

IBM at Agile  
Australia 2012



# The IBM Rational Agile Transformation Story

.... the Behind the Scenes Tour

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the Labs

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Wednesday 30<sup>th</sup> May 2012

# Our Journey to Agile...



Was a bit daunting at first...



**But through Teamwork...**





# No Fear of Heights





## And a Clear Focus on Destination

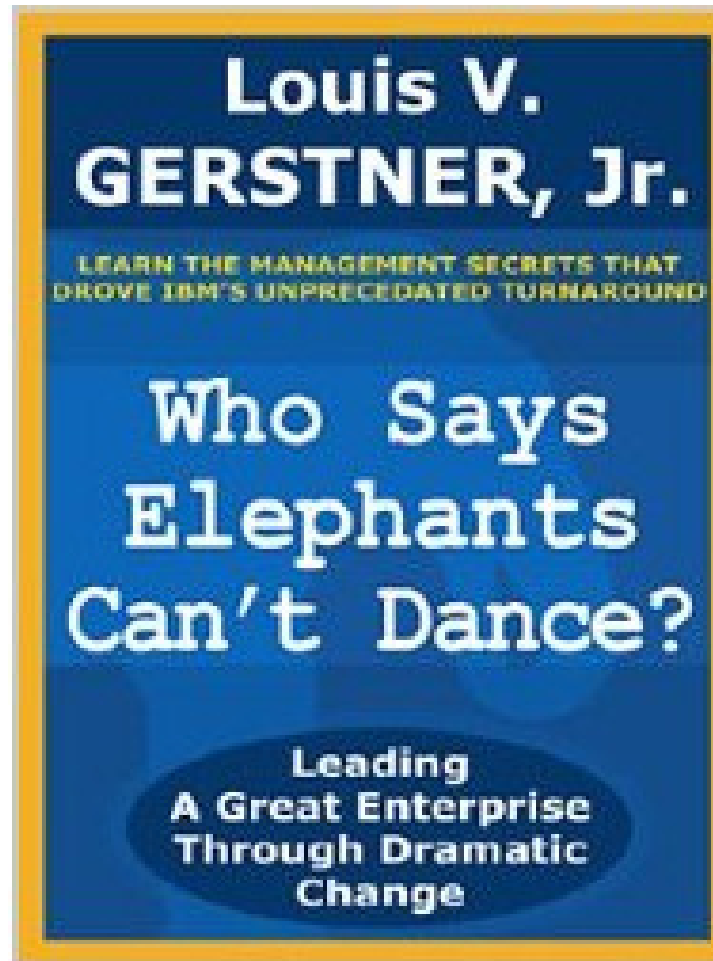


**We found our way to Success!**





**...and We Proved that Elephants CAN dance!**







## Agenda

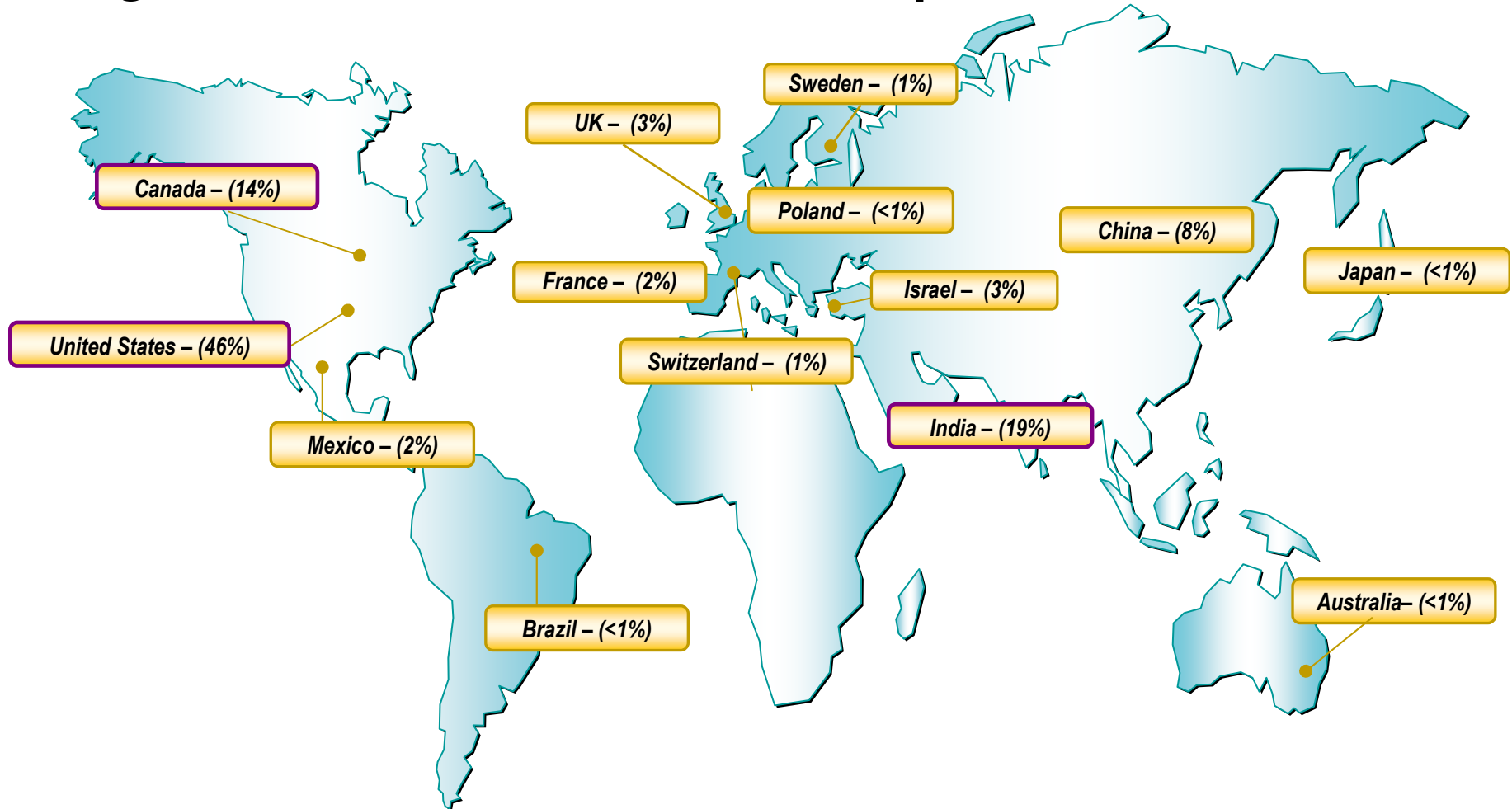
- **Current Situation**
- Five Best Practices
- Our Transformation to agility@scale™
- Drinking our own Champagne



*Driving Business  
Differentiation*



## The global IBM Rational core development team





## Some of the Challenges IBM faced...

### Complexity Challenges

- More granular service functionality in composite business applications
- Large number of projects and assets (coming from all different sources)

### Team Challenges

- Geographically dispersed teams
- Effective cross-organizational visibility and synchronization, sharing becomes an imperative

### Process Challenges

- Blind adherence to process insensitive to potential business trade-offs
- Need for agility *at scale*

### Tools Challenges

- Lack of standards impacts ability to collaborate, automate and report across teams and assumptions
- Frequent asset updates and changing interdependencies

