Ra-nnovate' your Application Lifecycle Management

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Our Capabilities to Help You Achieve Breakthrough Benefits

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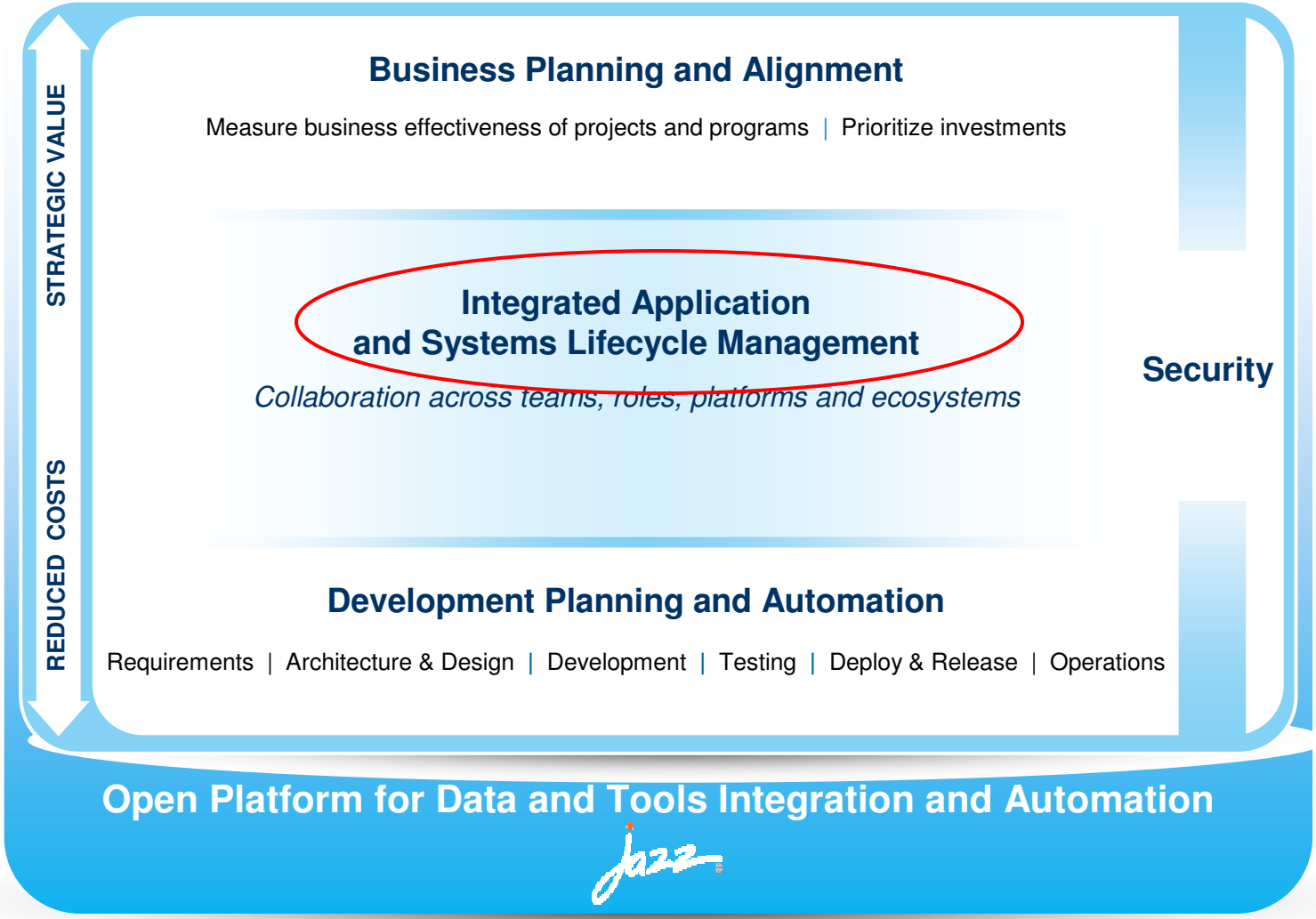

Agenda

1. Current market situation
2. IBM Rational Collaboration Lifecycle Management
3. Delivering the 5 ALM imperatives
4. Proven results

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IBM SOFTWARE CONFERENCE 2011
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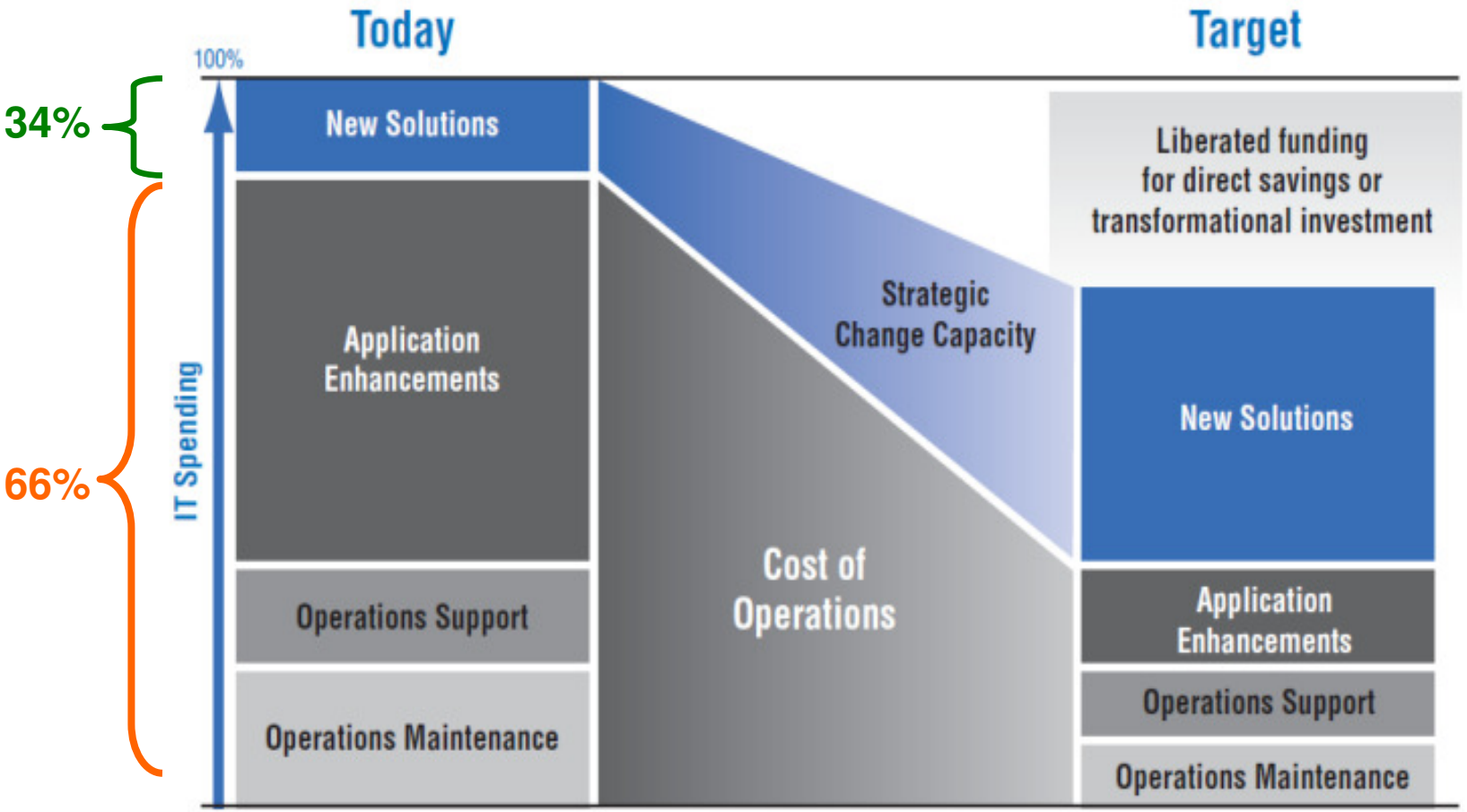
IBM

