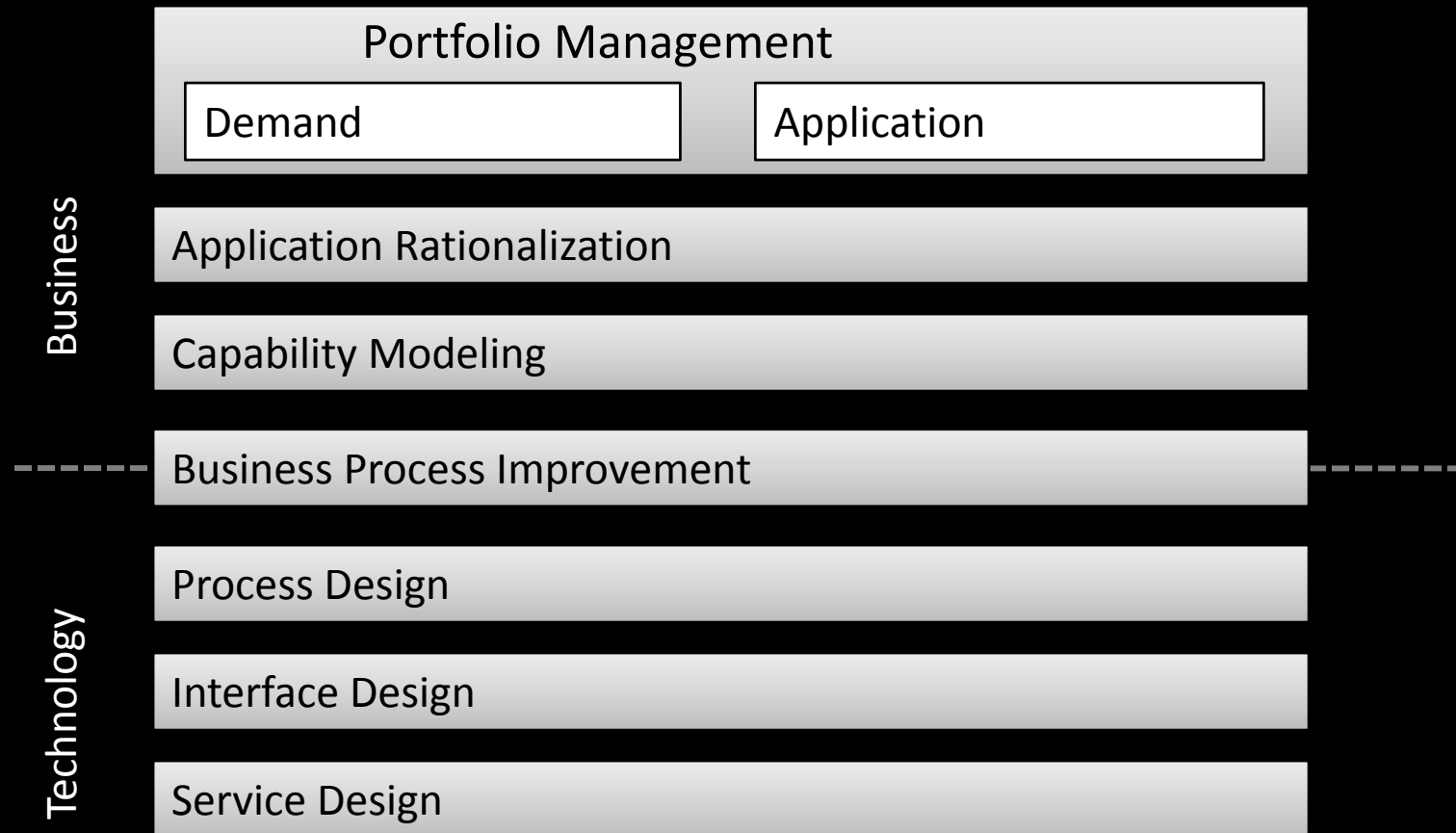
The evolution of IT from **cost center to strategy driver** started about five years ago. After living through the pain of **shadow IT** in the business units...Baird was not going to thrive unless IT had “**relevant conversations** with the business units about how IT could contribute to their success.”



IT had to prove it could offer **business solutions**, “not toys and technology that we thought were cool.”

Brian Brylow (CTO), Baird

Having the Correct Conversation



SOA Facilitates

- Compliance reporting
- Software as a Service (SaaS)
- Unified Communications
- Legacy modernization
- Outsourcing/Offshoring
- Provisioning and Role Management
- Business Process Management (BPM)
- Business Intelligence (BI)



But...

SOA is Part of a Something Bigger

Overemphasis on SOA in isolation distracts from enterprise goals

SOA makes it easier to accomplish higher goals

SOA must have business relevance

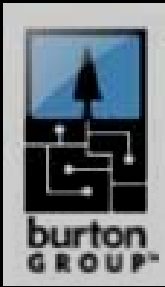
SOA is not a thing

SOA is an architectural style

Technology implementation of SOA principles will change

Conclusion

- SOA is a valid architectural style
 - *But may not be appropriate for all cases*
- SOA can provide cost savings
 - *But not without careful financial analysis*
- SOA principles are fundamental to agility
 - *But do not guarantee agility*
- SOA promotes reuse
 - *But does not guarantee reuse*
- SOA fatigue is real
 - *So, we have to raise the level of discussion*



Burton Group Research

- Vantage Point 2008-2009: Think Big; Take Small Steps
- A New Classicism
- Enterprise Architects: Sowing the Seeds of SOA Success
- Registry Services: The Foundation for SOA Governance
- The Registry and SOA Governance Market Landscape
- Application Rationalization: Burning Fat and Building Muscle



software2008
The Future of Software is Here