Business-IT Ecology

QCon – November 2009 jenny quillien –– dave west

IT's Not Going to Get Any Better

Cancel 31% of projects before completion

57% of projects with 189% cost overruns

9% of large projects on time, within budget

Large projects with 42% of original features

Restart 94% of projects at least once

IT's going to get worse

• Agile Enterprise

Innovation Enterprise

Pace of change accelerates, available response time decreases, innovative responses essential

IT Must!

Do it now

• Do it right

Do it for less

Show ROI at the "function level"





Formalism



Descartes



Leibniz



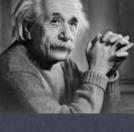
Newton



Pascal



Kant

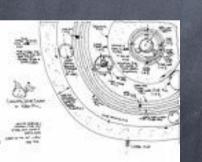


Einstein

Metaphor Abuse -Clockworks





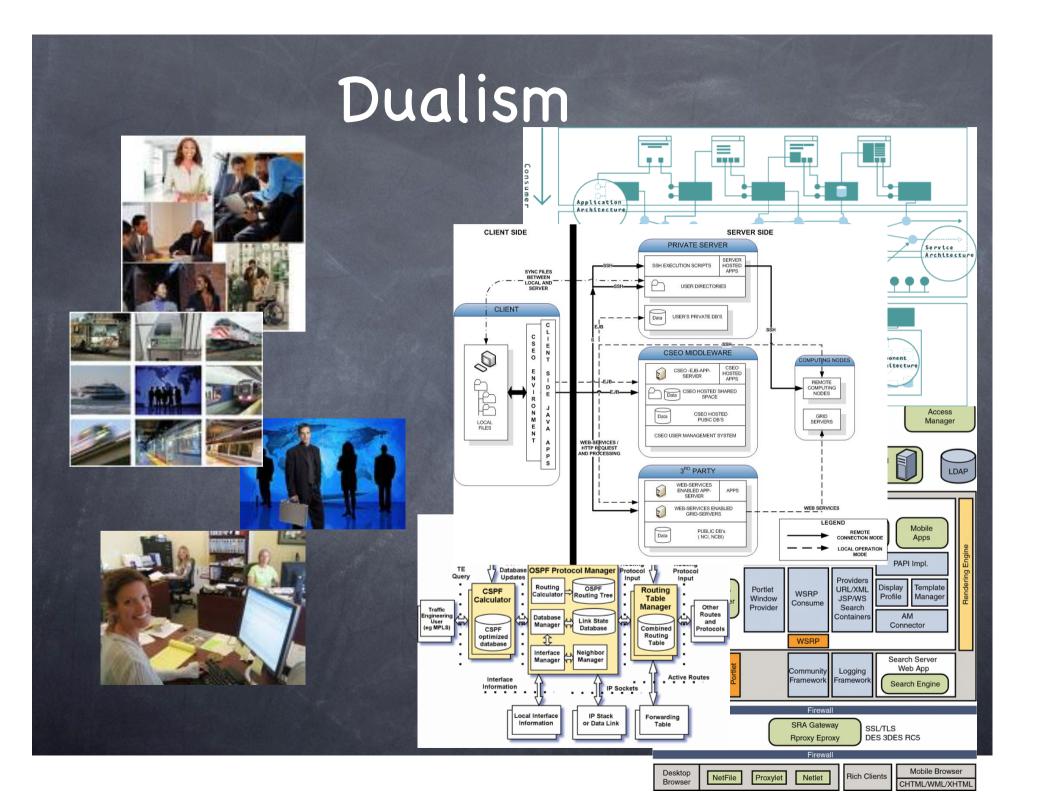






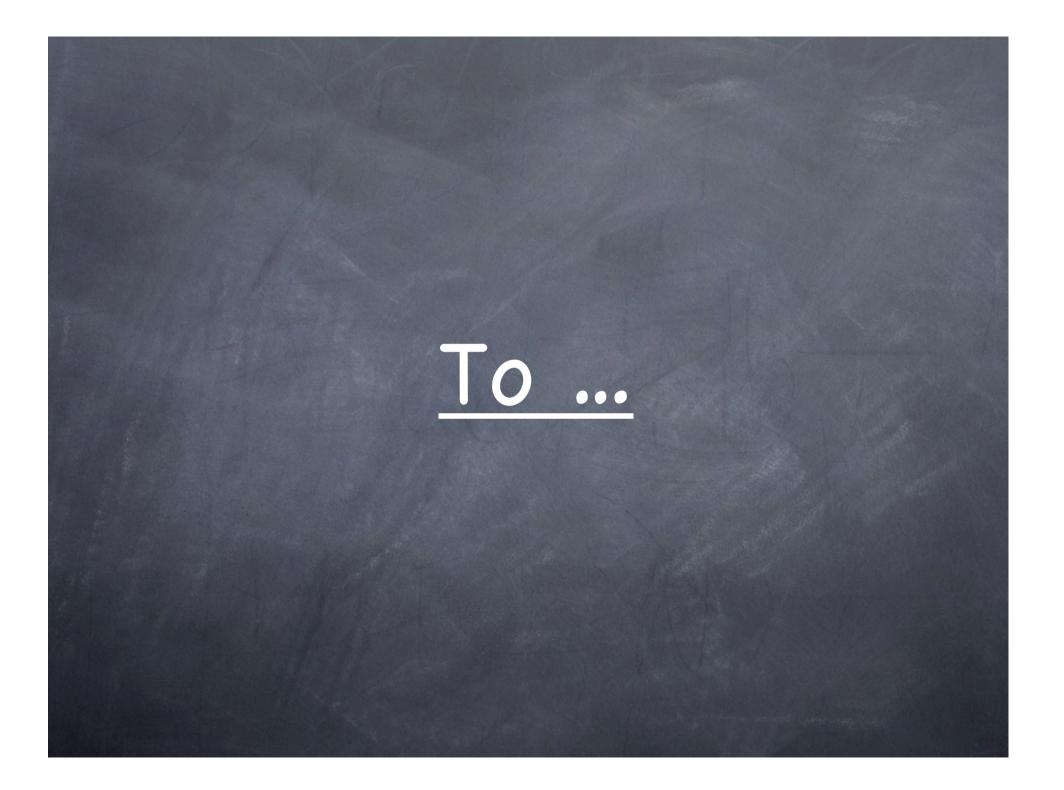




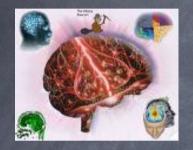


Technology Lock-In

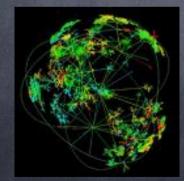




One Single CAS











Adopt a New Way of Thinking

Which integrates

Object Thinking, Design Thinking, Agile Thinking Systems Thinking

And then uses Computational Thinking for implementation

Object Thinking

System is a collection of objects participating in relationships (which are also objects).