Software drives today's innovation for a smarter planet

Transforming the way we live, work, and play

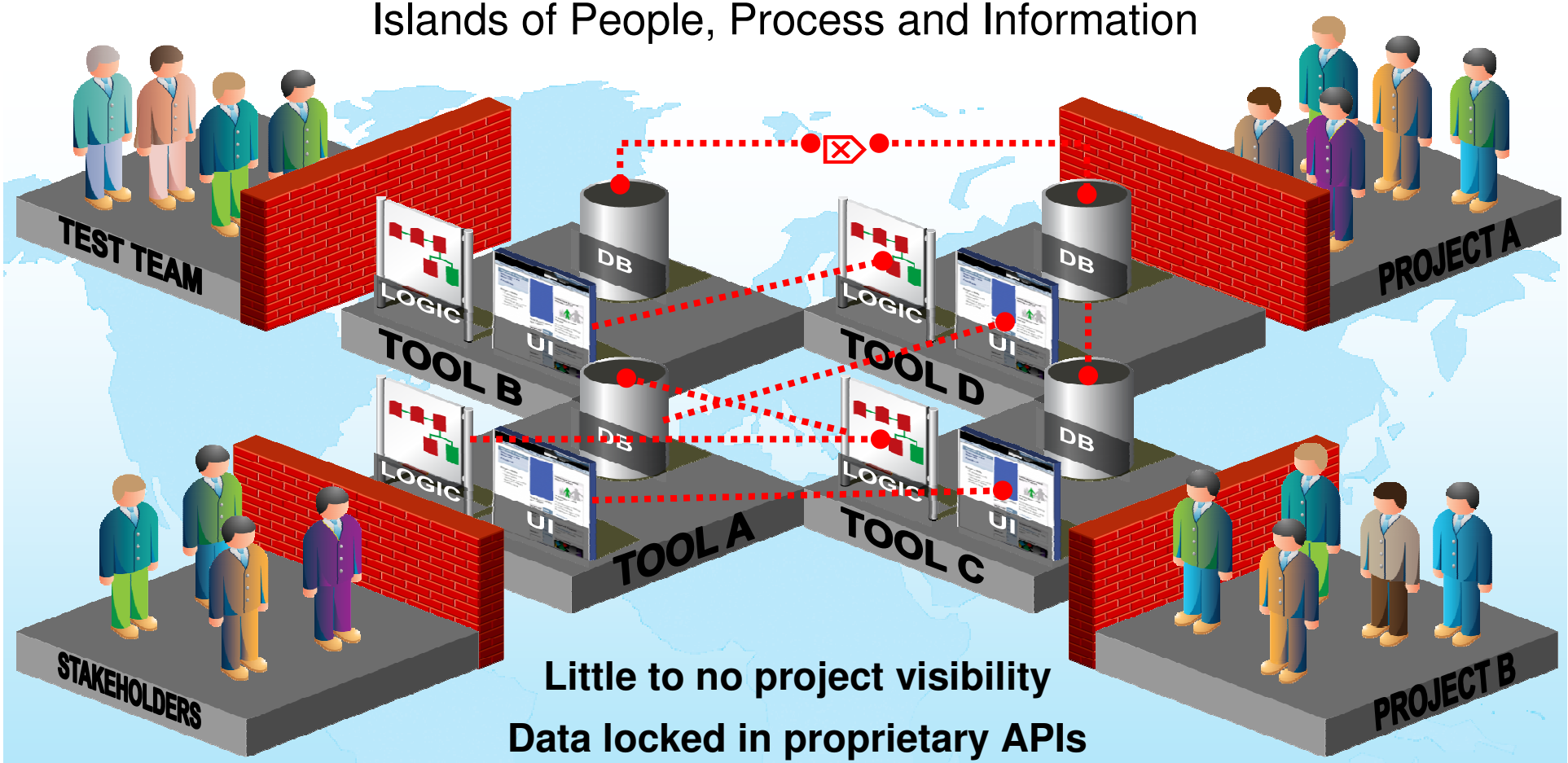
Business and IT Agility: Balancing Resources to Support Business Innovation

Balance IT investments to focus on new solutions.



- Forrester estimates that ongoing operations and maintenance consume ***66%*** of IT budgets
- While new projects and software initiatives represent only ***34%***

Traditional software delivery environments limit productive collaboration: Islands of People, Process and Information



