

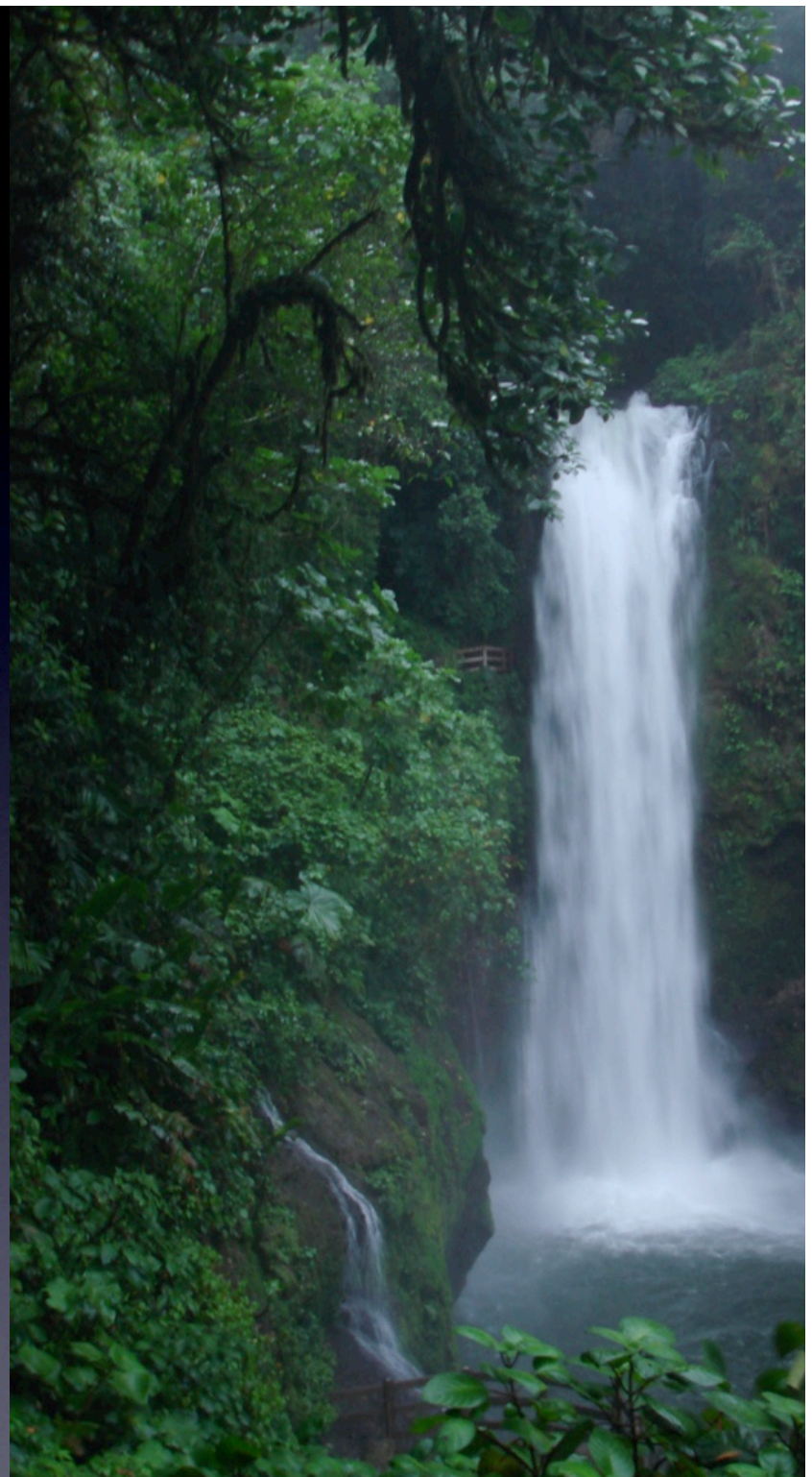
An Introduction to Agile for Traditional Project Managers

Presented by

Stacia Broderick, AgileEvolution

For Emerging Technologies for the Enterprise

Philadelphia, March 26, 2008



Stacia Broderick

- Agile since 2003
- 14 years project management (manufacturing and software)
- Global coach, trainer, consultant (hundreds of teams, dozens of companies)
- PMP, CST
- Co-author of *The Software Project Manager's Bridge to Agility* with Michele Sliger (available now, FINALLY I can get a life

Goals for this session

- Understand the main differences between traditional and agile project management
- Map some PMBOK knowledge areas to agile practices
- Discuss the role of the agile project manager

The Agile Manifesto

We are uncovering better ways of developing software by doing it and helping others do it.
Through this work we have come to value:

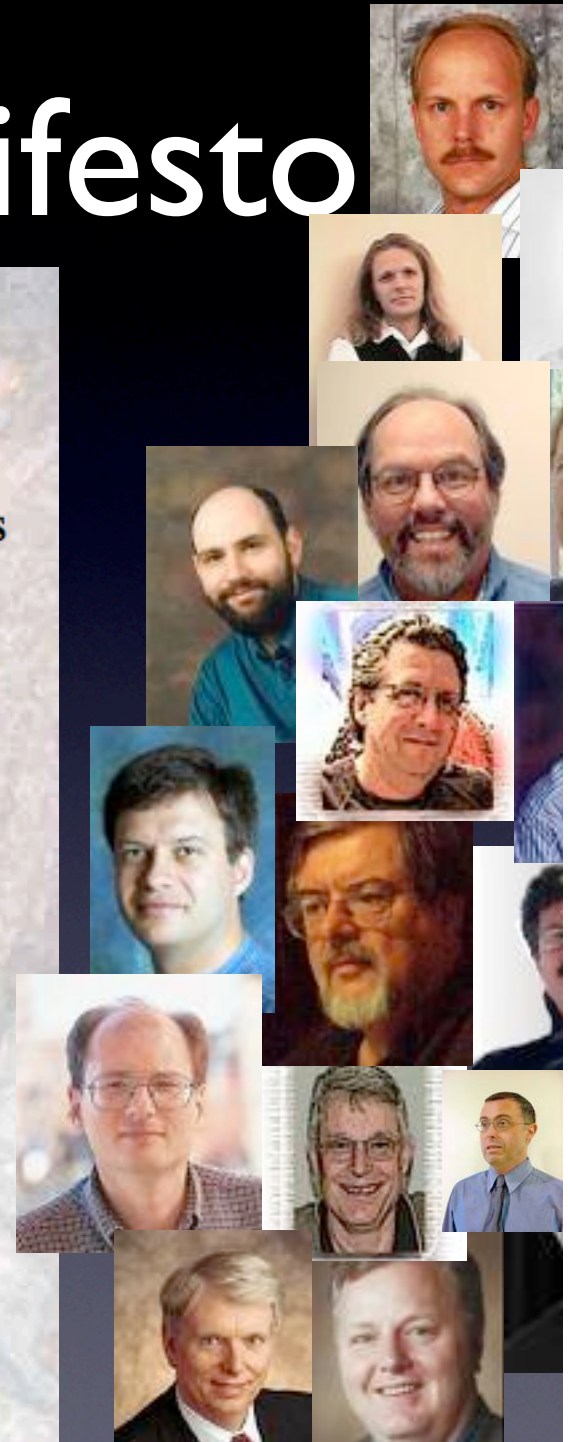
Individuals and interactions over processes and tools
Working software over comprehensive documentation
Customer collaboration over contract negotiation
Responding to change over following a plan

That is, while there is value in the items on the right, we value the items on the left more.

Kent Beck
Mike Beedle
Arie van Bennekum
Alistair Cockburn
Ward Cunningham
Martin Fowler

James Grenning
Jim Highsmith
Andrew Hunt
Ron Jeffries
Jon Kern
Brian Marick

Robert C. Martin
Steve Mellor
Ken Schwaber
Jeff Sutherland
Dave Thomas

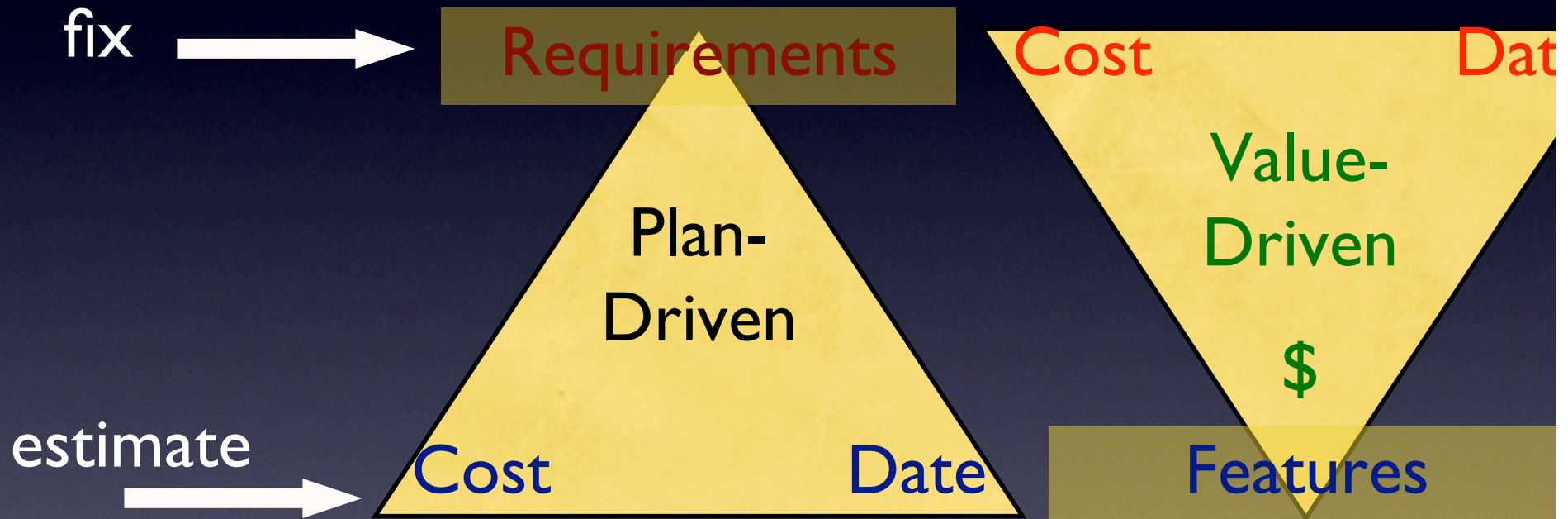


Characteristics of Agile

A value-driven approach to building working software by collaborating with the customer and embracing change.