OBJECTS (contrary to what you believe) are simply autonomous things which have an identity, exhibit specific behaviors, possess certain knowledge.

Design Thinking

Finding Solutions to Wicked Problems

...solving problems with imperfect knowledge using exploratory techniques, while involving all stakeholders.

Design is Change

Agile Thinking = E-i-i



Iterative



System Thinking: Theory of How It All Works.

Naur – "Theory Building"

Theory is Thick Description

Thick Description is collection of stories that make sense of object behaviors in context.

Thick Description



:Complement Thick Description With Patterns and Properties

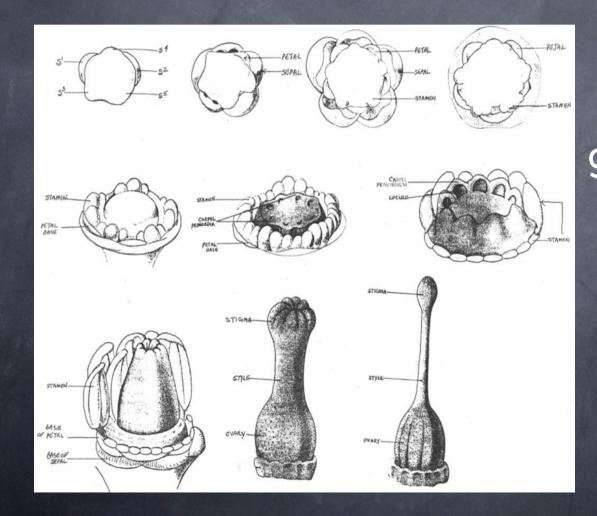
Patterns

Observed in Reality, in Nature

Not

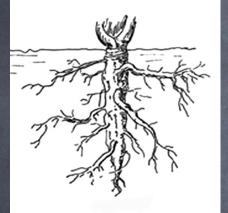
Product of thought that can be applied in many contexts.

Properties

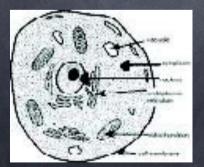


Geometries underlying patterns and generating form

Properties



Levels of Scale



centers as fields levels of scale boundaries local symmetries contrast positive space deep interlock and ambiguity echoes alternating repetition good shape gradients roughness simplicity and inner calm void not separateness

Boundaries



Centers

Business – IT Integration

Business and IT are already - inescapably integrated.

The required revolution is in the way you think about the problem.



The "Five Thinkings" point the way.