Little to no project visibility

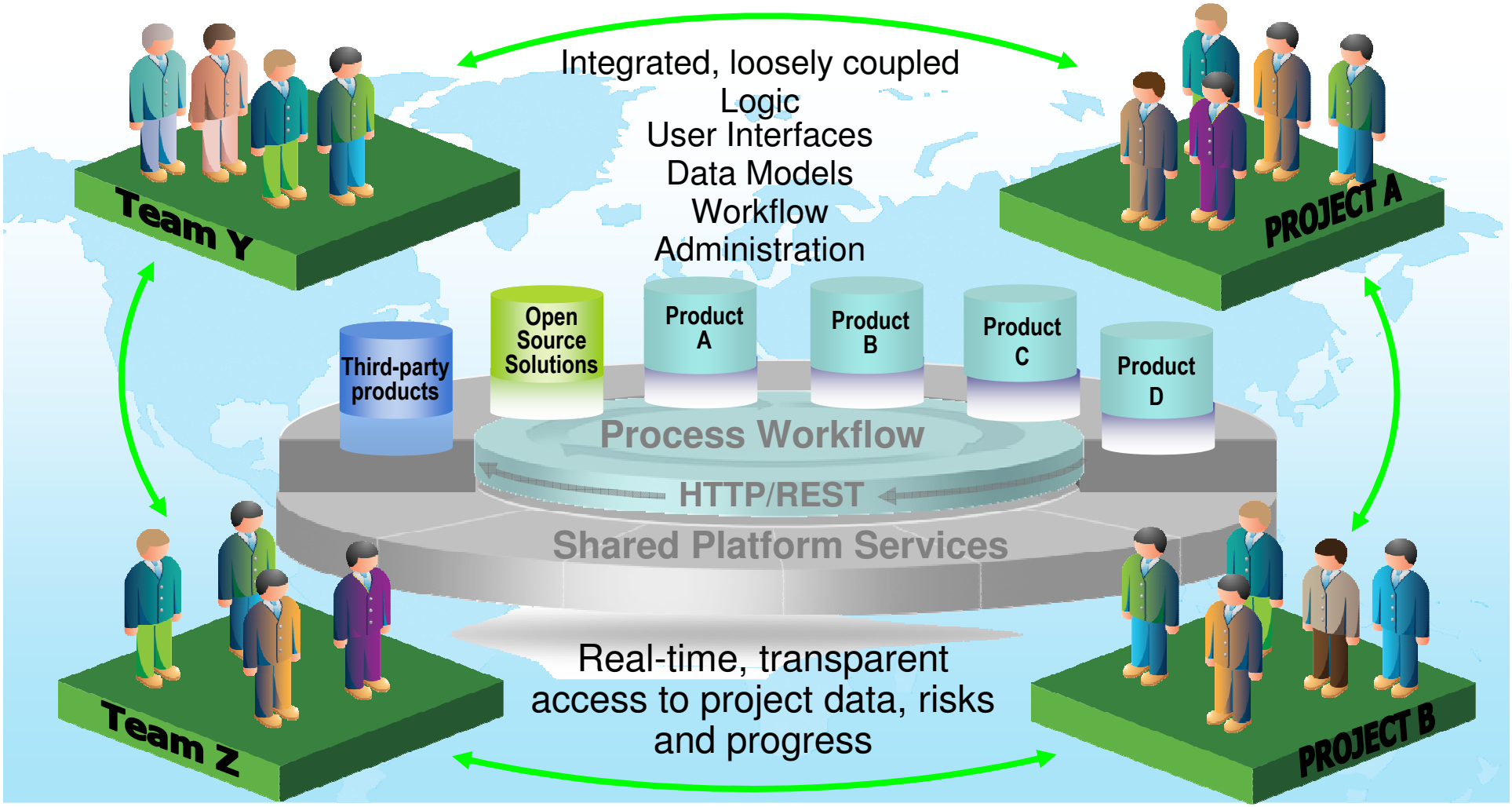
Data locked in proprietary APIs

Poor process and workflow integration

High maintenance and administration costs

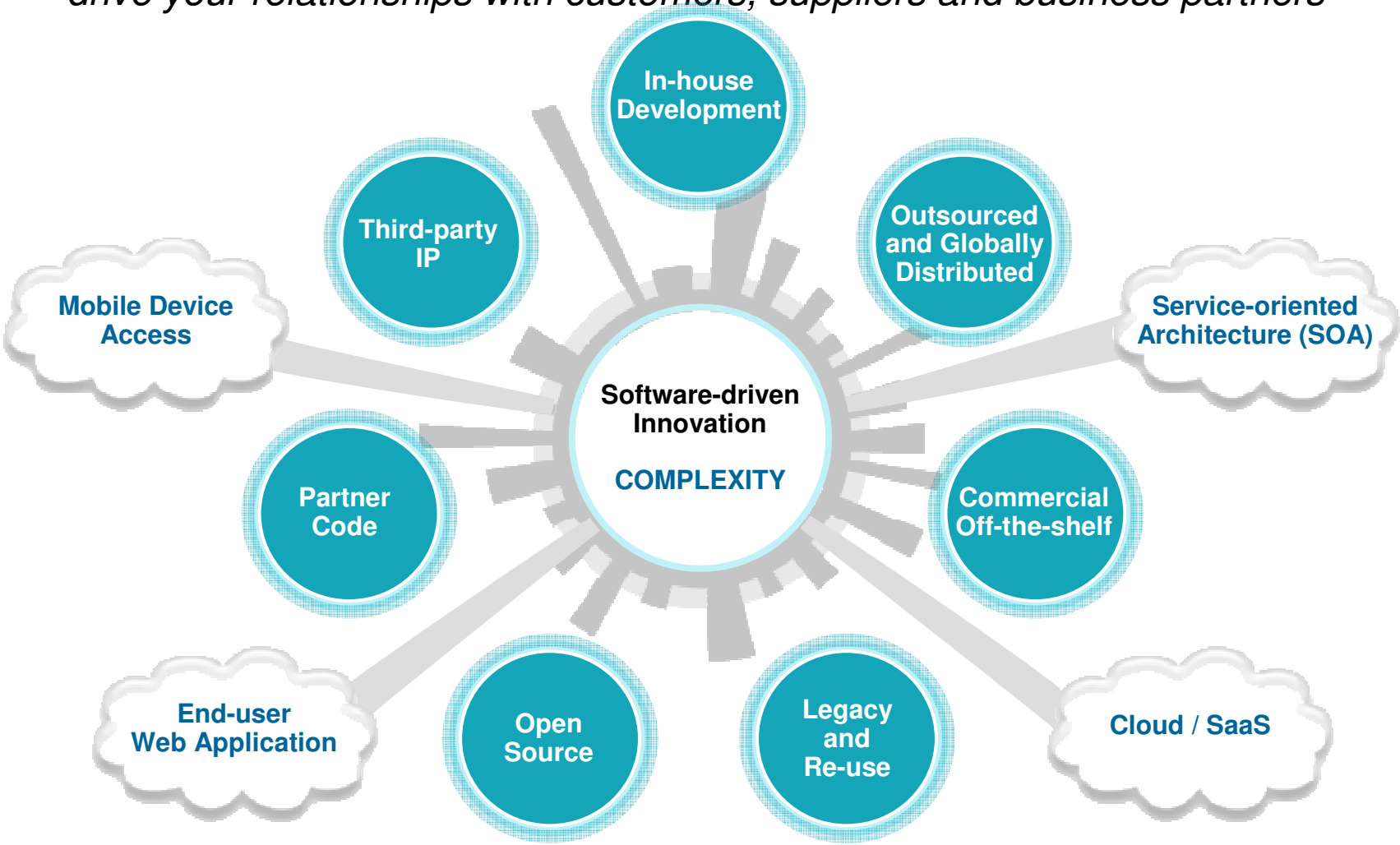
Persistent functional, geographic and organizational silos

Rational Collaborative Lifecycle Management Solution - A platform for software integration and collaboration



The defining challenge: Managing "systems of systems"

From back-end software to customer facing portals, systems of systems drive your relationships with customers, suppliers and business partners



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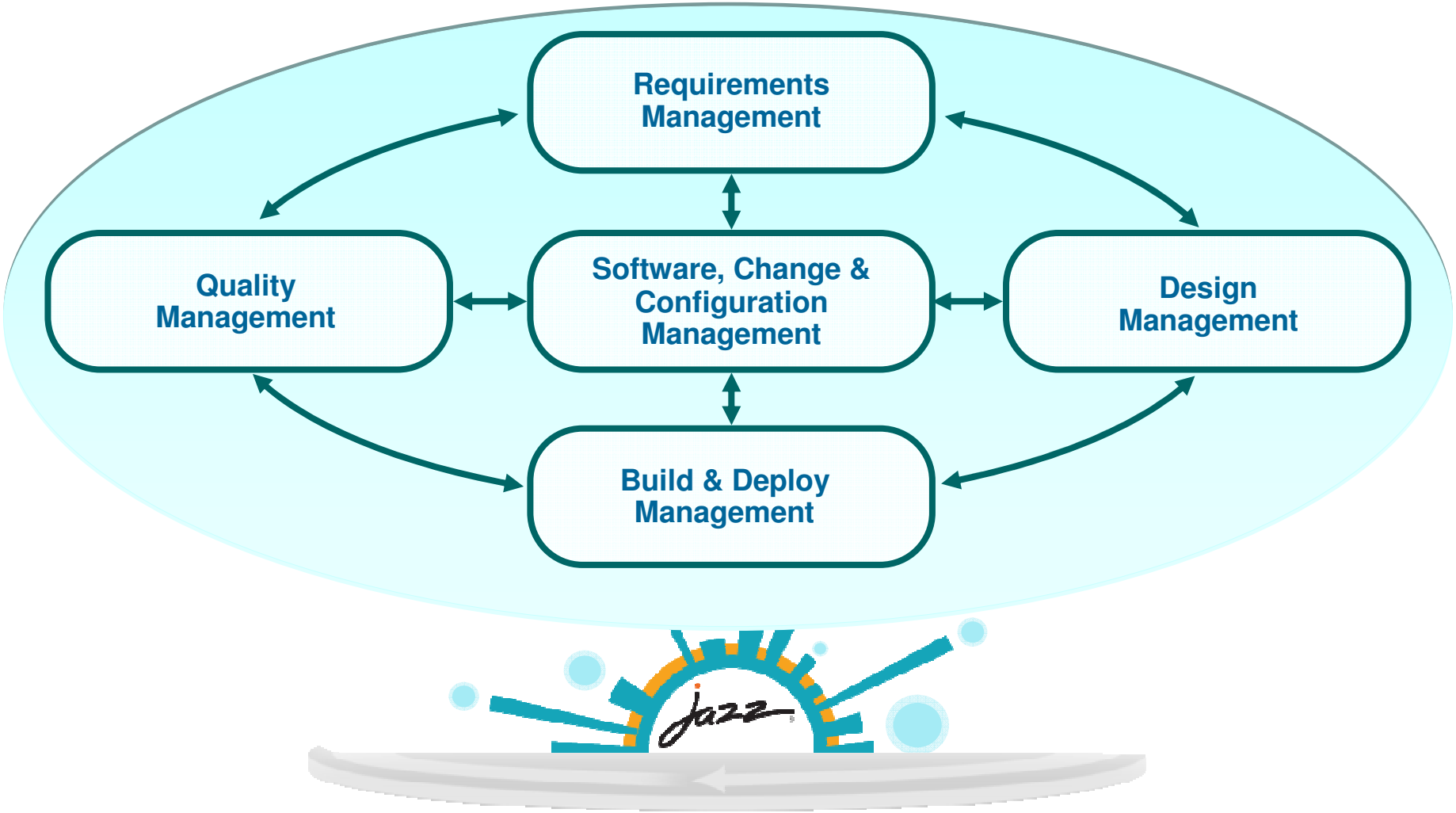
Rational Application Lifecycle Management (ALM)

Modular, open and extensible



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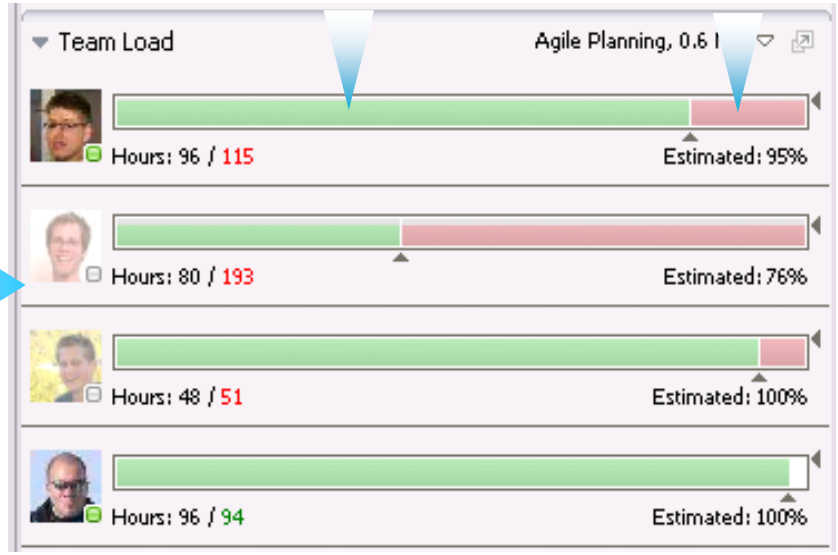
Criteria for effective lifecycle management: ALM imperatives

1. Real-time planning
2. Lifecycle traceability
3. In-Context collaboration
4. Development intelligence
5. Continuous process improvement

Imperative 1: Real-time planning



Don't

Have plans that live outside of ALM environment where requirements, development and test plans are disconnected and managed separately, or not at all.

Rely on manual, error-prone updates.

Have plans that are separate from team activities and assignments.