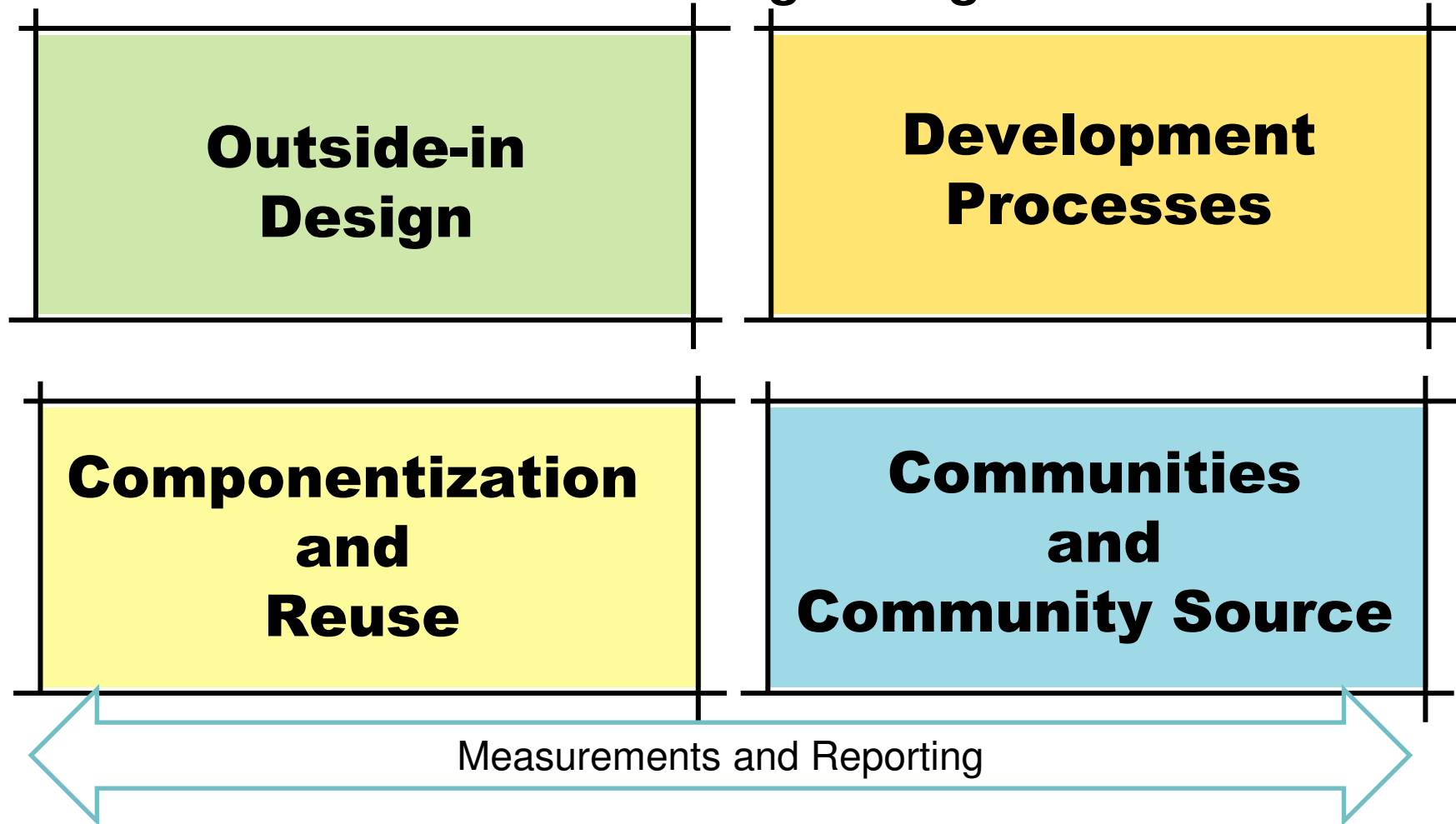


## Measuring Improvements...

Metric	2006 Measurement	2011 Measurement
On Time Delivery	47%	95%
Defect Backlog	9+ Months	3.5 months
Enhancements Triaged	3%	100%
Enhancements into Release	1%	21%
Customer Sat Index	88%	96%
Beta Defects Fixed Before GA	3%	94%
% of Agile Projects	5%	78%



## Five Best Practices for Driving Change



# Agile Software Delivery and Values

**We value**

**Individuals  
Interactions**

**Working  
Software**

**Customer  
Collaboration**

**Responding  
to Change**

**over**

**Processes and  
Tools**

**Comprehensive  
Documentation**

**Contract  
Negotiation**

**Following  
a Plan**

**While there is value in the items on the right, we value the items on the left more.**

Source: [www.agilemanifesto.org](http://www.agilemanifesto.org)



*A sense of pride and ownership in every aspect of software delivery!*

*Energy and excitement about their work and the results!*

*Openness and willingness to share experiences!*

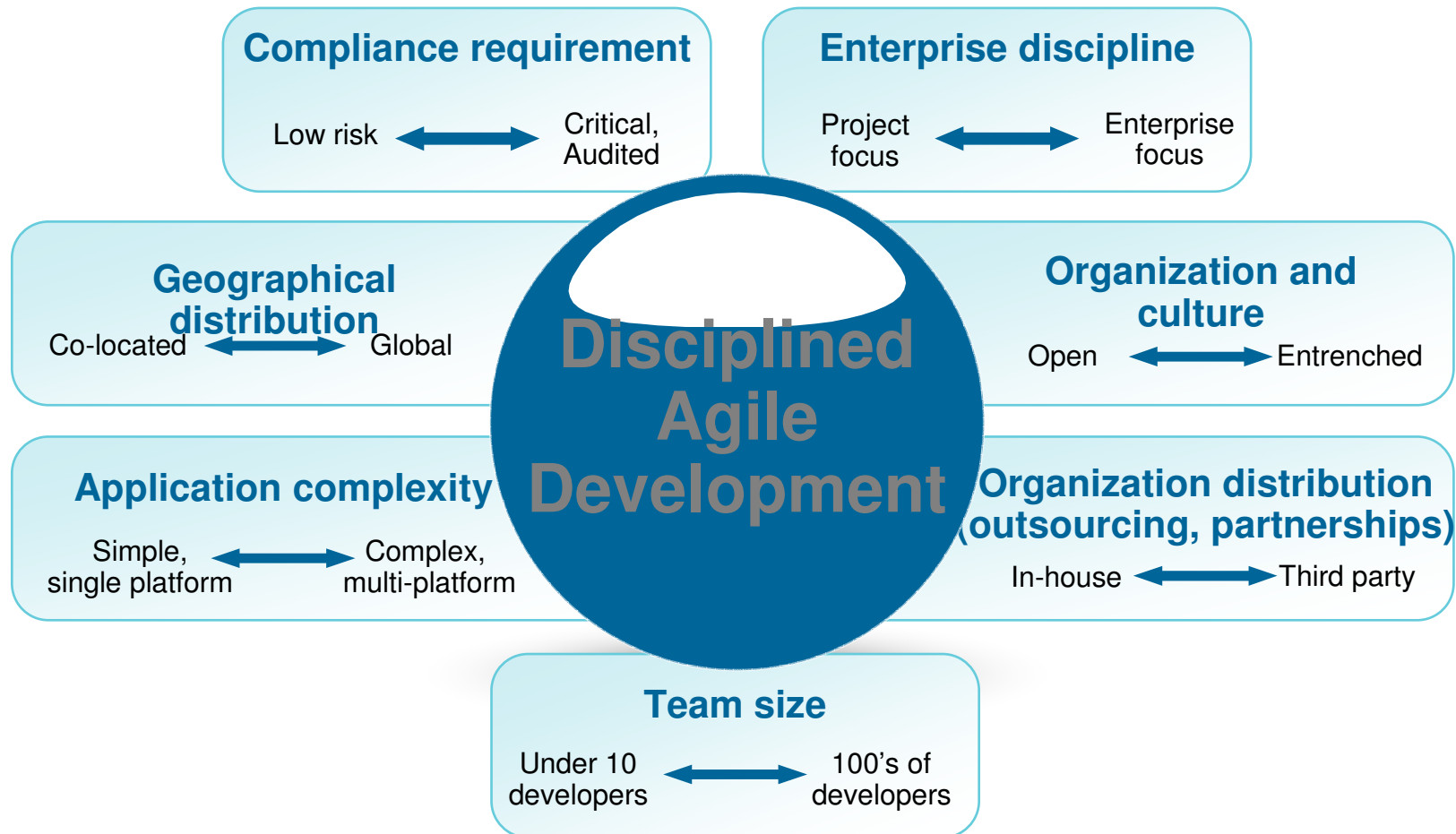


IT'S ALL ABOUT PEOPLE!