- Iterative and incremental
- Risk mitigation via use of time boxes
- Continuous improvement
- Team ownership of quality
- Value-based prioritization of requirements
- Dedicated, self-managing teams
- Collaborate with customer
- Embrace change
- Modern engineering practices

Agile Planning 101

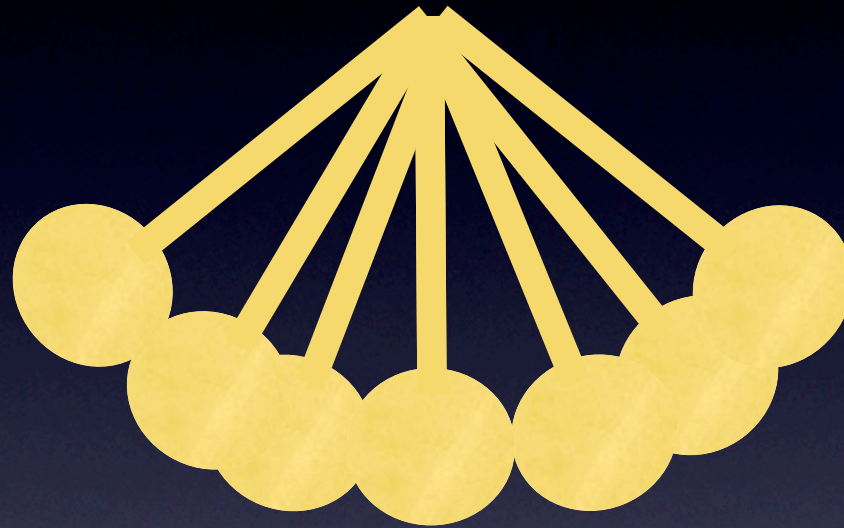


Source: DSDM

The Planning Pendulum

Plan Everything Up Front

- Plan up front
- Resist change
- Value = follow the plan
- Team owns risk
- The “Waterfall”



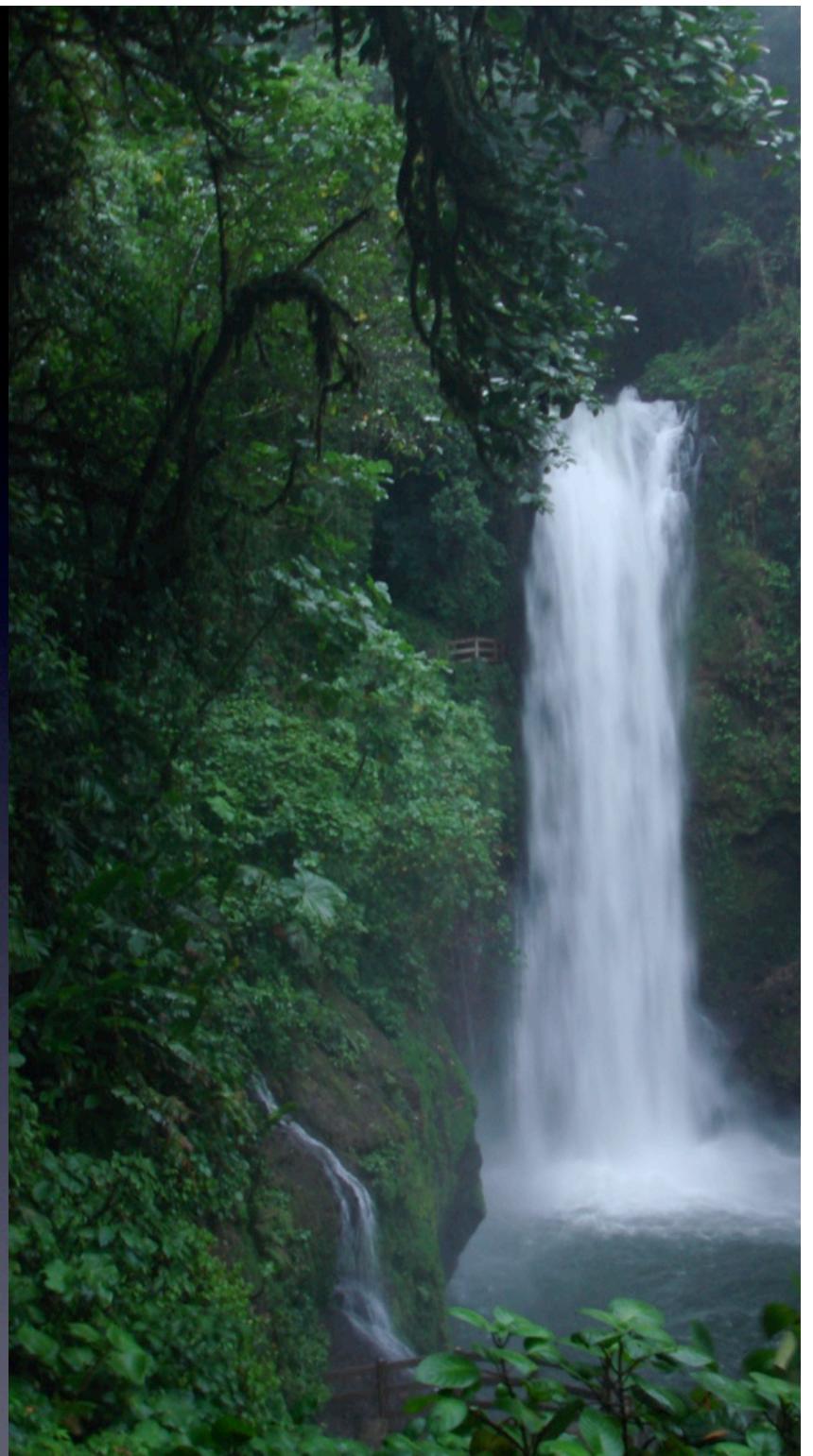
Plan just today

- Plan only for current iteration (n)
- Change anytime
- Value = iteration demo
- Business owns risk
- OK if customer in room w/team

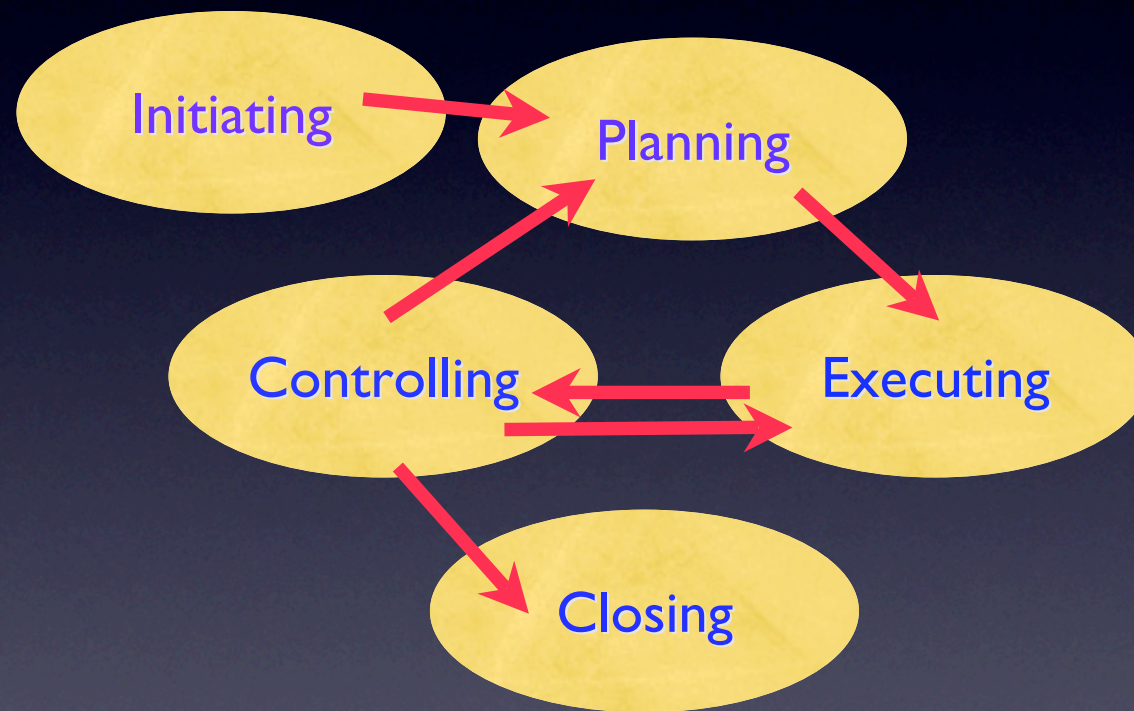
Agile Release Planning

- High level of certainty and detail near term
 - Decreasing certainty and level of detail in the future
 - Change anytime, keep the vision in mind
 - Value = $f(\text{market timeliness, customer satisfaction, quality})$
- Shared, calculated risk by business and team