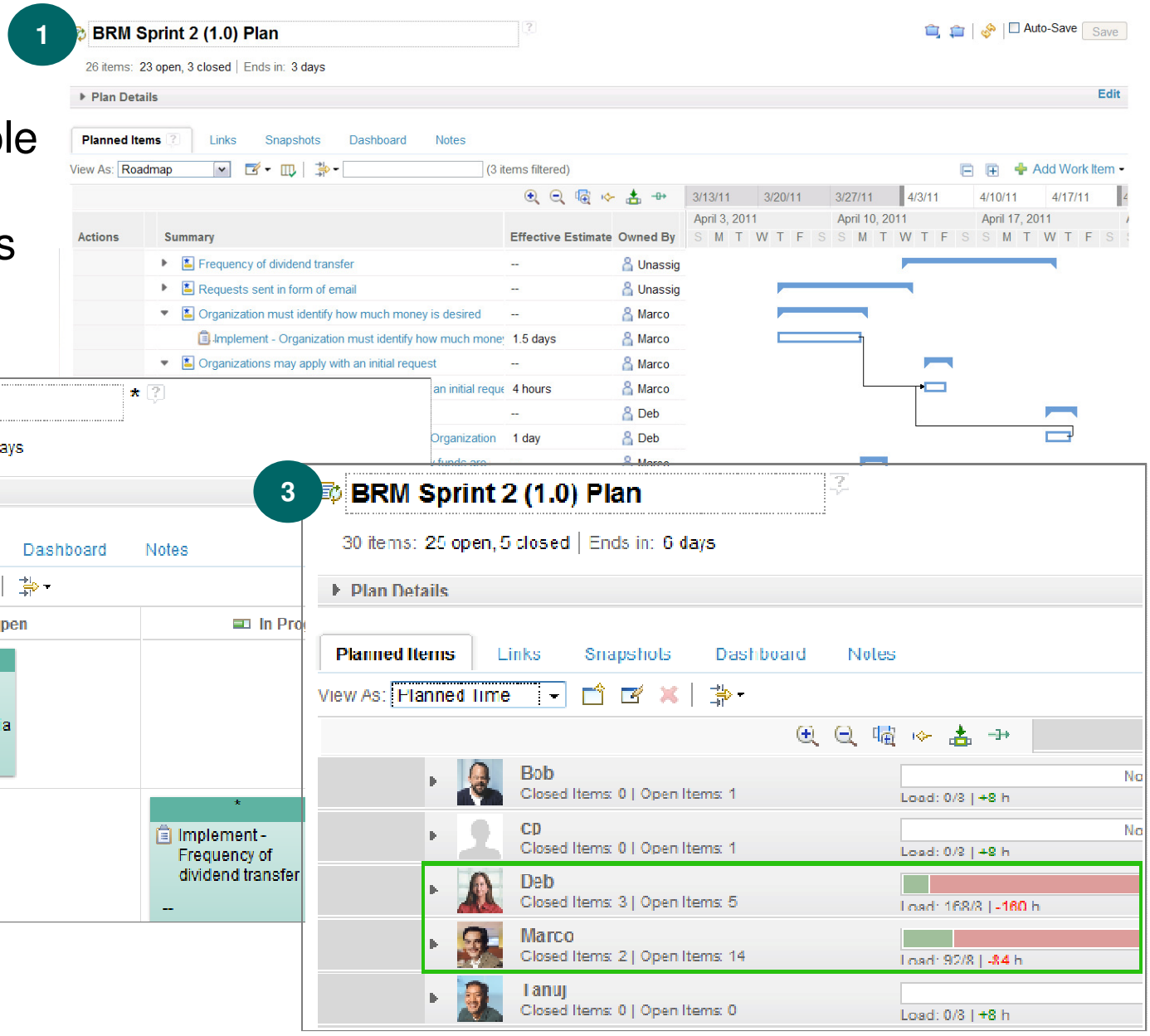
Do

Plan across the entire team, not silos, by linking and populating development and test plans from requirements.

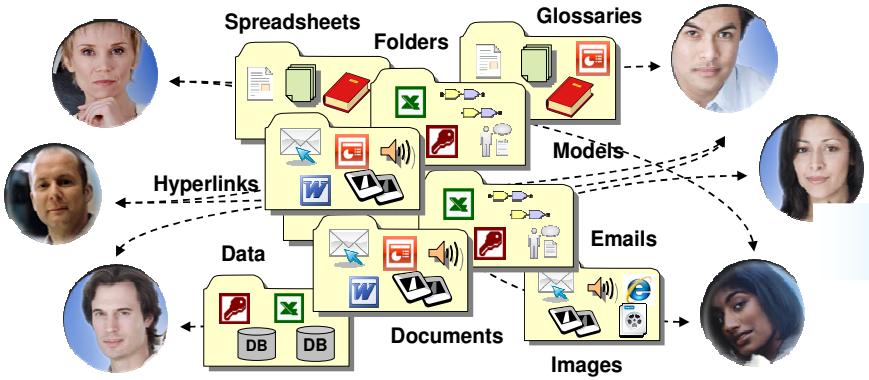
Practice continuous planning using lifecycle queries and project dashboards to respond to changing events.

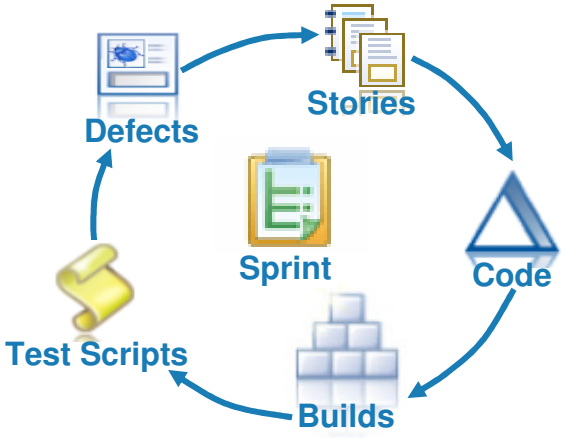
Use plans that are fully integrated with execution where updating time spent directly from the work item makes easy to keep accurate plans.

One plan - Multiple views facilitate detailed analysis



Imperative 2: Lifecycle traceability





Don't

Create silos of information with disconnected and incompatible tooling and terminology