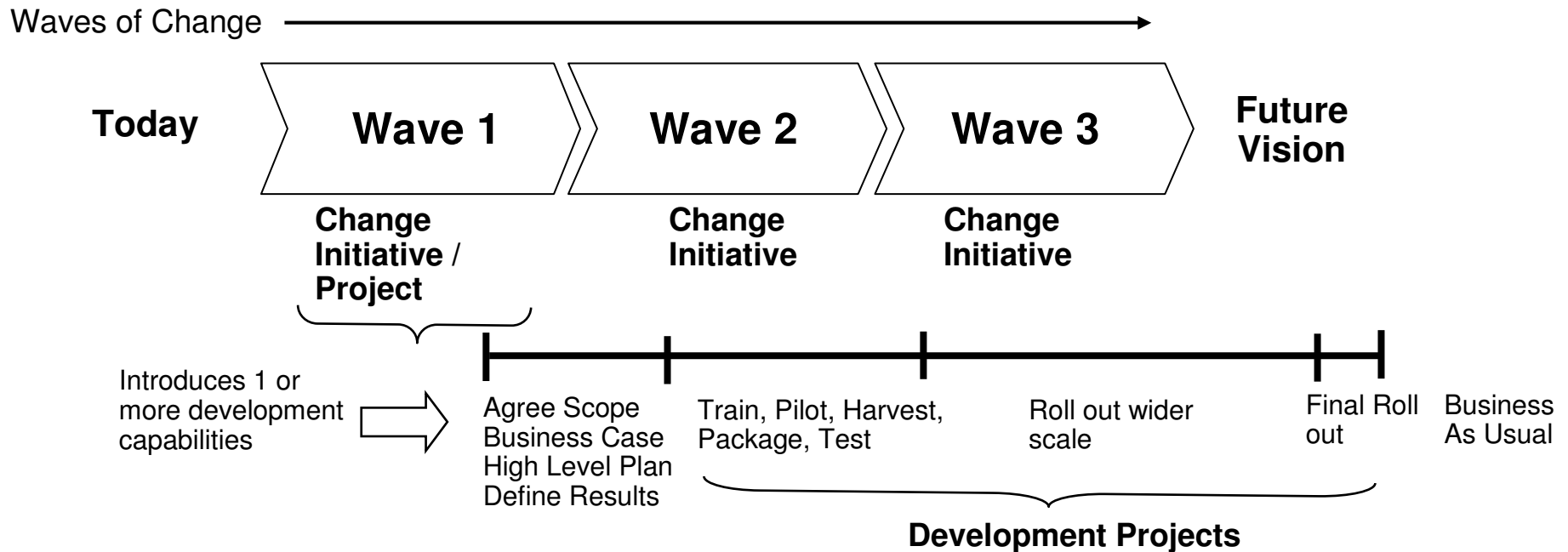
# What is agility@scale™?







# Our Strategy for Agile Transformation

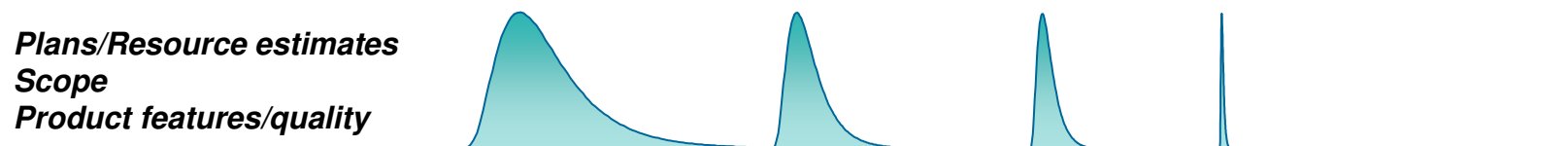


## [Best Practices for Transformation]

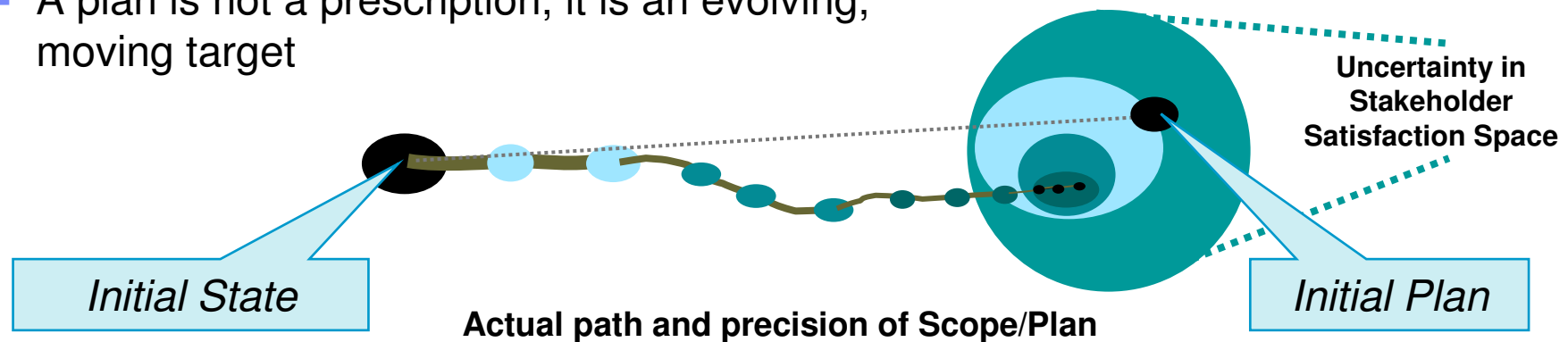
- Adopt process & tools incrementally in projects
- Support project teams with just-in-time training & mentoring to accelerate learning/adoption
- Demonstrate quick-wins from projects.
- Develop internal SMEs/Mentors who deliver mentoring to project team via CoE/Tools Group