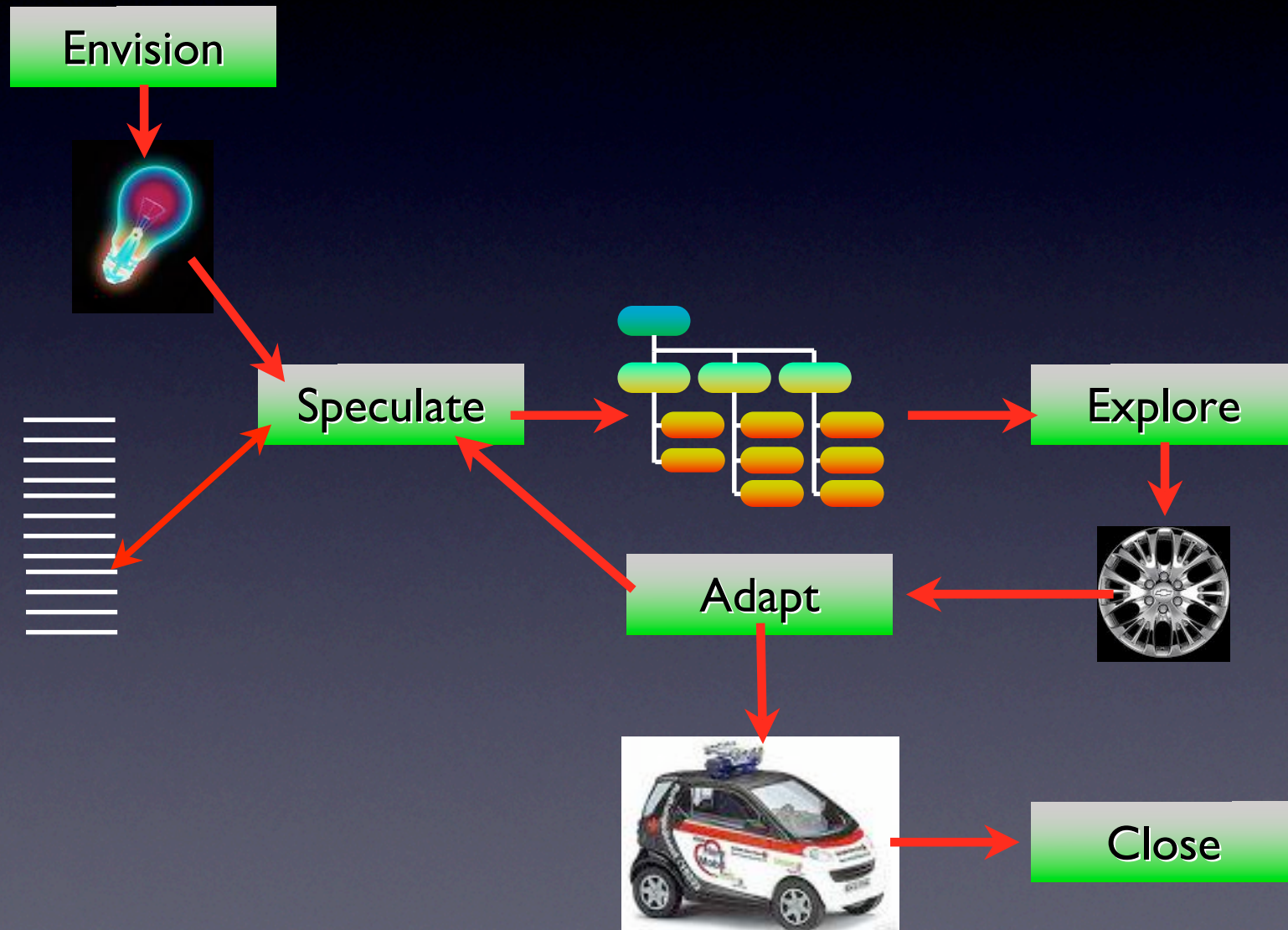
Mapping Process Groups and Knowledge Areas