Email copies of deliverables to remote team members and break linkages

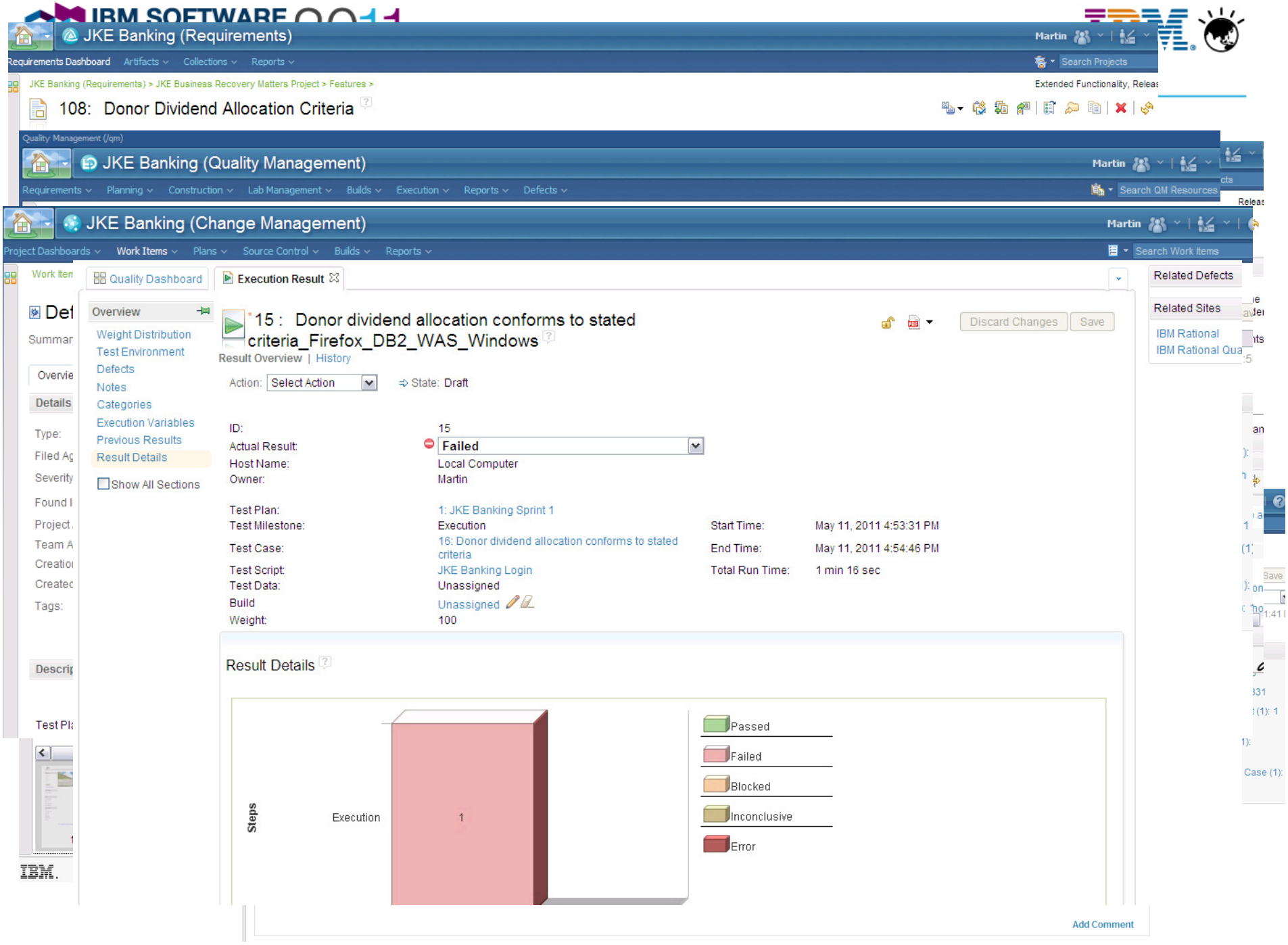
Integrate by replicating data

Do

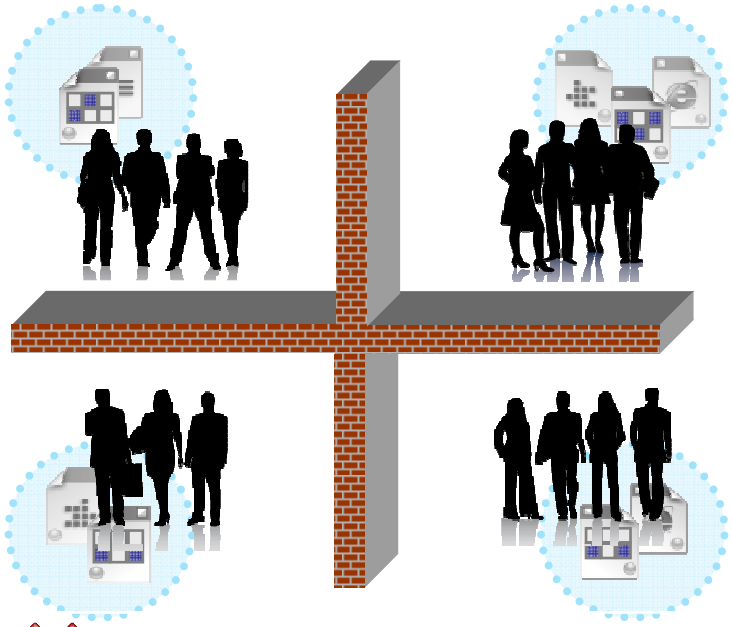
Link deliverables and connect the dots so every deliverable has the proper upstream and downstream relationship

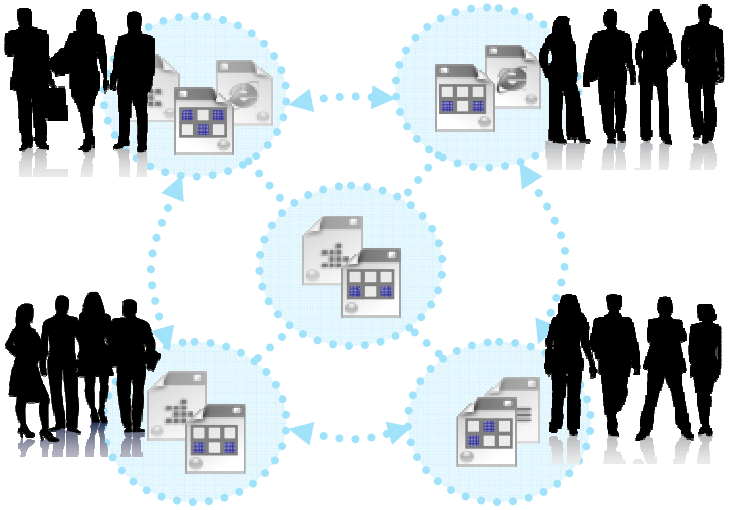
Share links to deliverables with related deliverables context including reviews and comments from other team members

Link critical project deliverable so that the entire team have access to the latest version of the truth


JKE Banking (Requirements)
Martin
Requirements Dashboard
Artifacts
Collections
Reports
Search Projects
JKE Banking (Requirements) > JKE Business Recovery Matters Project > Features >
Extended Functionality, Releas
108: Donor Dividend Allocation Criteria
Quality Management (/qm)
JKE Banking (Quality Management)
Martin
Requirements
Planning
Construction
Lab Management
Builds
Execution
Reports
Defects
Search QM Resources
JKE Banking (Change Management)
Martin
Project Dashboards
Work Items
Plans
Source Control
Builds
Reports
Search Work Items
Work Item
Quality Dashboard
Execution Result
Related Defects
Related Sites
IBM Rational
Overview
Weight Distribution
Test Environment
Defects
Notes
Categories
Execution Variables
Previous Results
Result Details
Show All Sections
15 : Donor dividend allocation conforms to stated criteria_Firefox_DB2_WAS_Windows
Result Overview | History
Discard Changes
Save
Action: Select Action
State: Draft
ID: 15
Actual Result: Failed
Host Name: Local Computer
Owner: Martin
Test Plan: 1: JKE Banking Sprint 1
Test Milestone: Execution
Test Case: 16: Donor dividend allocation conforms to stated criteria
Test Script: JKE Banking Login
Test Data: Unassigned
Build Unassigned
Weight: 100
Start Time: May 11, 2011 4:53:31 PM
End Time: May 11, 2011 4:54:46 PM
Total Run Time: 1 min 16 sec
Result Details
Steps
Execution
1
Passed
Failed
Blocked
Inconclusive
Error
Add Comment

Imperative 3: In-Context collaboration





Don't

Create an environment of silo'd teams and disconnected data

Manually collect status reports or
wait for status meetings to take action

Rely on email discussions.

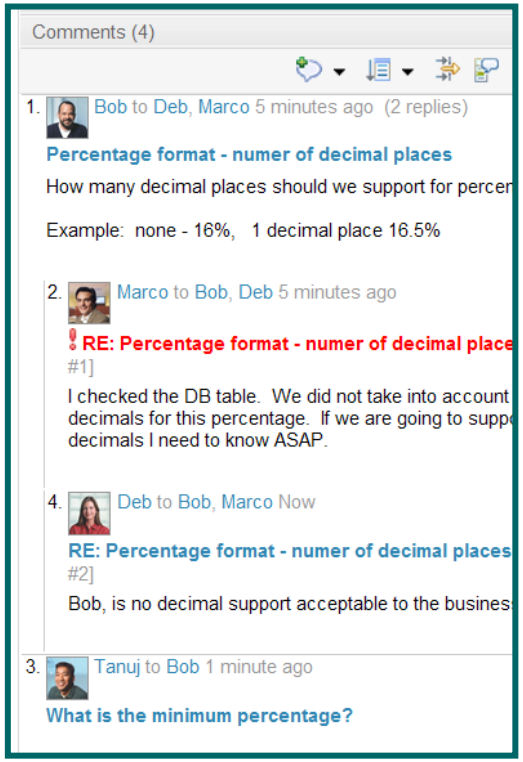
Do

Unified teams share linked data providing visibility into each others work.

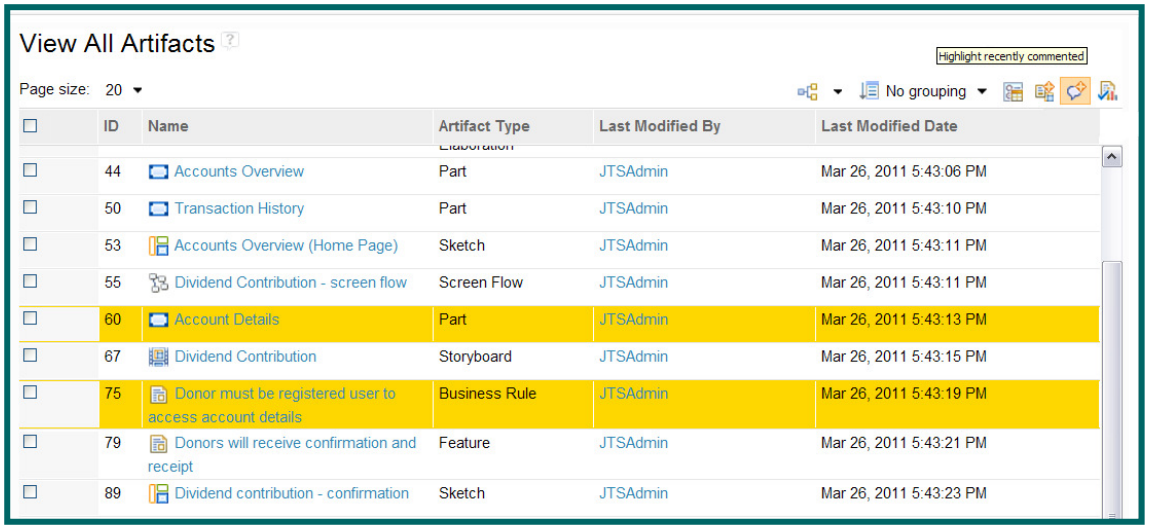
Collaboration is also about knowing what is going on without having to ask. Dashboards and traceability views provide real-time status of the team's progress.

All discussions in work items integrated on the plan. Use lifecycle queries to answer more meaningful questions such as "Which requirements are affected by defects?