# Our Approach for Agile Governance = Managing Uncertainty and Managing Variance

- Scope is not a requirements document, it is a continuous negotiation

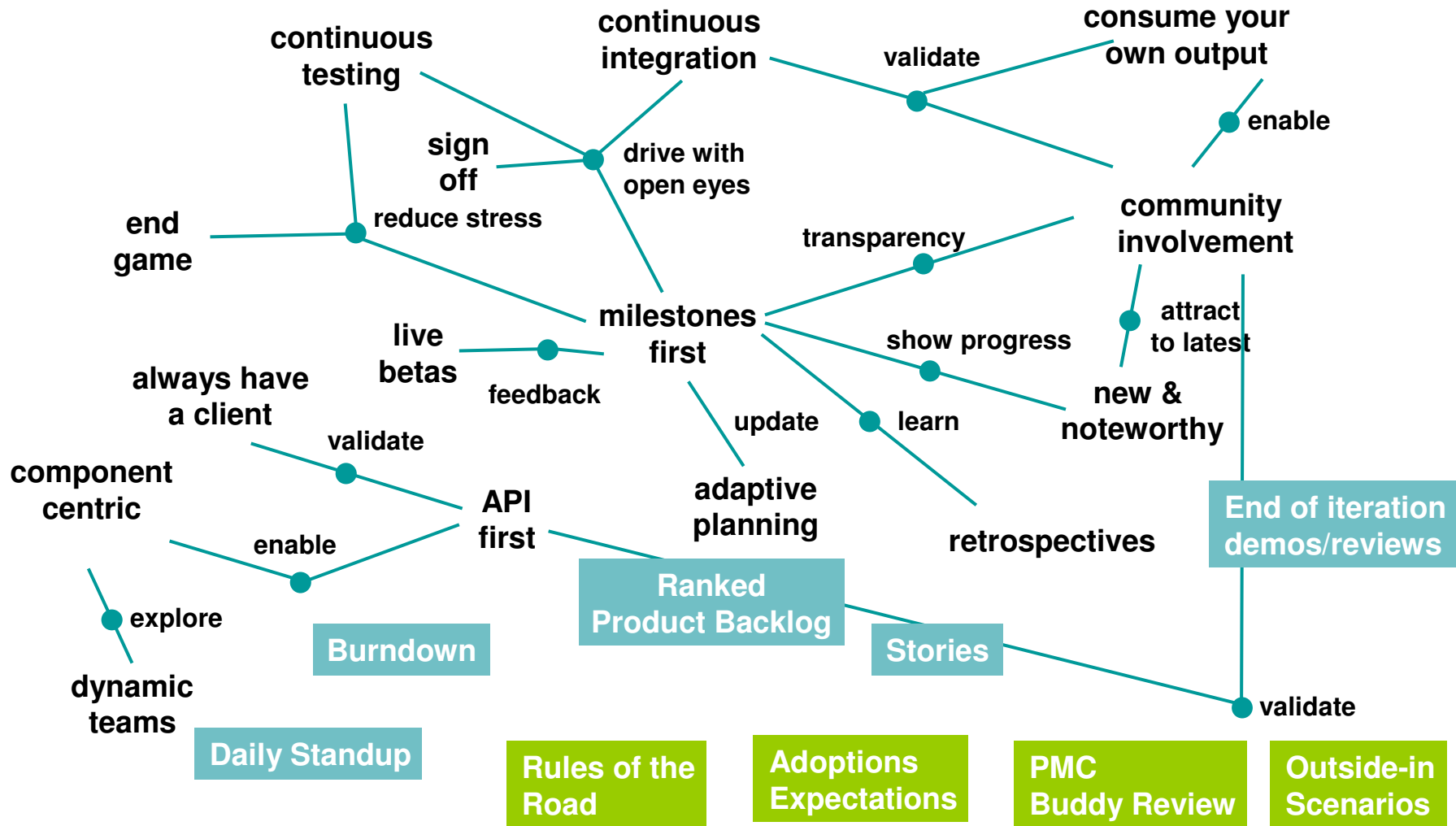


- A plan is not a prescription, it is an evolving, moving target





# A Detailed View of our Method





# Tracked Items

- Planning
  - Plan items, Stories, Tasks
- Tracking
  - Build status, Adoptions
- Feedback
  - Defects, Enhancement, Retrospectives

- Defect
- Task
- Enhancement
- RFS
- Plan Item
- Track Build Item
- Retrospective
- Story
- Adoption Item

Java - Rational Team Concert - Rational Team Concert

64477: Adopt new web UI code - Rational Team Concert

Summary: Adopt new web UI code [Completed] [Adopted]

Details

Type: Adoption Item

Impact: Moderate

Affected Teams: Agile Planning, Build, Dashboard

Creation Date: Nov 17, 2008 2:48 PM

Created By: Bill Higgins

Team Area: Web UI Foundation / Ration...oncert

Filed Against: UI Foundation/Web UI

Owned By: Bill Higgins

Priority: Medium

Planned For: 2.0 M1

Due Date: None

Resolution Date: Dec 18, 2008 1:59 PM

Description

Context

In Summer / Early Fall 2008, the Foundation Web UI teams (Bill's framework team and Dejan's common components team) did some explorations to make early progress on what we thought it would take for Jazz Web UIs to work in the Jazz Integration Architecture (JIA). We basically did this work in a branch and didn't try to keep Rational Team Concert (RTC) 1.0.1 code backwards compatible because we didn't know if we'd need to and we were being strategically lazy.

We now understand that because of RTC constraints (compressed schedule, lots of committed high-priority product features) and because of the relative immaturity of JIA, it's unreasonable to expect upstream web components to move to a new representation model. We have had to live with this.

Discussion (6 comments, 1 new)

From Richard Backhouse's mailing list note:

The new Web UI Foundation code has been delivered to the [Foundation Stable 1.0 FMI](#) Stream.

Please be aware that the Web UI code now resides in its own component called "Foundation Web UI". If you are accepting the new changesets into your development environment, you must make sure that you also accept this new component too otherwise you will see compile errors. Also you will have to make changes to your equinox launches as new Web UI bundles are required as dependencies. The "Embedded Jetty for Web UI Development" launch can be used as a guideline on what is required.

Please contact me with any questions.

Richard

\*99043: Support task tracking as a service - Jazz Collabora...

Plan Item 99043

Summary: Support task tracking as a service

Status

Dev Status: Defined

Risk Status: Yellow

Risk Description

Roadmap

Exploration Done: 2010 M4

Implementation Done: -> 2010 M6

Team

Feature Team Lead: André Weinand

Feature Home Page: <https://jazz.net/wiki/bin/view/Main/CALMT>

Feature Team:

- André Weinand
- April L de Vries
- Craig Lavton
- Erich Gamma
- Jennifer Hayes
- John Whitfield
- Larry Smith
- Patrick Streule
- Pratik Shah

Overview | Planning | Execution | Done Criteria | Links | Approvals | History

Work Item Web UI started to run as an embedded component in an iframe in our standalone Module ( see [attachment 34998](#) )

3/19/2010:

- created Wiki: <https://jazz.net/wiki/bin/view/Main/CALMTTaskAsService>
- discussed detailed tasks with RQM team
- implementing redirecting link clicking in embedded UI to container ( see [Item 108817](#) )
- created library for Compact Rendering support: see <https://jazz.net/wiki/bin/view/Main/CompactRenderingInRichClient> already adopted by SCM

3/26/2010:

- RQM has defined done criteria
- embeddable Web UI implementation on track: discussion with UX and Web UI Foundation teams
- investigation for [Item 108426](#): we are planning to provide a patch for Foundation

4/1/2010:

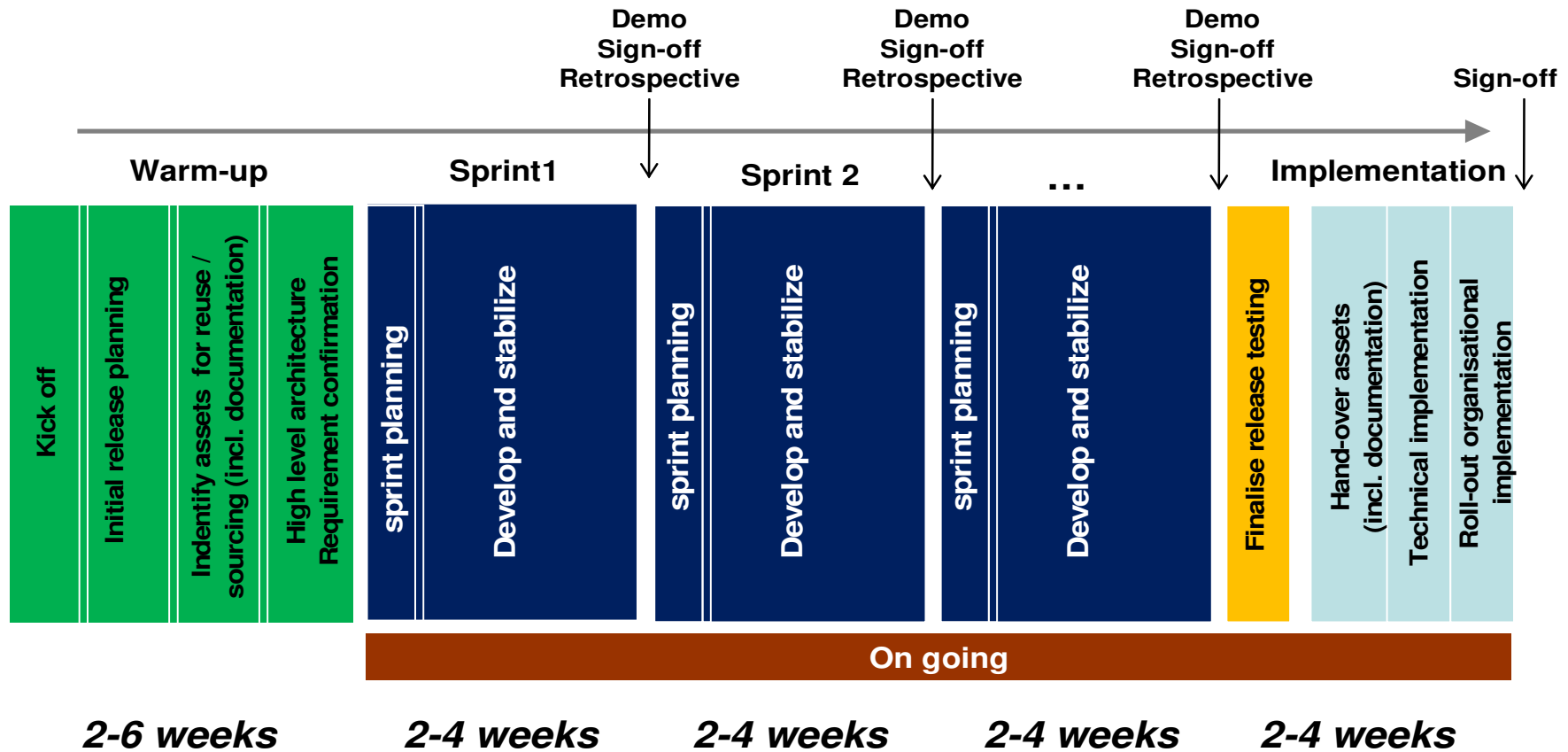
- embeddable Web UI implementation done: can be explored in standalone Module Test web app. Waiting for RQM to consume it
- discussions with UX and Web UI foundation teams: planning to base implementation on Open Social in M6
- Process is willing to accept a patch for the proposal presented in [Item 108424](#)