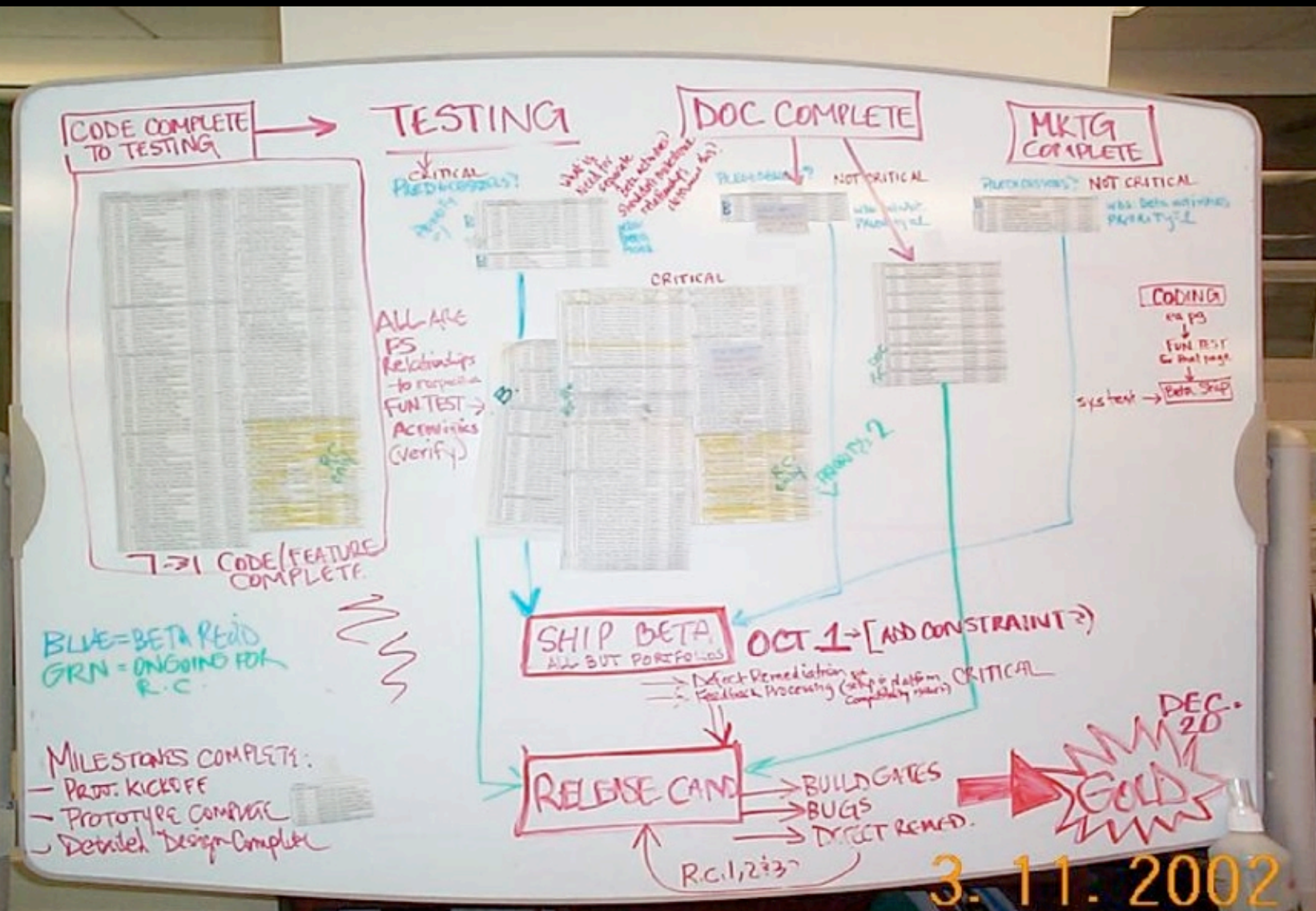
PMBOK Process Groups



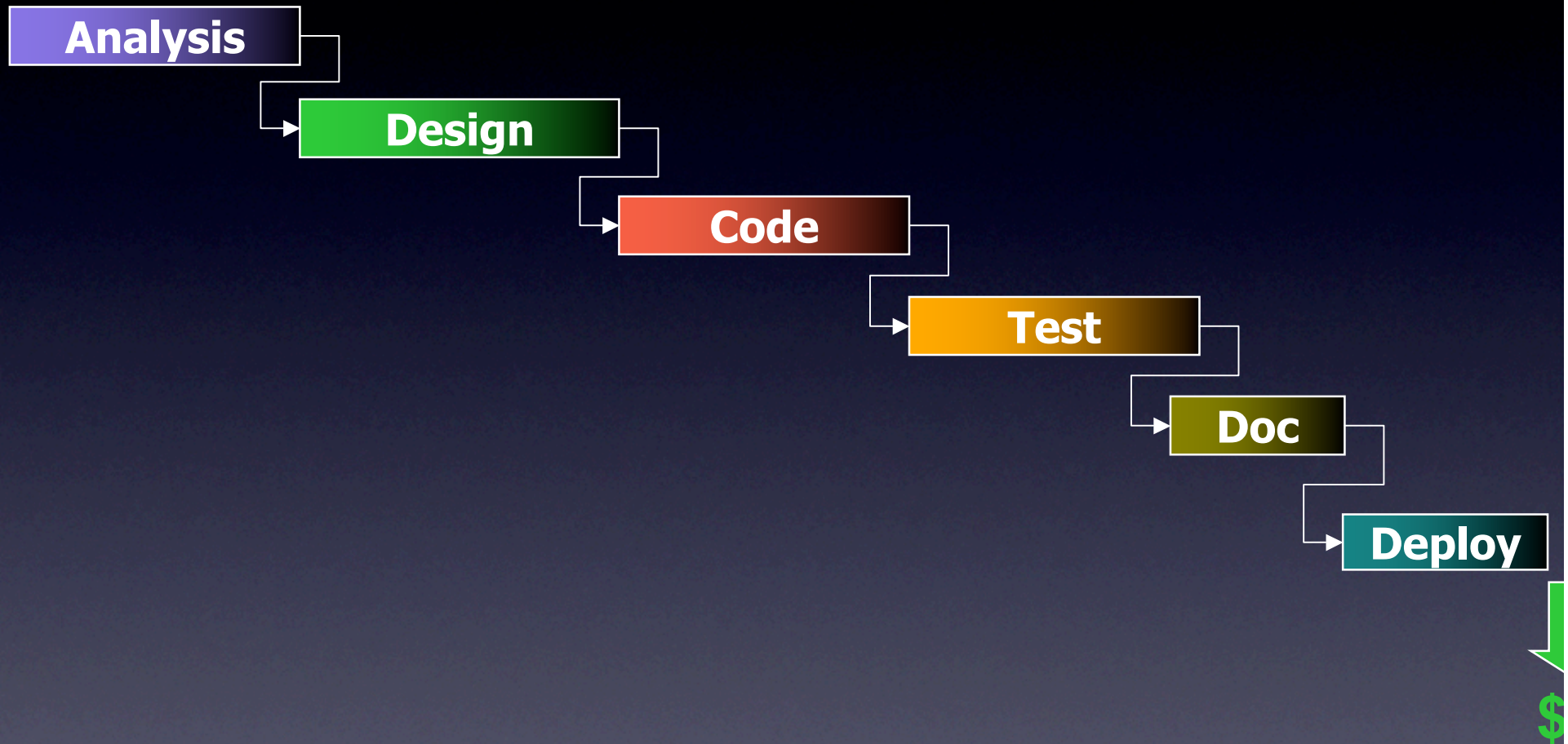
Agile Process Groups



Projects are Complex

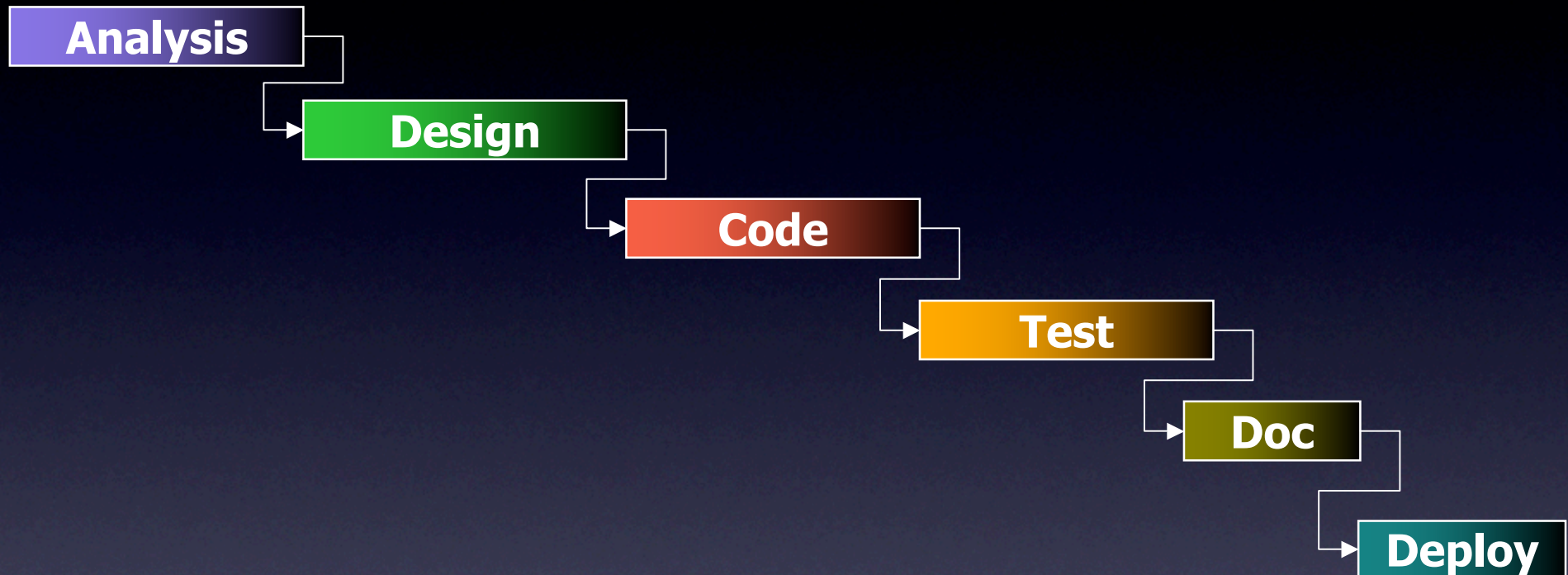


Traditional Gantt Chart



Value recognized at END of entire cycle

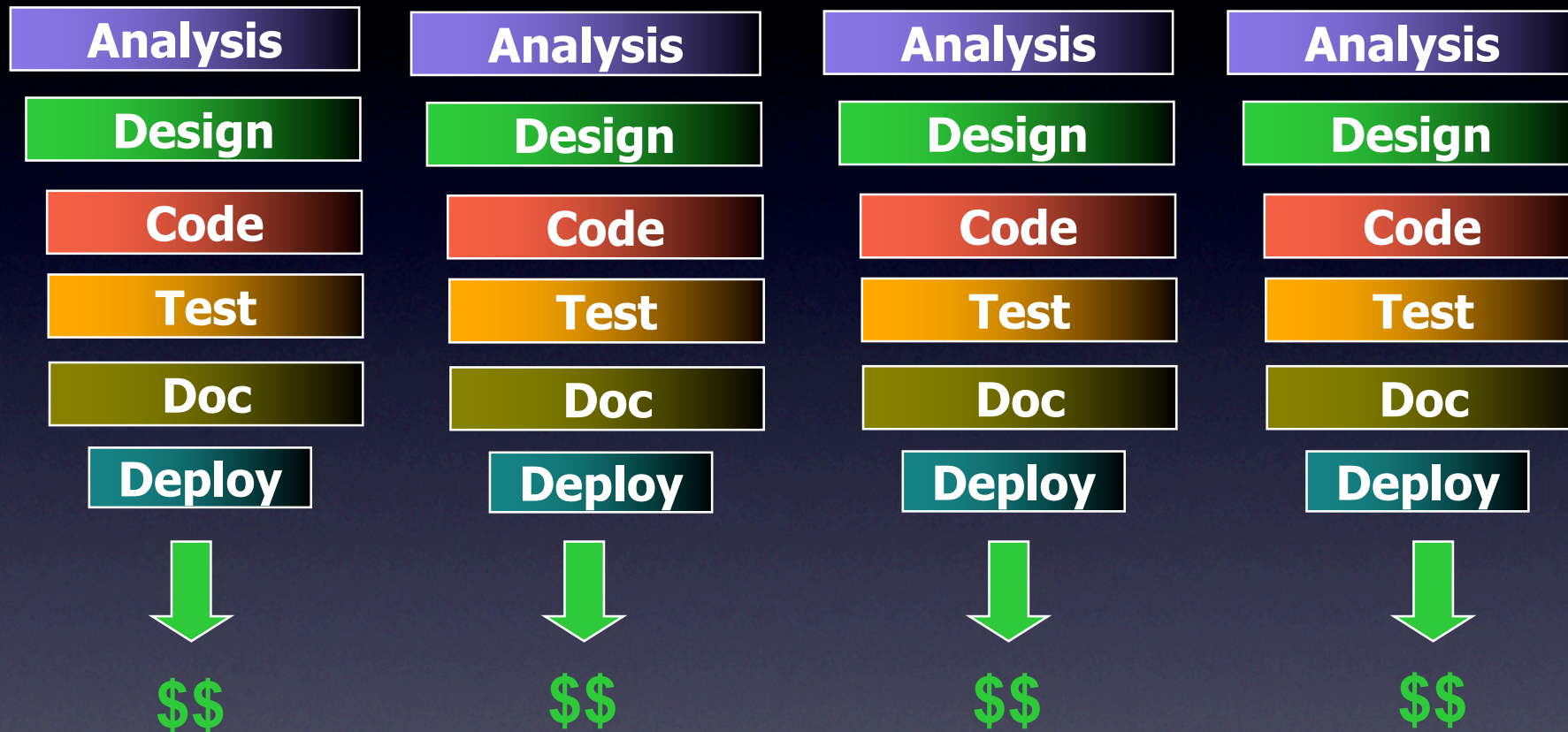
Collapse the Gantt



....to expedite the speculate-
explore-adapt phases



Deliver Value Every Iteration



- Deliver customer value every iteration
- Deliver potential business value every iteration