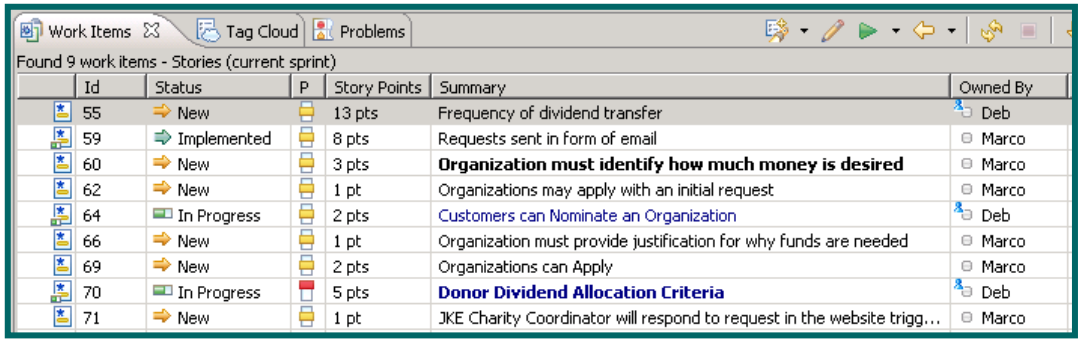
In-context Collaboration always shows the latest



Threaded discussions on requirements

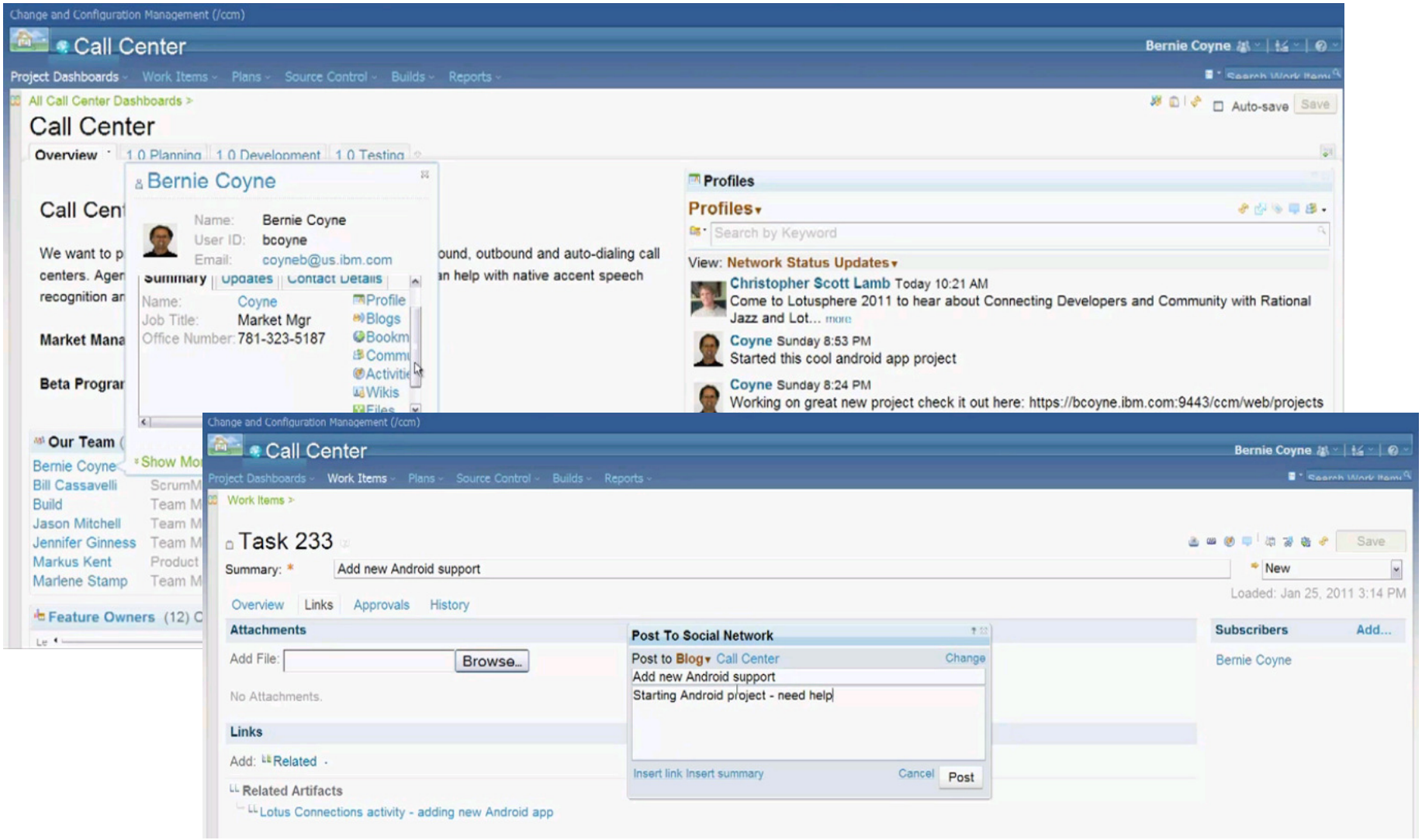


Recent Threaded discussions highlighted on requirements

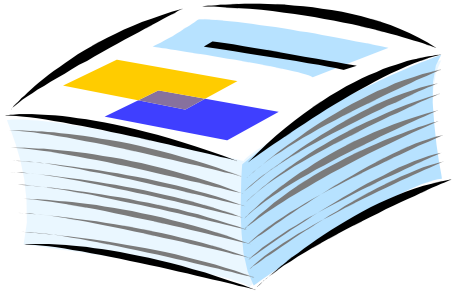


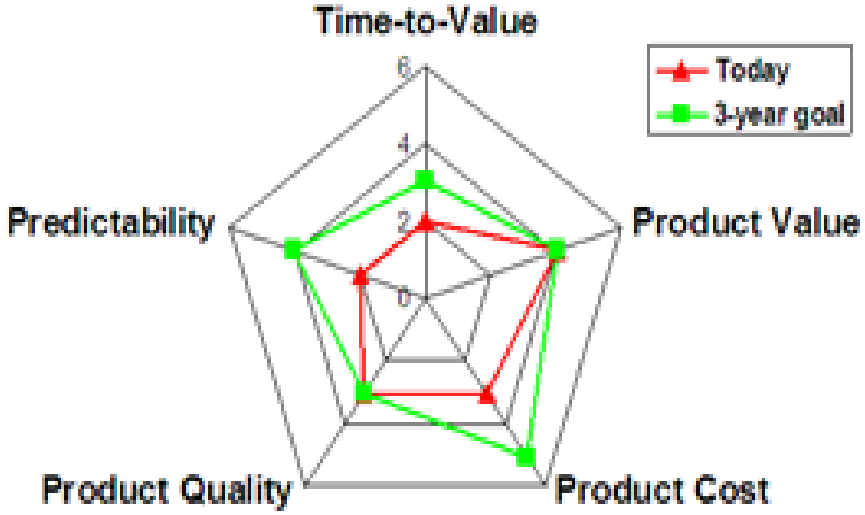
Unread work Items bolded for developers

Extending the environment to leverage on social network/community



Imperative 4: Development Intelligence





Don't

Manually collect data by hounding the team for status reports.

Take a 'big bang' approach to instituting measures

Don't expect to get it right the first time.

Do

Use live dashboards that provide transparency of information and dashboard reports based on data coming from the team's activity.

Identify a weak spot or a current pain point or bottleneck.

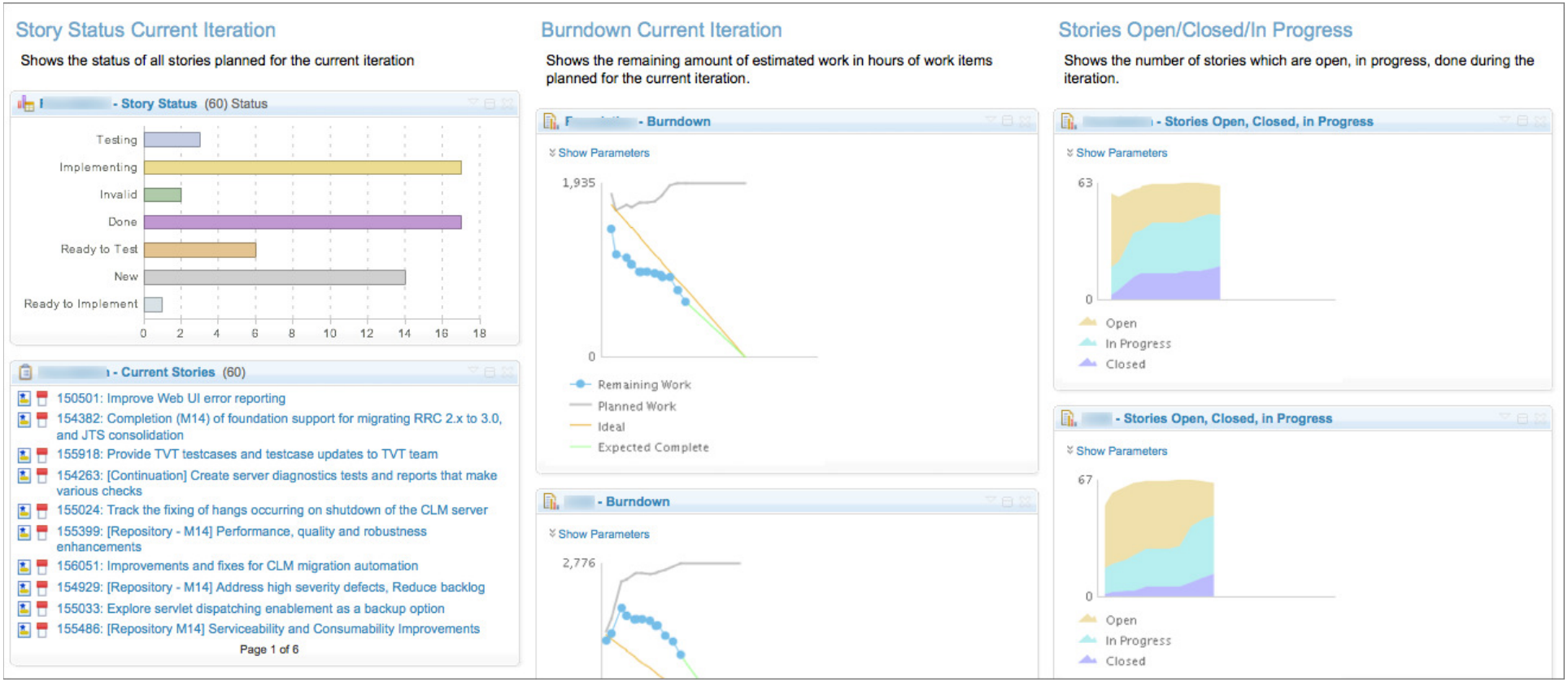
Conduct retrospectives to discover what worked, what didn't work, and how you can improve.