4/9/2010:

- RTC 3.0 M5 endgame

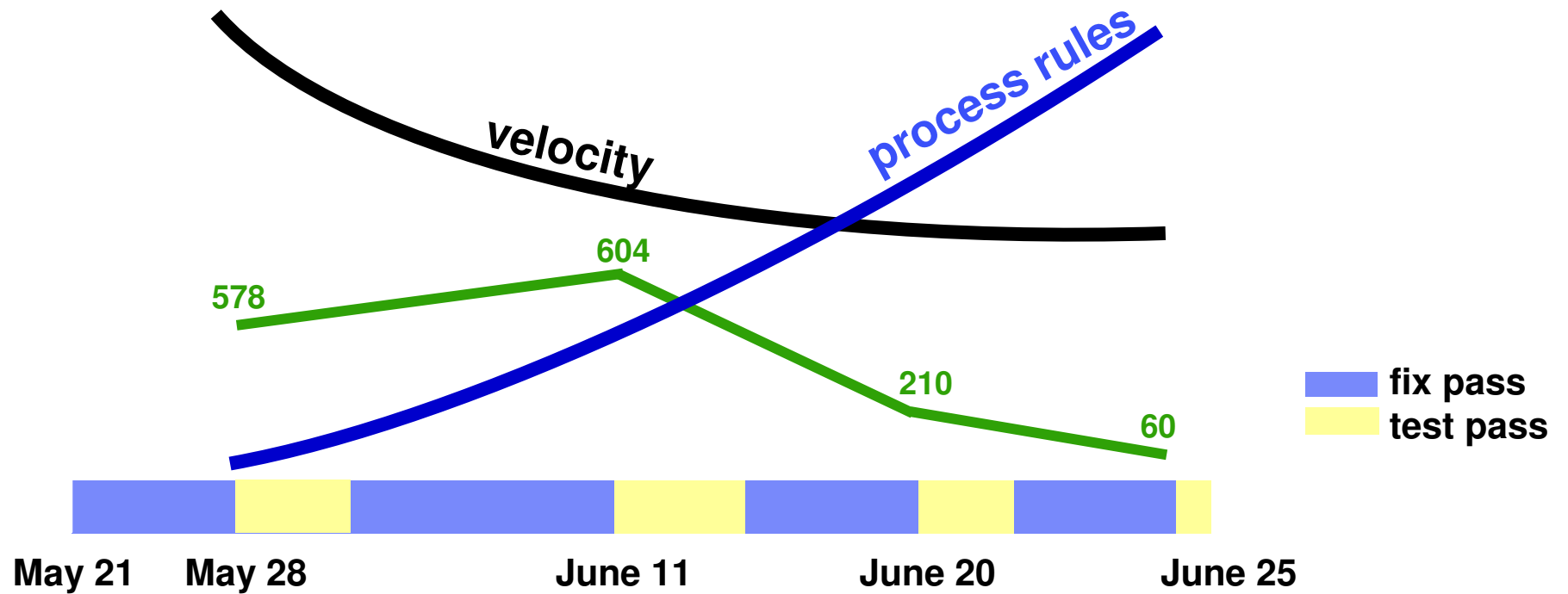
4/15/2010:

# Project Timeline Template



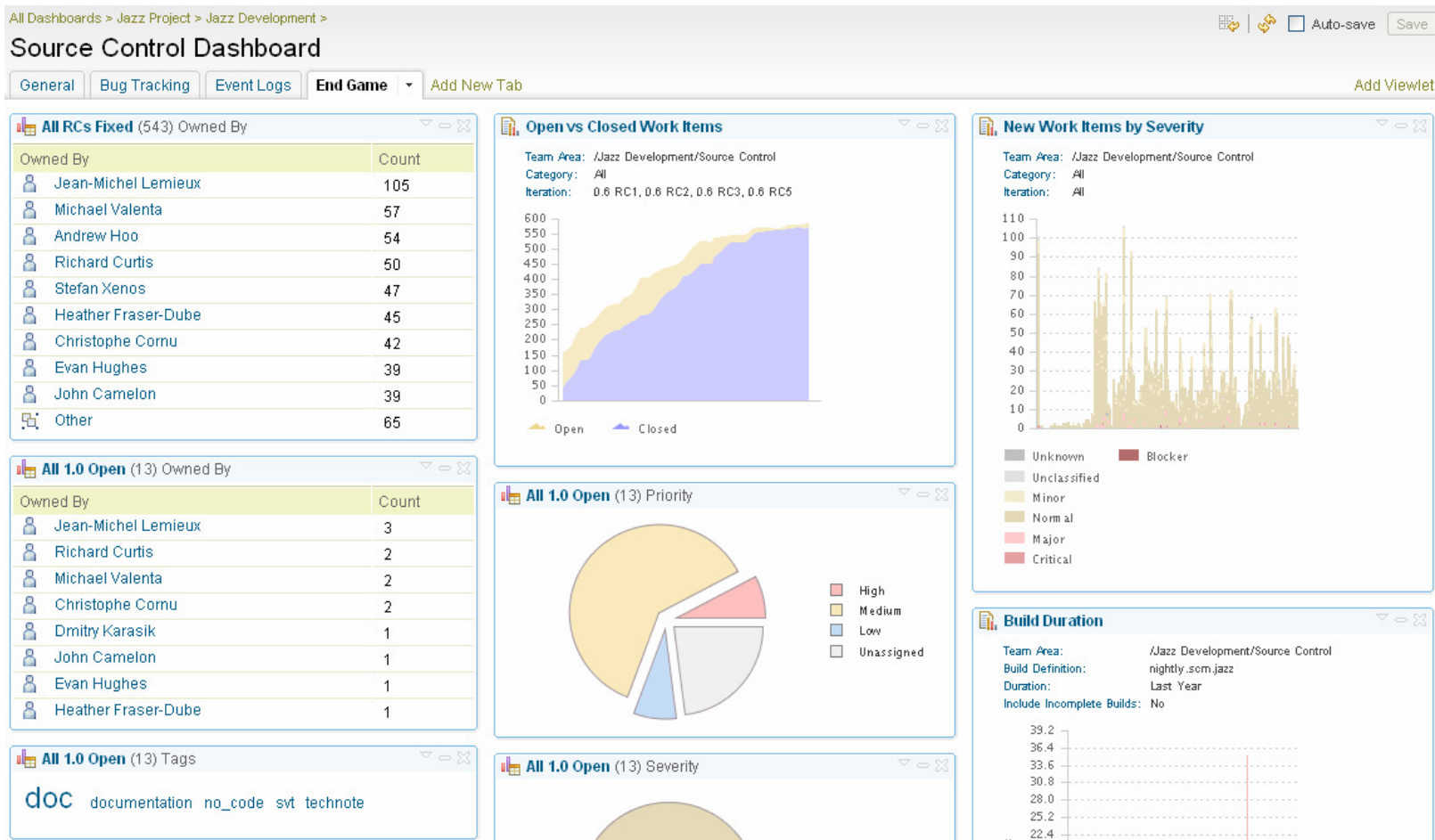


# Endgame Convergence





# Endgame tracking dashboard of a team

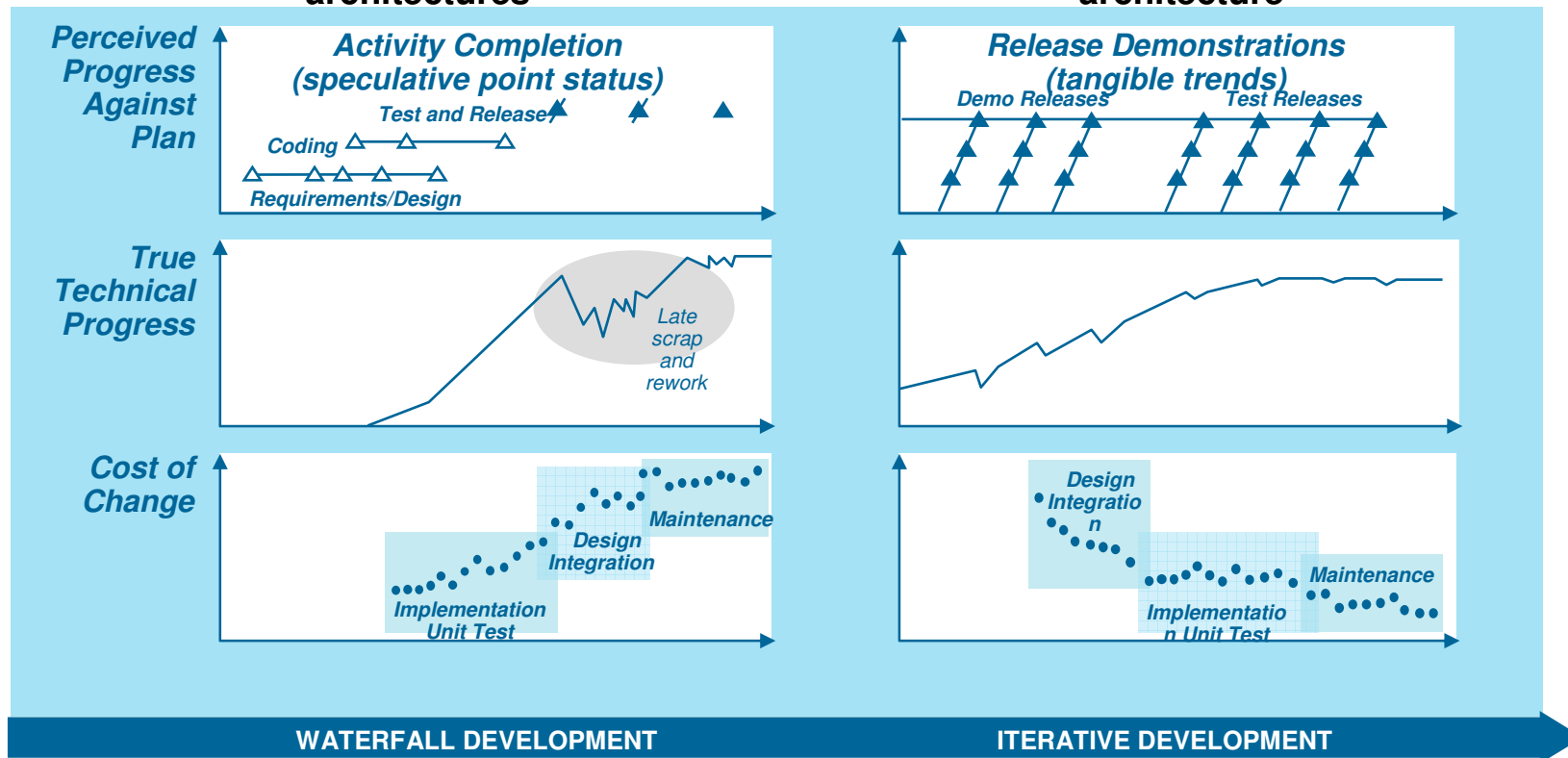




# Moving from waterfall to iterative and agile trend measures

Escalating change costs over time due to late integration and custom architectures

Reduced change costs over time due to continuous integration and sound architecture





What do you see?



12  
ABC  
14

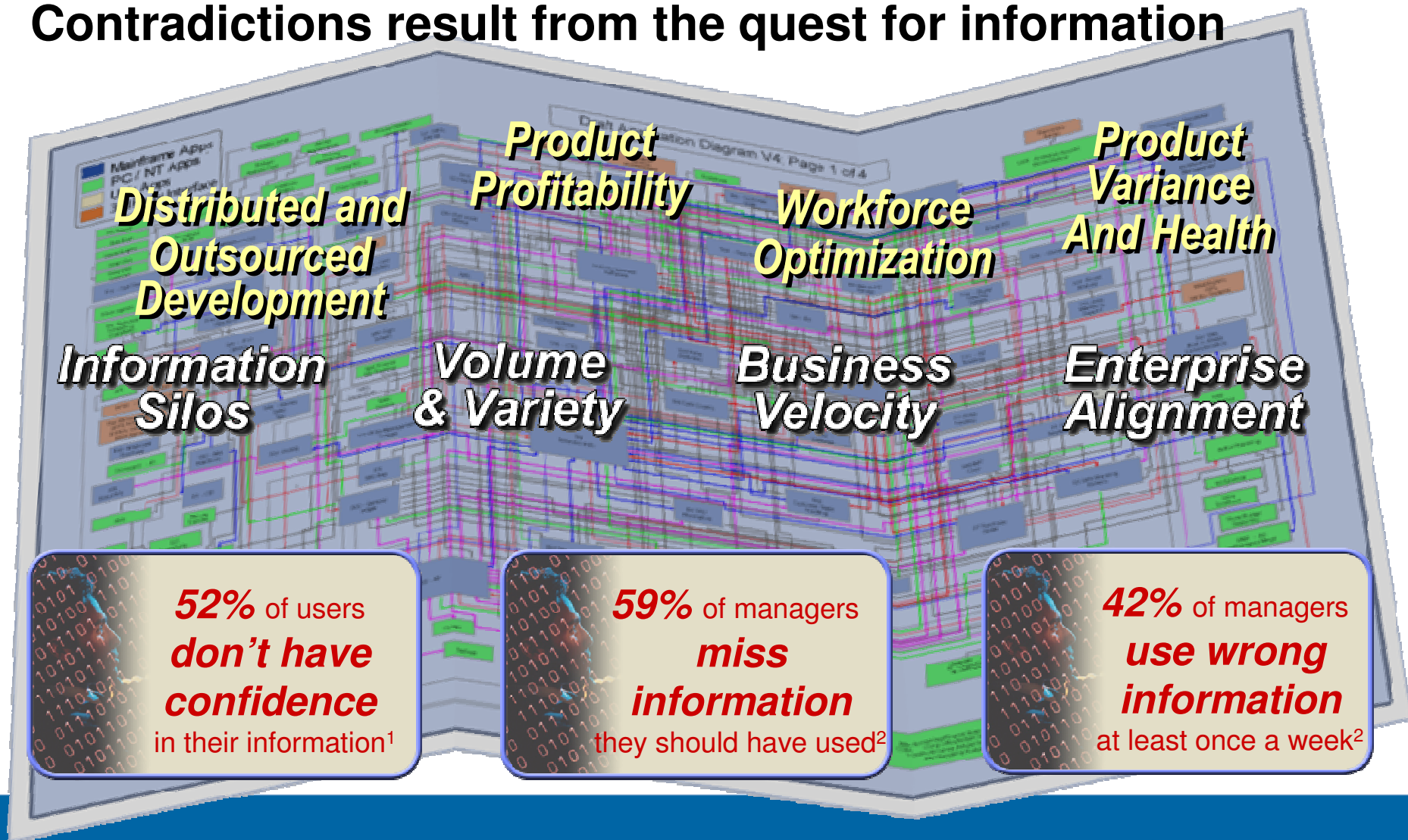


What do you see?