Big Ideas



- Exploration is critical
- Speculate based on real, demonstrable results
- Pack a lunch and get started
- We adapt our way to closure (vs. predict our way there)
- Iterations of work are sequential
- PMBOK does not equal Waterfall

Integration Management

Traditional

Project Plan Development

Project Plan Execution

Direct, Manage, Monitor,
Control

Integrated Change Control

Agile

Release and Iteration
Planning

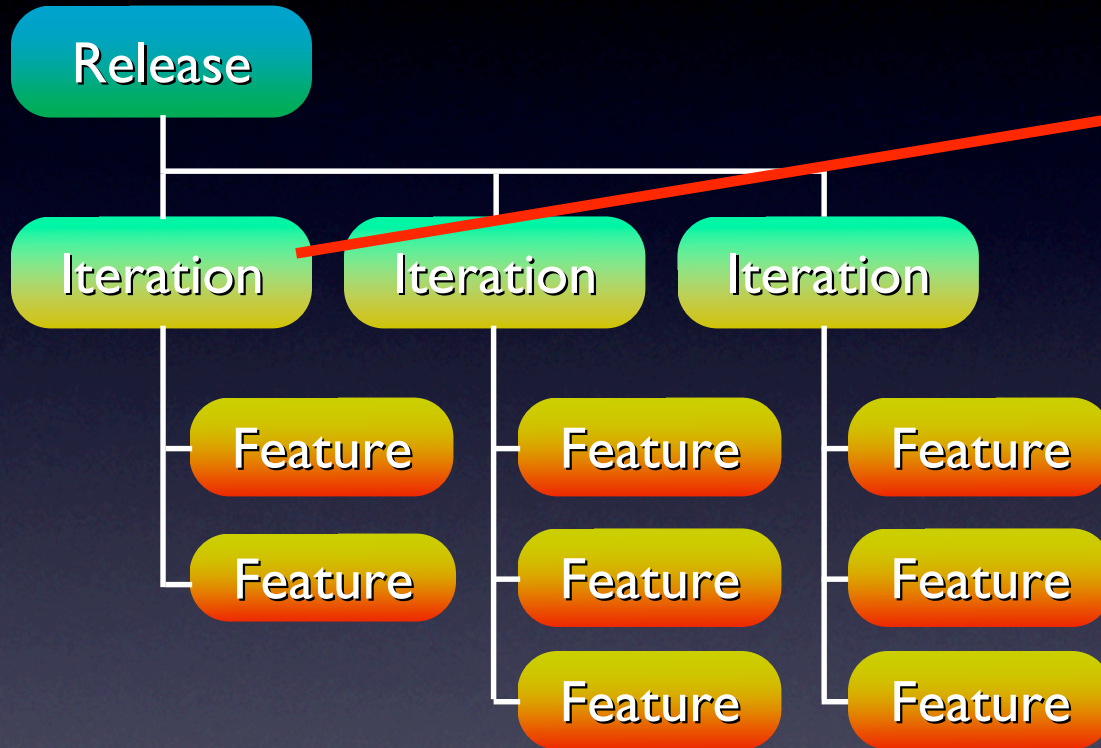
Iteration Work

Facilitate, Inspect & Adapt

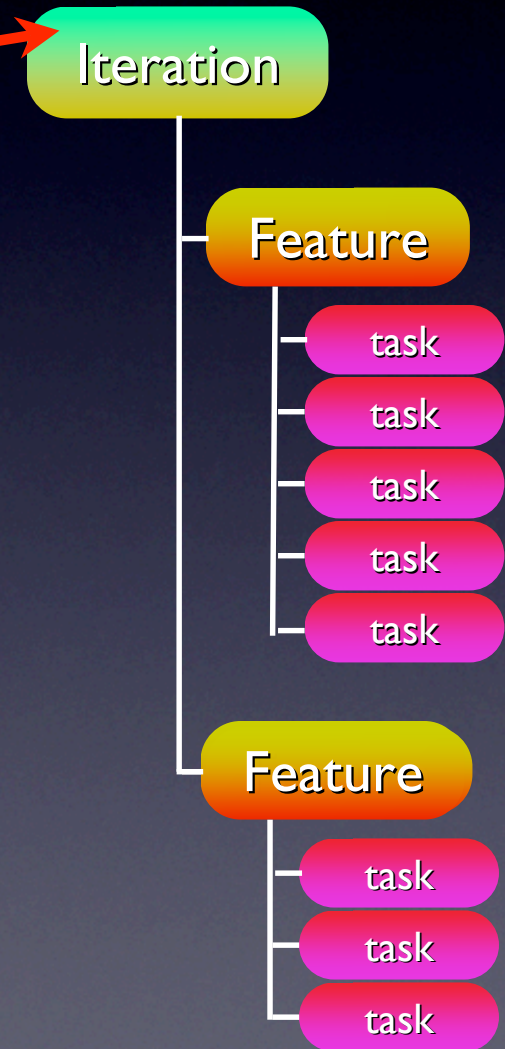
Ranked Backlog

Strategic and Tactical Planning

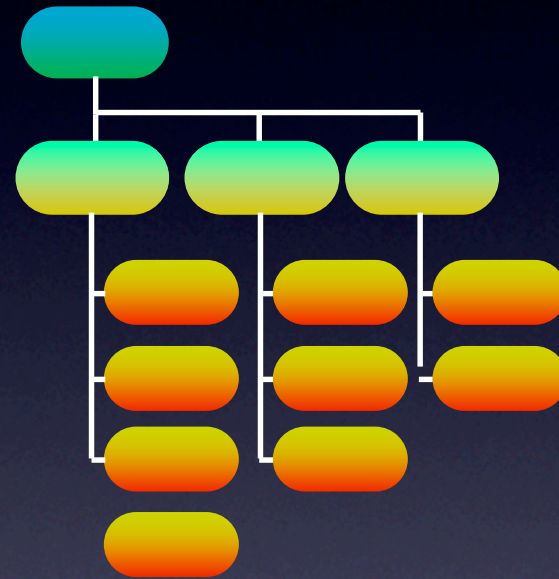
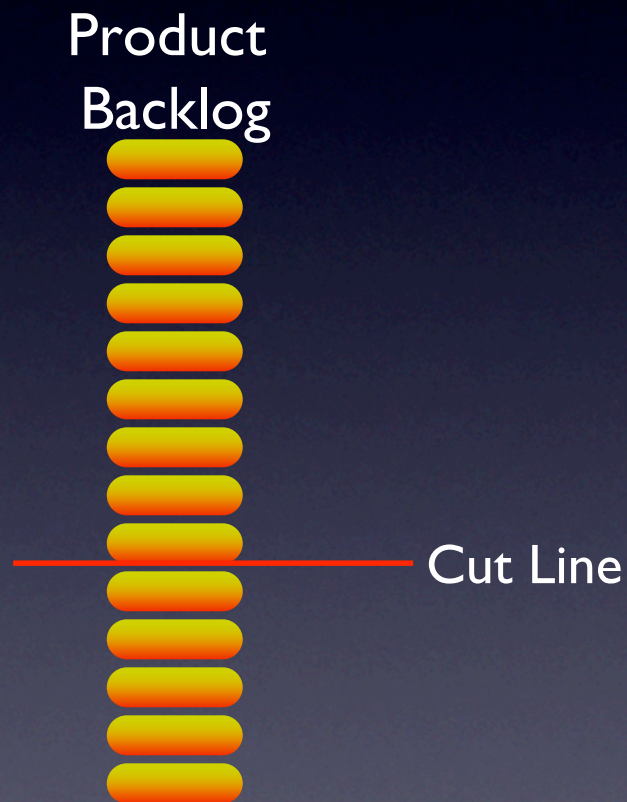
Strategic Planning



Tactical Planning



Release Plan (Strategic)



Based on our velocity and the estimates in the product backlog, what feels like a reasonable amount of work that we can consider for a collection of iterations?

The Iteration (Tactical)

Iteration Planning

Prioritized
Backlog

- Feature
- Feature
- Feature
- Feature
- Feature
- Feature
- Feature
- Feature
- Feature
- Feature

Iteration

Feature

task

task

task

task

task

Feature

task

task

task

Daily Standup Meeting

Iteration Review

Iteration

Retrospective

Product Increment

Deming Revisited



Big Ideas



- We can send a man to the moon, but we cannot predict the future (sorry)
- In agile projects, we inspect and adapt our product, process and approach; strategy is important. Set the direction, react to the reality.
- Empowered, self-managed teams move faster than micro-managed, “over-processed” teams; let the team figure out the tactics.
- Change happens. Embrace it.