From In Process (Team) To Executive Value

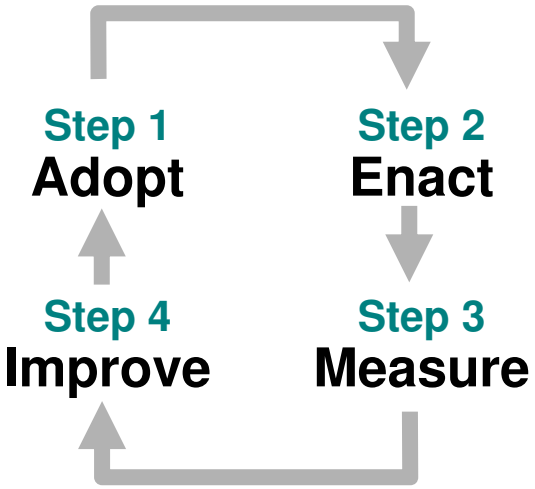
Appropriate Metrics for Each Management level

Dimensions	Team (In Process)	Middle Management (Development Mgmt.)	Development Executive (VP Development)
Time-to-Value (Schedule)	**User Story Points / Use Case Points**		
	Iteration Burndown, Blocking Work Item		
		Release Burndown	
Product Value	**Iteration Velocity**		
	Stakeholder Feedback, **# of Enhancement Request**, **Age of Enhancement Request**		
		Tested and Delivered Requirements, Business Value Velocity, Customer Satisfaction	
Product Cost	**Effort (Man-hours)**		
		Cost / Unit of work	
			Development / Maintenance Costs
Product Quality	**Technical Debt (Defect trend, defect density)**		
	Test Status, Test Coverage of Requirement, Test Execution Status		
		Quality at Ship	
Predictability	**User Story Points / Use Case Points**		
		Planned/Actual Cost and Velocity	
		Trend Variance. Likelihood of on-time delivery	

Use dashboards to provide that 1 view of project health



Imperative 5: Continuous process improvement



Don't

Define a process and place it on a shelf

Ignore process altogether or treat it like an unnecessary burden.

Institute process police

Do

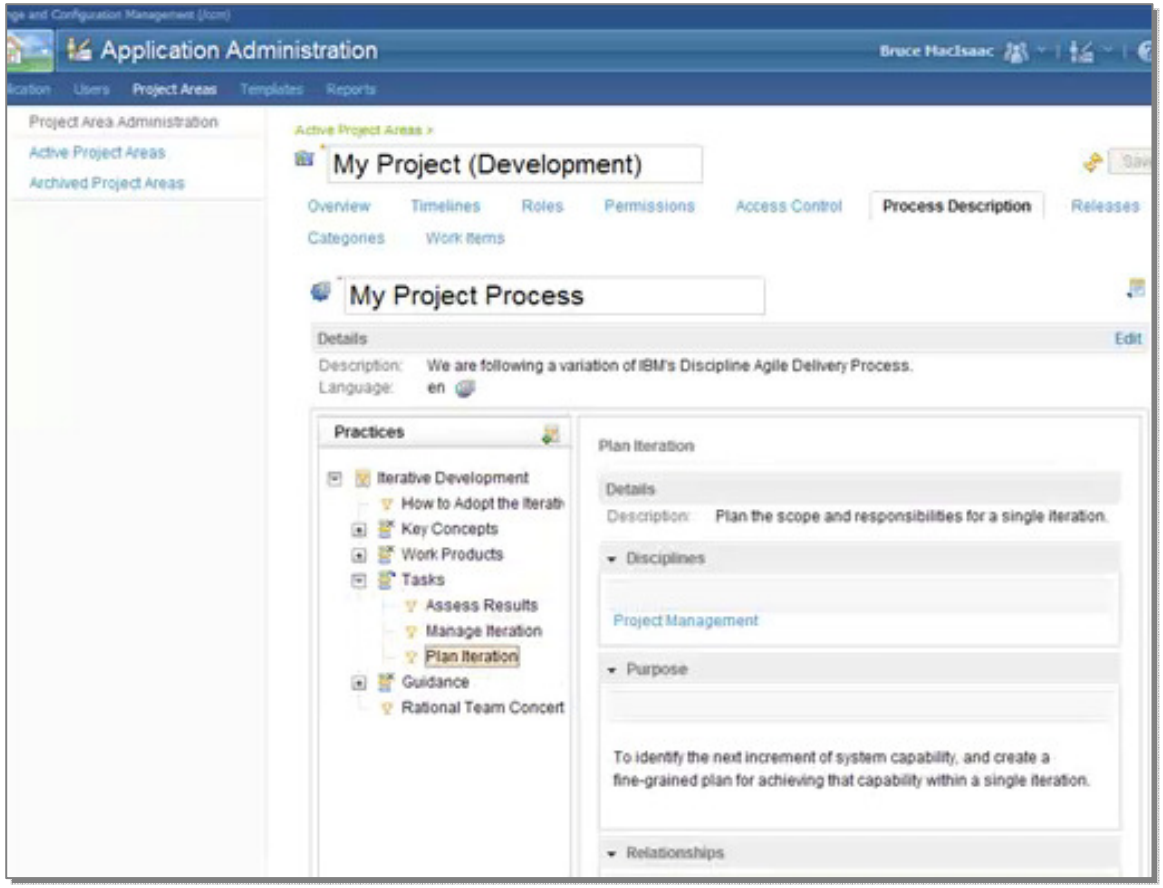
Use a tool that can 'enact' your process definition and guide the team toward the desired result.

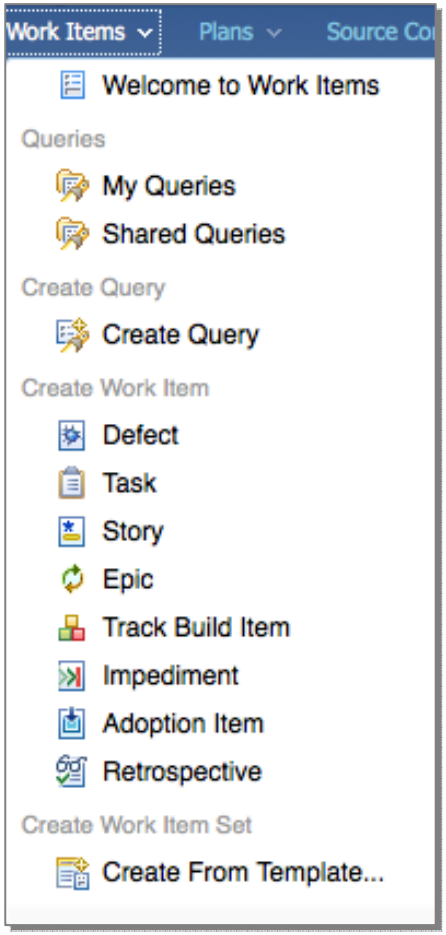
Learn from what other teams have done and leverage their results across other teams when appropriate Ignore process altogether or treat it like an unnecessary burden.

Let the tool govern behavior and refine it over time. Add peer reviews to encourage knowledge sharing and collaboration.