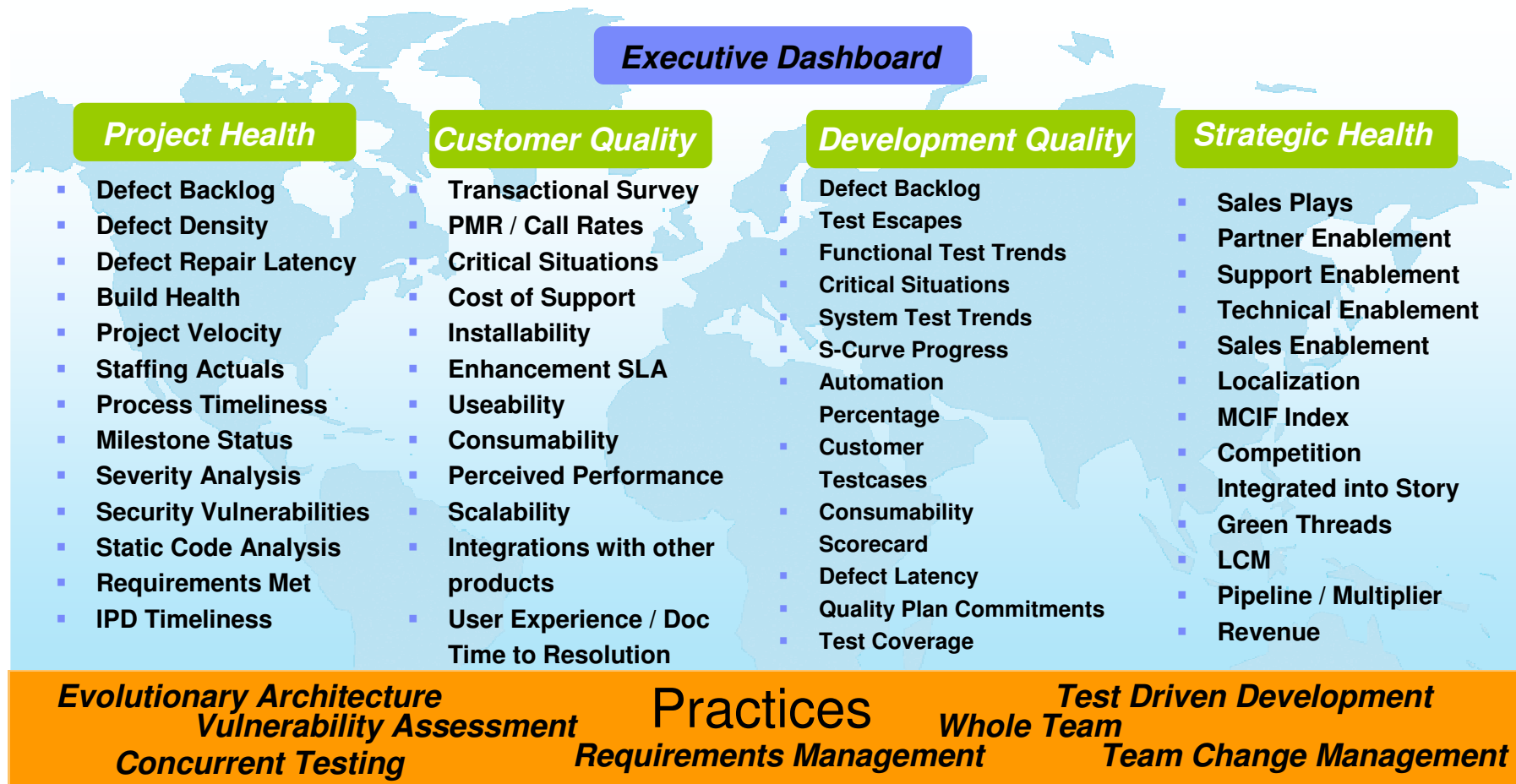




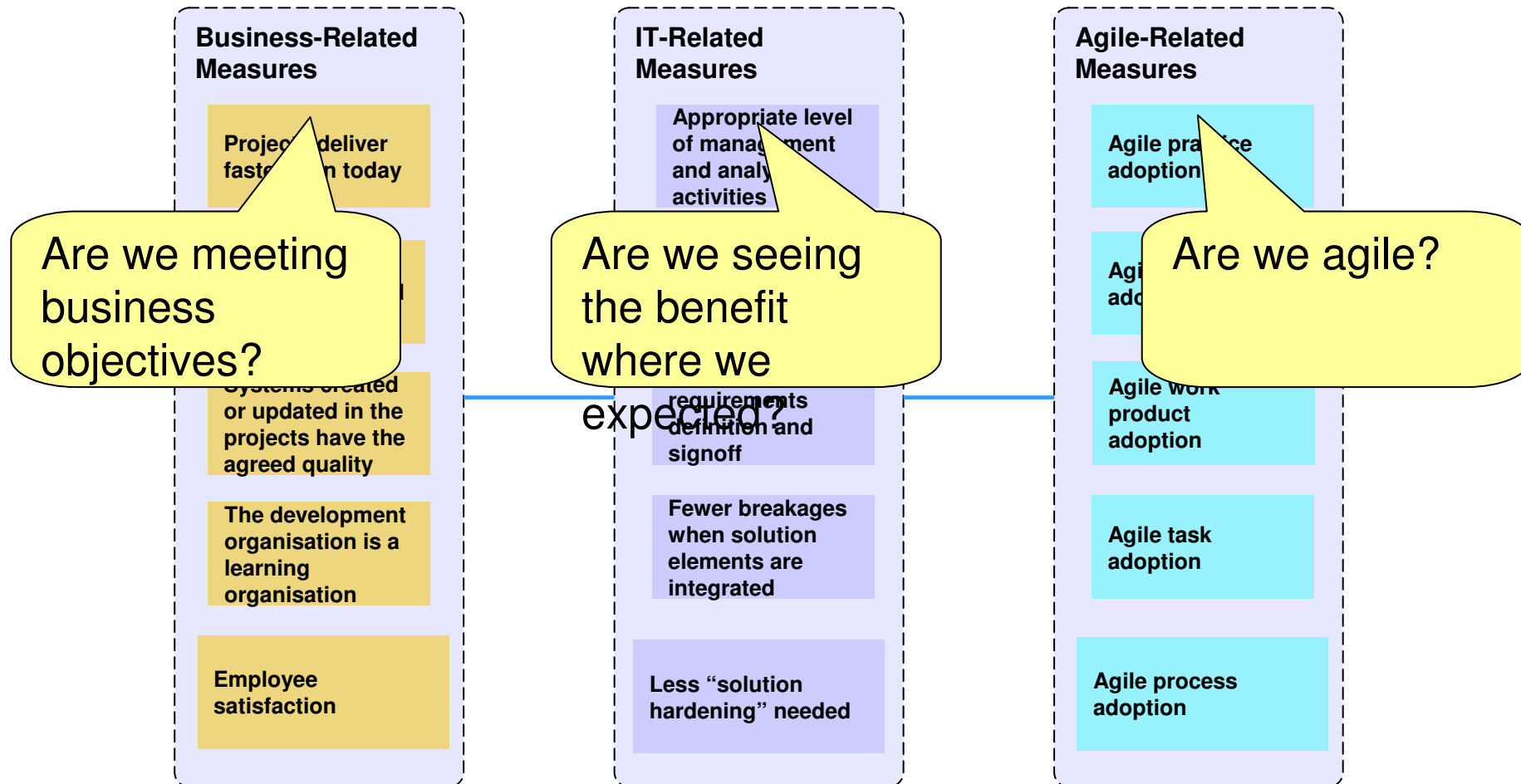
## Contradictions result from the quest for information