Scope Management

Traditional

Scope Definition

Create WBS

Scope Verification

Scope Change Control

Agile

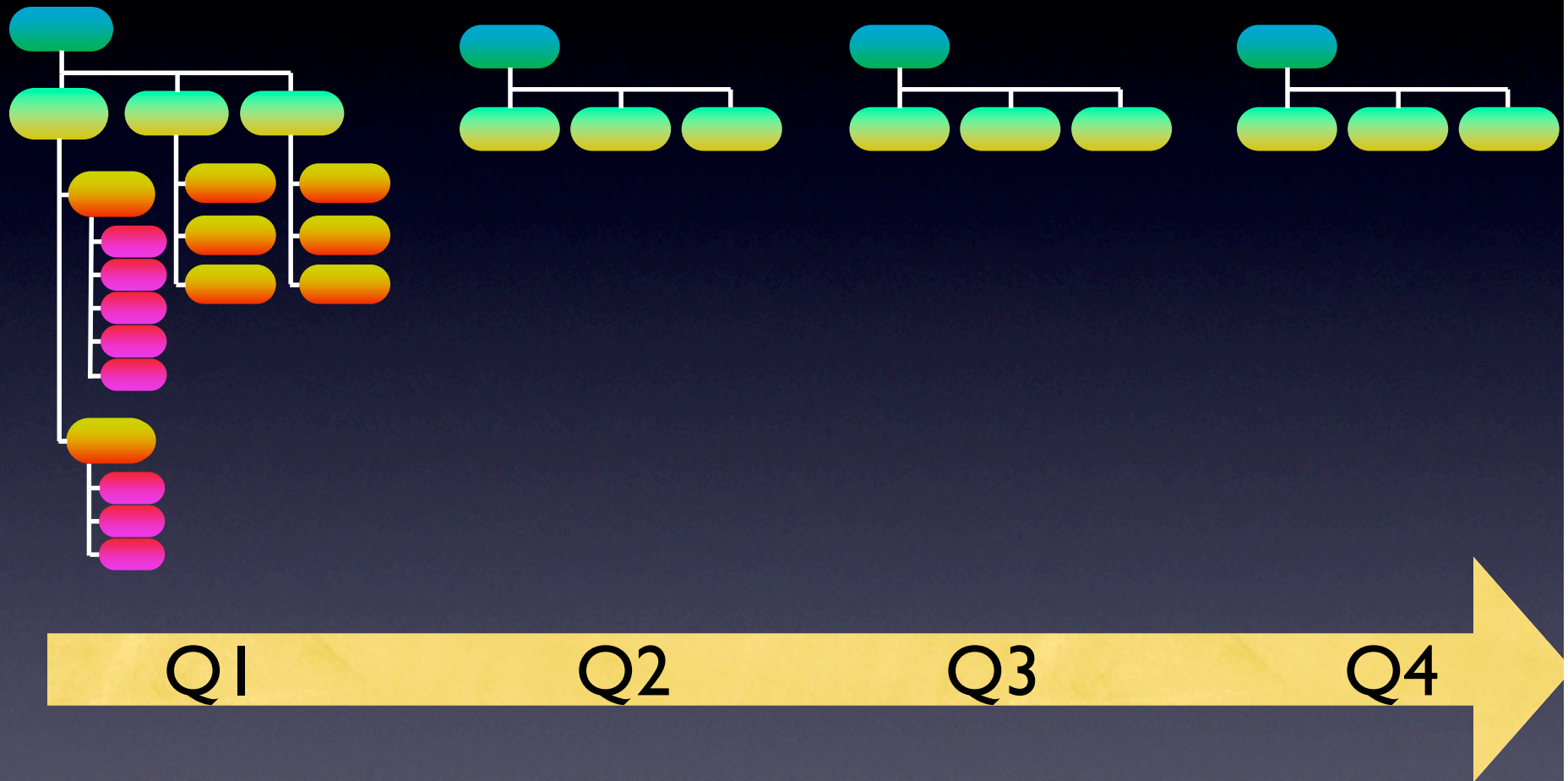
Release & Iteration
Planning Meetings

Release & Iteration Plans

Feature Acceptance and
Feedback

Ranked Backlog

An Agile Project Roadmap

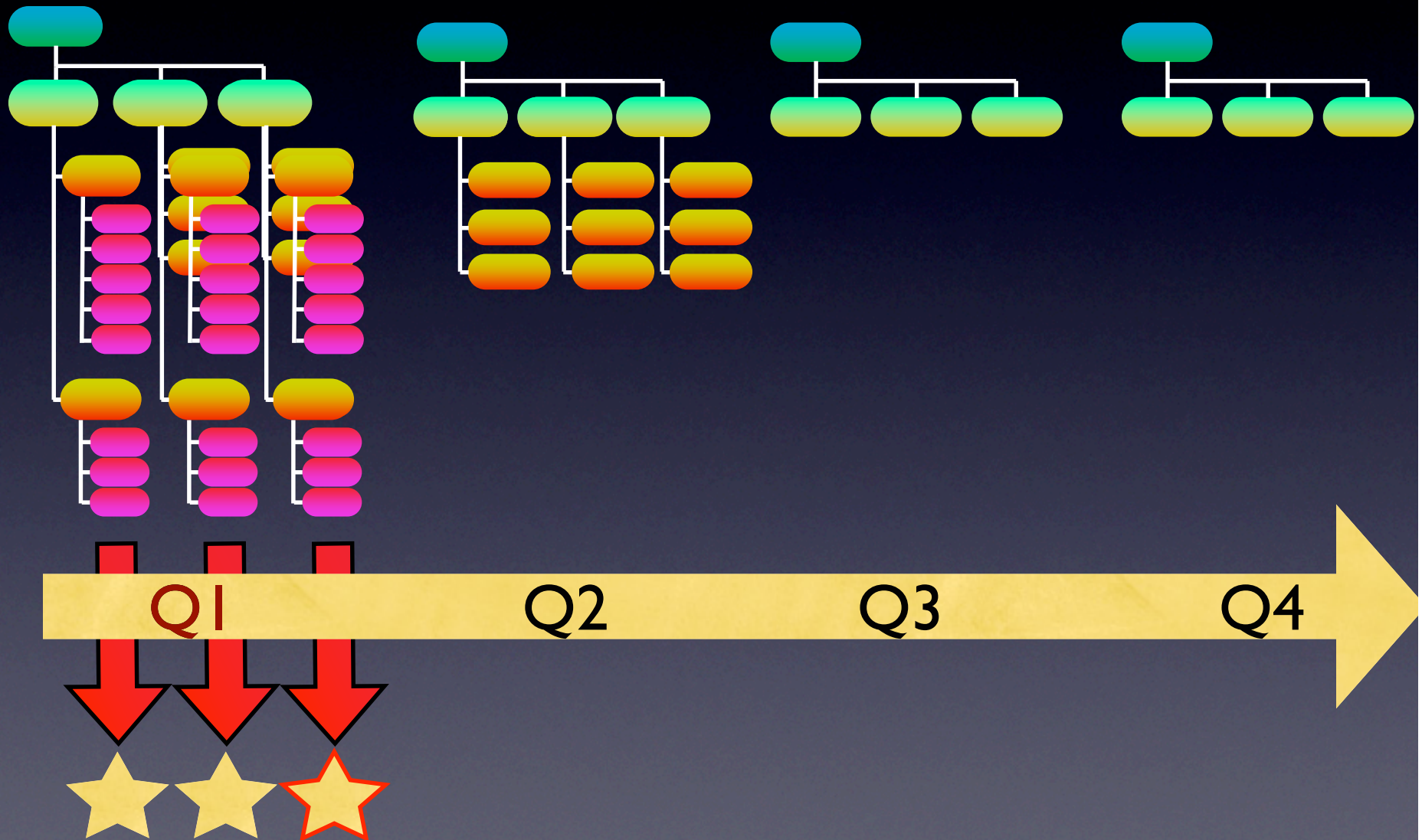


Big Ideas



- Plan the details appropriate to the horizon
- Planning is continuous
- Planning is best conducted with the team and customer; a plan is an output of dialogue
- A willing, engaged customer drives delivery and makes feature expectations known
- Change will happen; we use a backlog to capture ideas and facilitate change
- The team will choose enough scope to fill up the iteration time box