# But What Should We Measure?

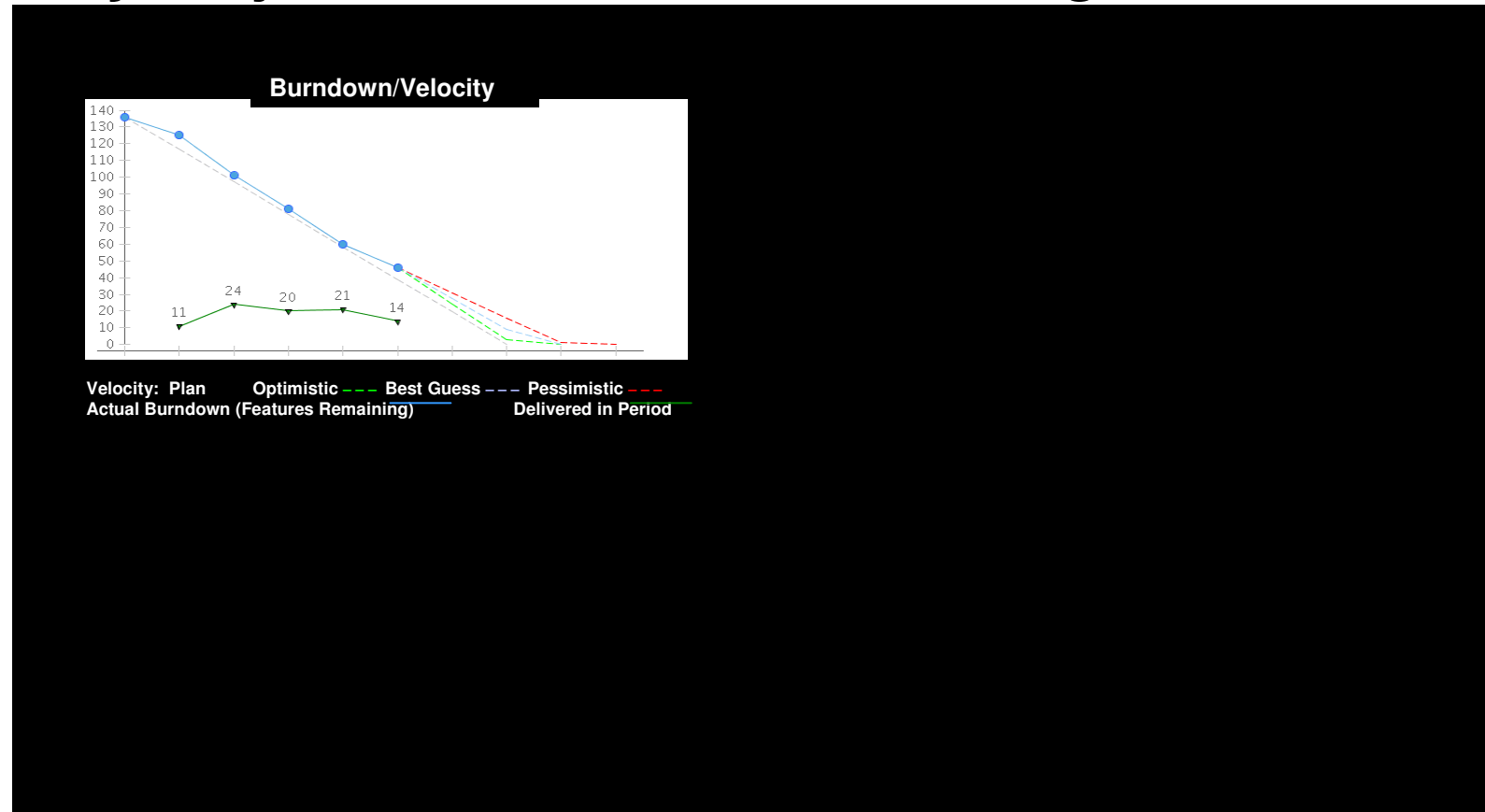


# Measures Help Answer Key Questions



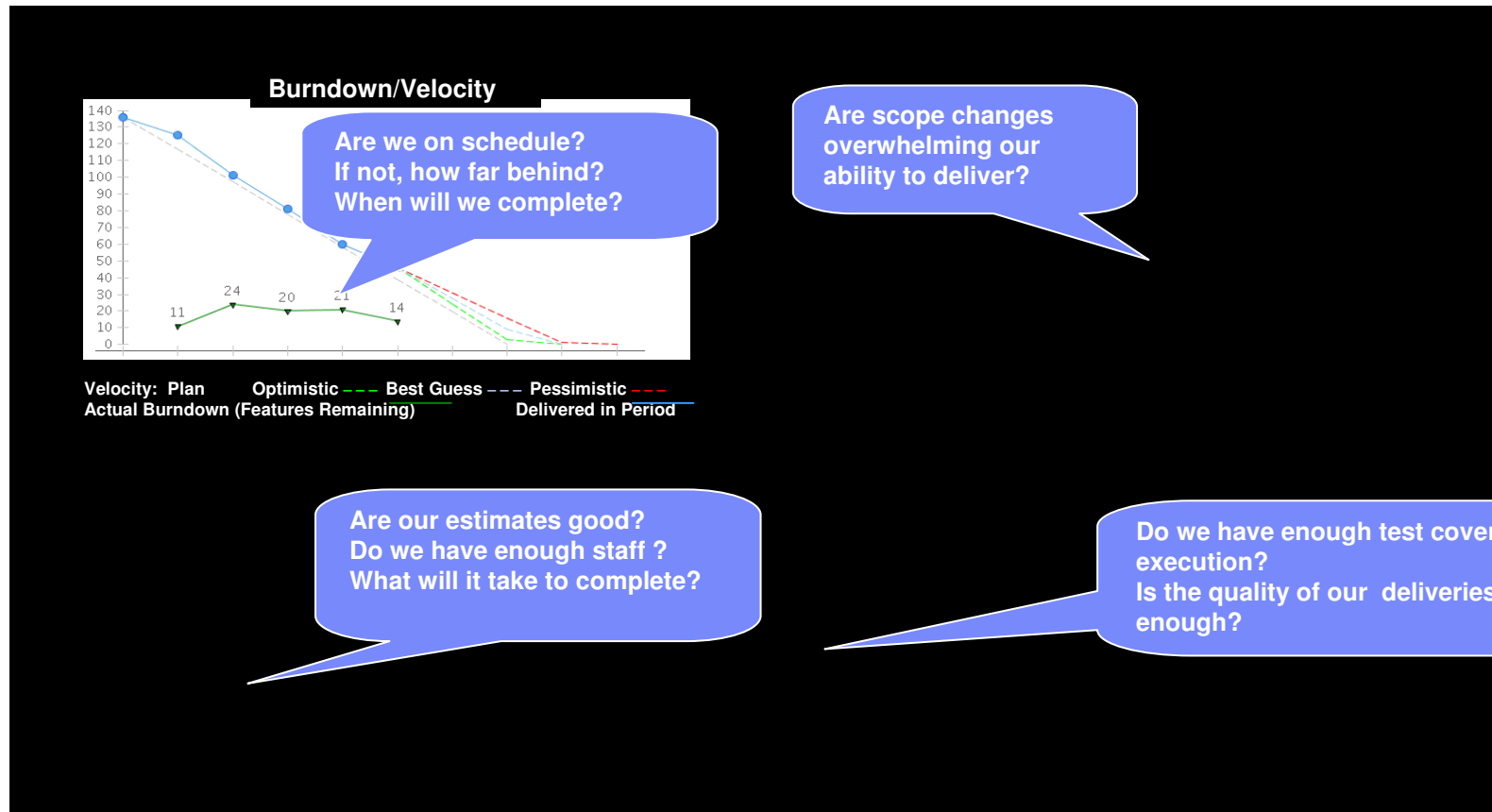


## Key Project Performance Metrics: Agile View



This is a sample view. Metrics can take different forms. The intent is ensure that the charts address core management concerns and associated questions.

# Agile Performance Metrics: Core Answers



Here are the key management questions answered by each chart. An inability to answer any of these questions serves as a source of fundamental risk.

# Other Key Principles We Learned (Inspired from LEAN)



## Eliminate Waste

- Value Stream Maps
- Complete Solution



## Build Quality In

- Foundation Disciplines
- Continuous Validation



## Defer Commitment

Keep options open



## Deliver Fast

Queuing theory



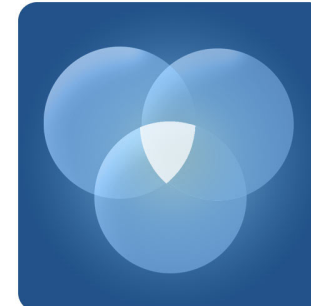
## Focus on Learning

Product & process



## Respect People

- Teams
- Partners



## Optimize the Whole

- Systems thinking
- Set-based design





## Drinking our Own Champagne



Go see for yourself at [jazz.net](http://jazz.net)



Thank You!