Rolling Wave Planning in Action



Time Management

Traditional

Activity Definition &
Duration Estimating

Activity Sequencing

Activity Resource
Estimating

Schedule Development

Schedule Control

Agile

Iteration Planning

Iteration Planning

Dedicated Teams

Project Roadmap, Release and
Iteration Planning

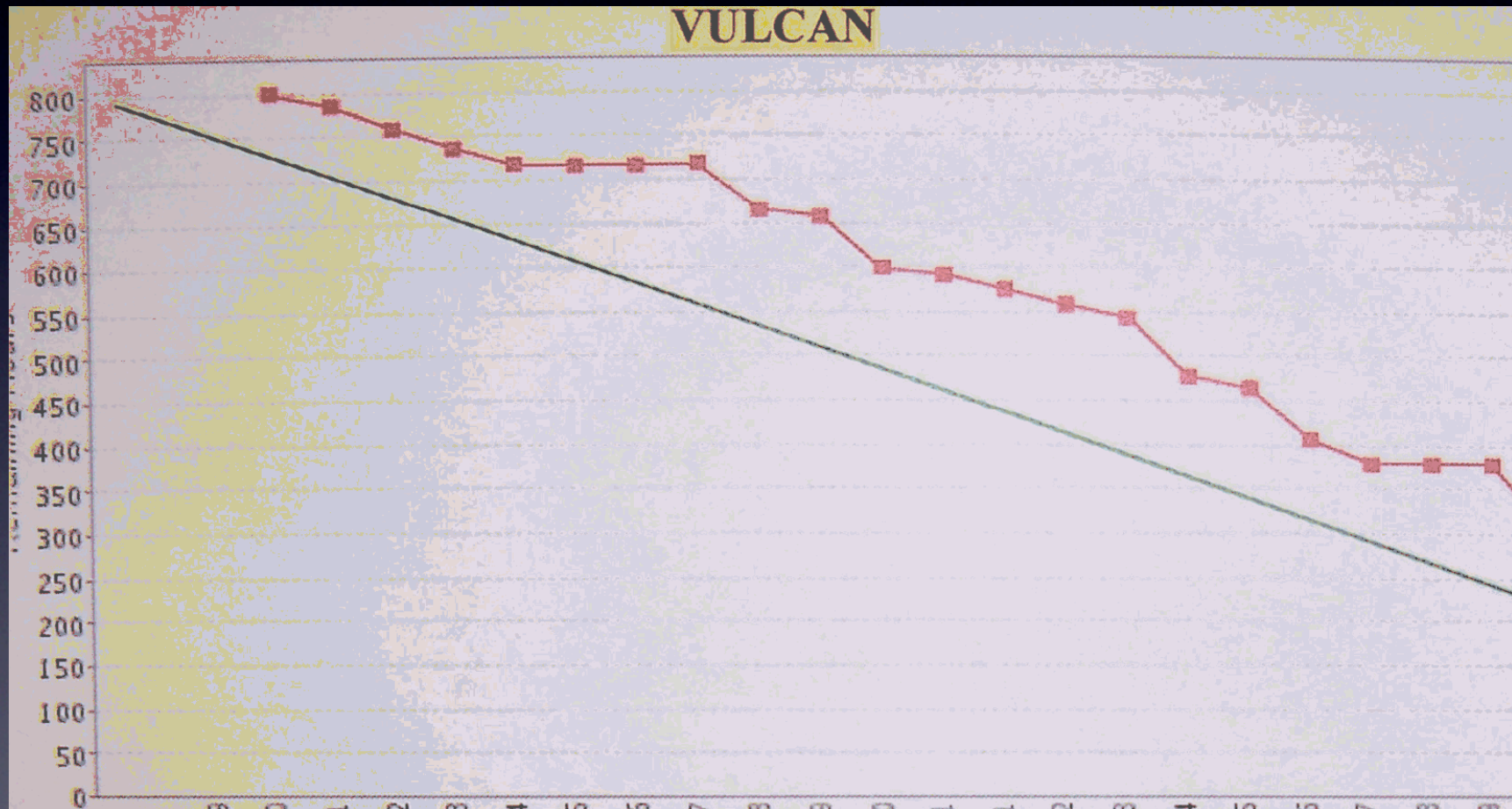
Update Project Roadmap and
Release Plan based on velocity

Big Ideas

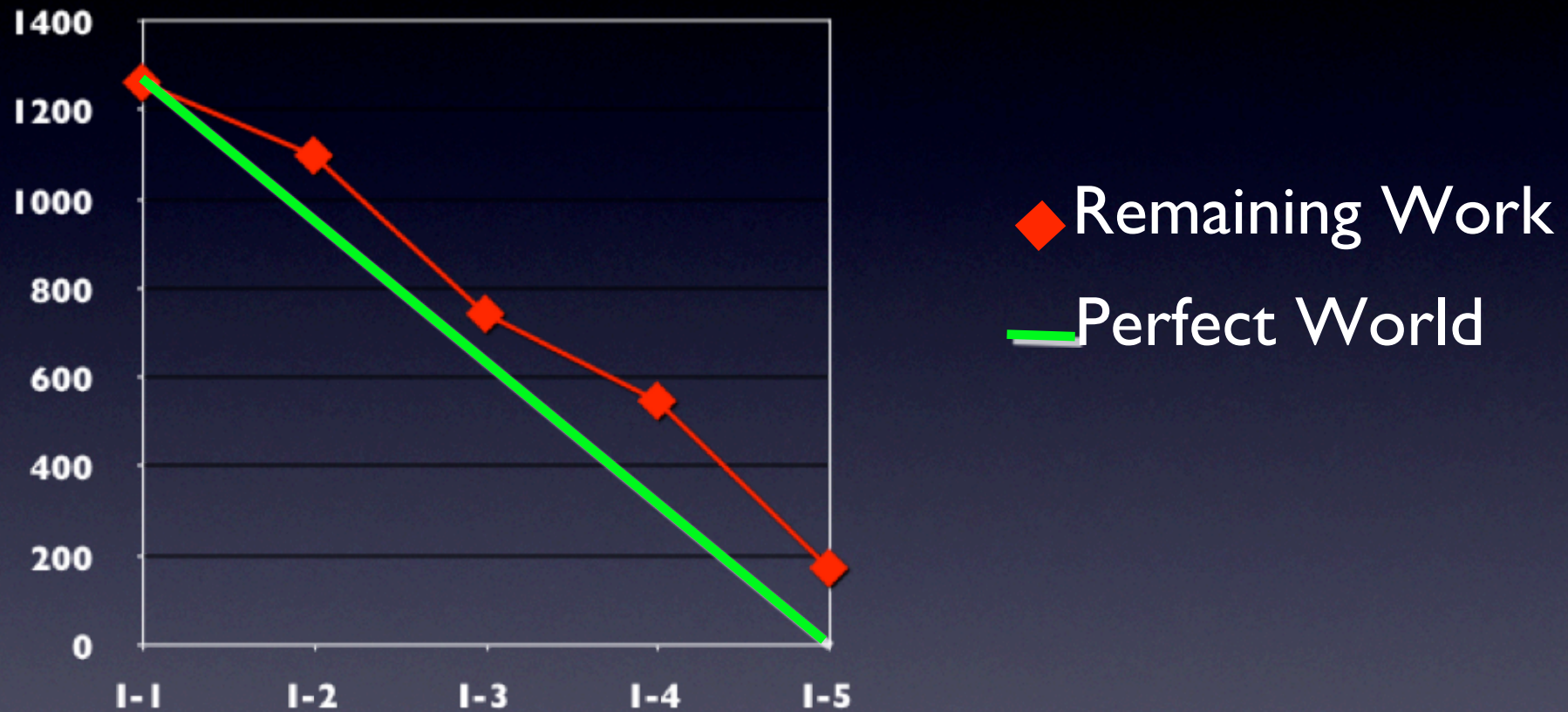


- The team always gives estimates to the work
- Detailed planning still occurs, but only in the iteration at hand
- Team determines tactics (how we're going to get to the end of the iteration with something to review)
- Schedules are replaced with roadmaps, release and iteration plans ("agile" schedules)

Tracking Progress



Release Burndown Chart



Cost Management

Traditional

Cost Estimating

Requested Changes Processed
through Change Control

Cost Budgeting

Cost Control

Agile

Cost Estimating

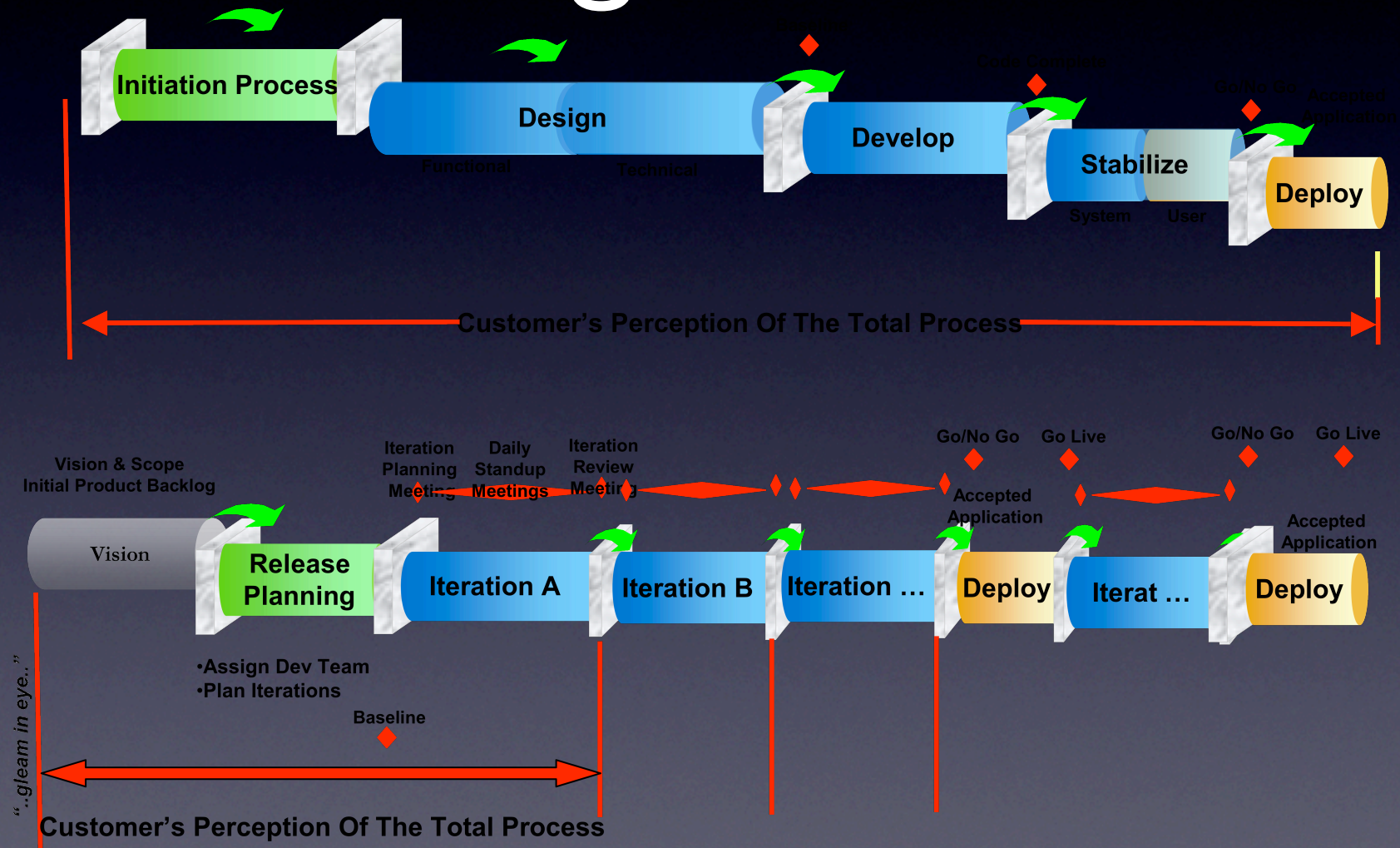
Release Backlog is updated to
reflect new & changing req'ts

Cost Budgeting

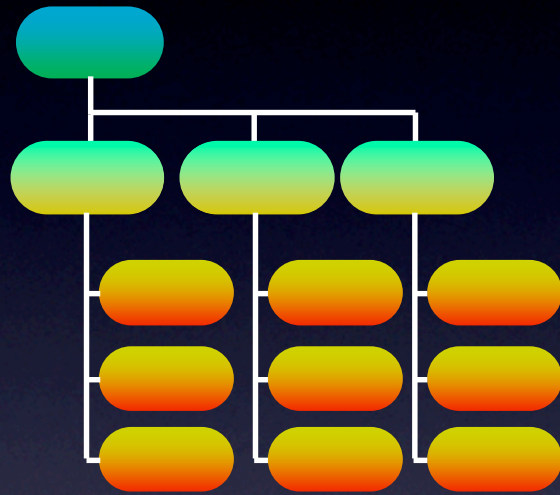
Cost Control

“For a project manager, overruns are as certain as death and taxes.” – Author Unknown

Initiation Process and Funding Decisions



Cost Estimation Worksheet for Release A



3 iterations * \$10,000 per iteration = \$30,000
+ 1 DBA for Iteration 2 = \$5,000
+ Equipment upgrade \$20,000
+ 10% standard overrun allowance

\$60,500 cost estimation for Release A

Facilitating the negotiation of the team and customer
= PRICELESS!

Big Ideas



- Dedicated team model reduces cost budgeting overhead and management significantly
- Determine initial cost baseline based on release backlog estimates provided by team (factor in other expected expenditures)
- Measure expected costs for release vs. actual costs for release AND re-projection of remaining release backlog items; refine as you go based on team input
- Customer can choose to proceed or not

Quality Management

Traditional

Quality Planning

Quality Assurance

Quality Control

Agile

Test Driven Development

QA at start

Reviews, Retrospectives
and Acceptance

HR Management

Traditional

Organizational Planning

Team Development

Metrics

Agile

Self-managing teams

Collaborative and Cross-functional

Metrics

Risk Management

Traditional

Risk Identification

Qualitative Analysis

Response Planning

Monitoring and Controlling

Agile

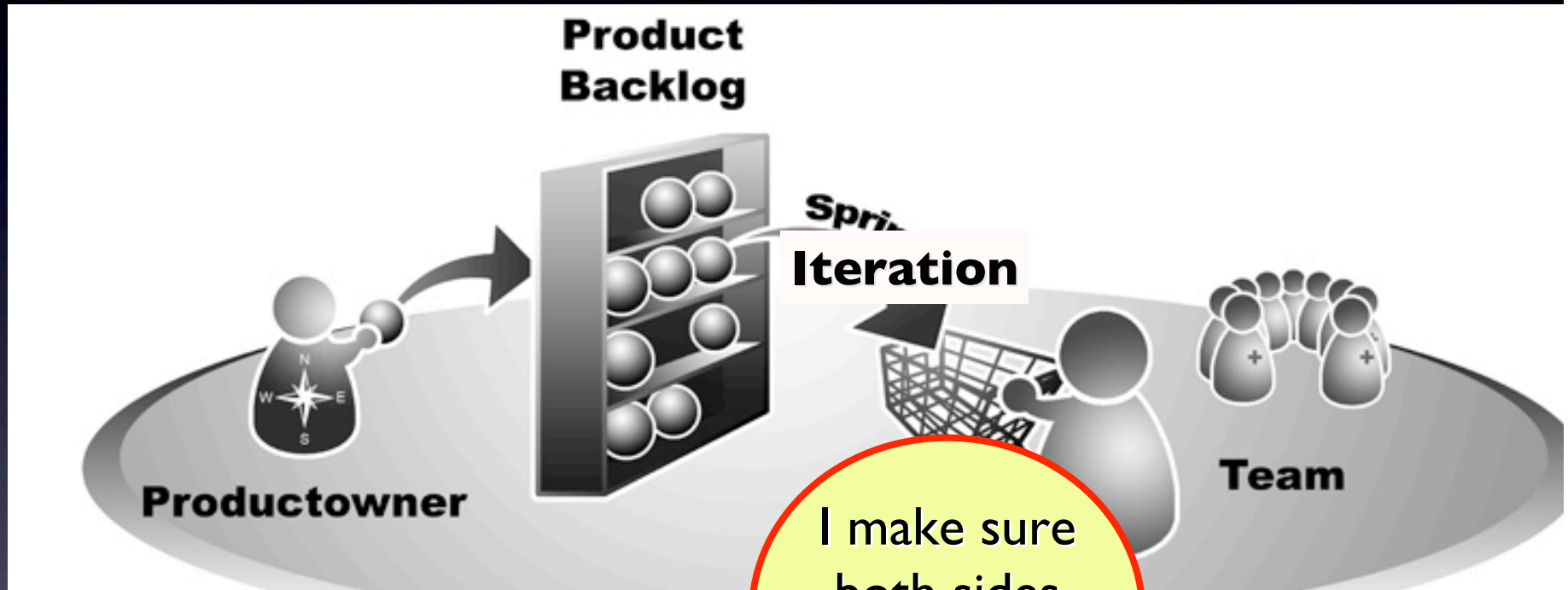
Release and Iteration
Planning / Daily

As needed by team

As needed (what-if
scenarios, fall back plans)

Daily Meetings /
Communication

The Role of the Agile Project Manager



Compliments of Boris Gloger, SPRiNT-iT Germany



And Cut
Through the
Red Tape!

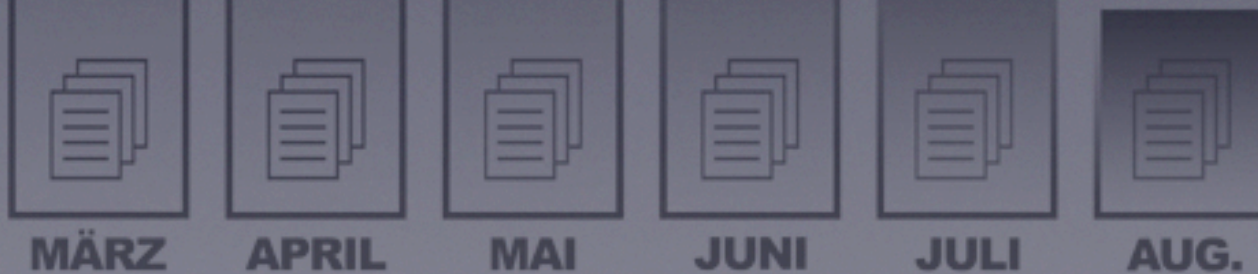


Soft Skills First

- A value-based approach calls for leadership, not management
- Allow teams to self-manage. Let go.
- Mistakes are good. Learning from them is better.
- Leads by serving.
- Facilitates
- Listens
- Possesses self-awareness
- Embraces change
- Embodies “continuous improvement”
- Educates

Project Skills Second

- Make progress visible
- Assist product owner with backlog management
- Socialize and educate agile principles and practices
- Clear obstacles from the team and product owner
- Bring the news



Don't become a barrier to communication

Protecting the team is your #1 job, but don't become a barrier to communication.

Remember: You are trying to help the customer drive delivery.



The customer is not the enemy

Crossing the bridge
from traditional to
agile practices will
bring you full circle
in your professional
career.

You will bring some
old practices with
you, new ones will
be discovered along
the way, others will
be left behind.

To you, the details will become known....



Stacia Broderick
AgileEvolution, Inc.

www.agileevolution.com

info@agileevolution.com

+1.610.909.5124

Michele Sliger
Sliger Consulting, Inc.

www.sligerconsulting.com

michele@sligerconsulting.com

[+1.720.377.1741](tel:+17203771741)