Process specifications and work-item templates speed team adoption

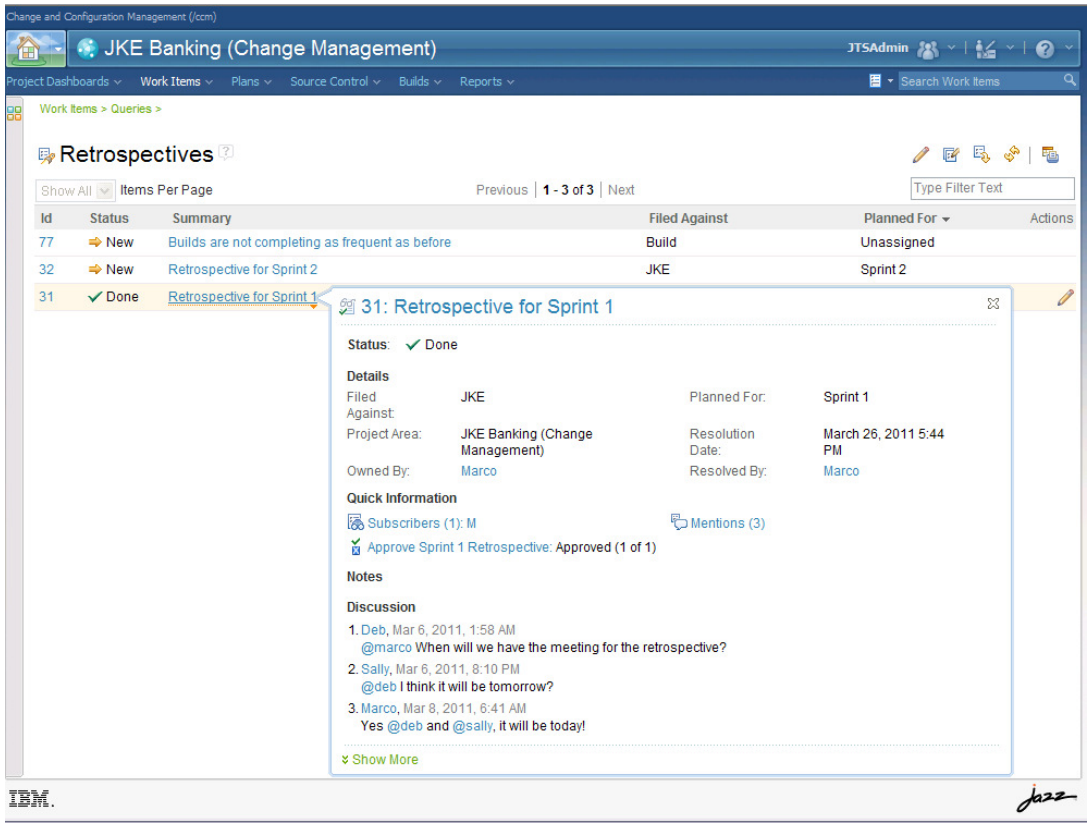
- Modify processes using a rich set of practice content
- Teams use work item types defined by your process





Team Retrospectives help identify areas of improvement

- Tracking Retrospectives help team members to collaborate on improvements.
  - Ranking of process improvements help to focus on where the team feels the biggest pain.
  - Metrics where available help support process improvements and show results.



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Business results

Automated status reporting derived from evolving engineering artifacts can ***improve productivity*** *by*

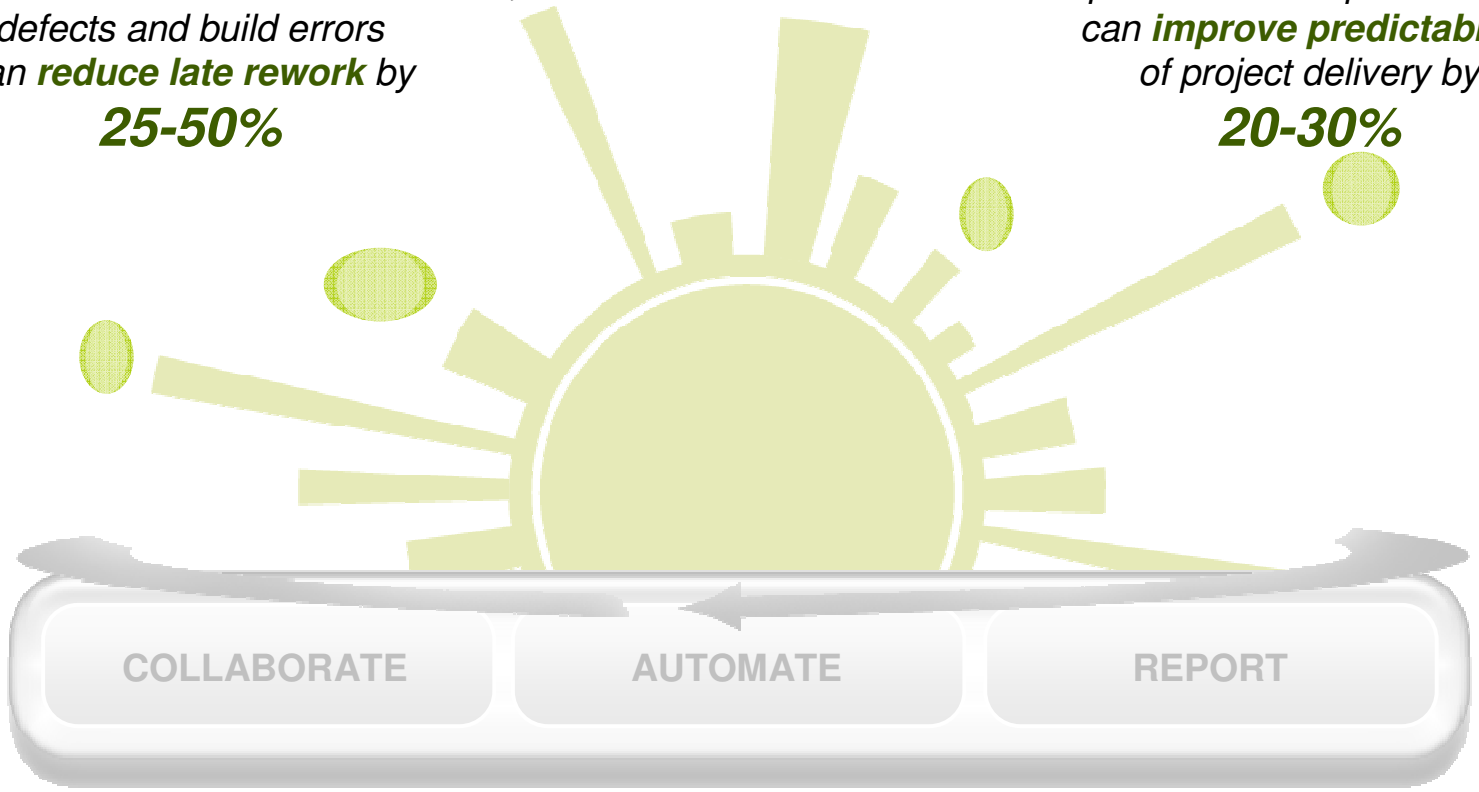
5-10%

Being able to collaborate on work items, defects and build errors can ***reduce late rework*** *by*

25-50%

Best practices in scope management can ***improve predictability*** *of project delivery by*

20-30%



Source: IBM analysis based on services research.

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Greater productivity, global collaboration, and lifecycle visibility

MV

Results

MV was the first company in Brazil to become certified to use electronic health records, meeting the security standards issued by SBIS and CFM.

Business challenge:

MV is a leading provider of healthcare systems in Brazil with three software development centers that needed to improve their development processes to rapidly respond and take advantage of market opportunities and regulations in the changing healthcare industry.

Solution:

Collaborative Lifecycle Management solution and lifecycle offerings, with RUP methodology and agile practices. MV first adopted and updated their change and configuration management processes with **Rational Team Concert** and then added **Requirements Composer** for business process and rules modeling, requirements collaboration and elicitation, and **Quality Manager** for test planning, test creation, execution, and quality management.

Benefits:

MV accomplished the following:
- Greater integration of and **collaboration** among three development locations
- Improved developer and tester **productivity**
- **Decreased the learning** curve when employees switch from one location to another
- Gained greater **visibility** into requirements
- Achieved greater **reuse** of requirements.

Solution components:

Requirements Management
Rational Requirements Composer

Architecture & Development
Rational Software Architect
Rational Software Modeler
Rational Application Developer for Websphere

Software Change & Configuration Management
Rational Team Concert
Rational Method Composer

Build & Deploy Management
Rational Team Concert

Quality Management
Rational Quality Manager
Rational Functional Tester
Rational Performance Tester

Gartner MarketScope for Application Life Cycle Management

IBM Rational earns "Strong Positive" – the highest possible rating

Gartner

Efficient coordination and automation of the delivery process requires new, collaborative approaches to the planning, measurement, execution, control and reporting of activities.

These new approaches are what differentiate current application life cycle management (ALM) tools, and what make ALM processes vital to leading-edge development activities.

ALM is what enables sustainable agile practices. ALM creates a management framework providing consistent, auditable records of the decisions and activities of agile teams.

IBM earns "Strong Positive"–the highest possible rating

	RATING				
	Strong Negative	Caution	Promising	Positive	Strong Positive
AccuRev			x		
Aldon			x		
Atlassian				x	
CollabNet				x	
Digite			x		
HP				x	
IBM					x
Kovair			x		
Micro Focus			x		
Microsoft				x	
MKS				x	
Parasoft			x		
Polarian Softw are			x		
Rally Softw are				x	
Seapine Softw are			x		
Serena Softw are				x	
SmartBear Softw are			x		
TechExcel			x		
ThoughtWorks			x		
VersionOne				x	

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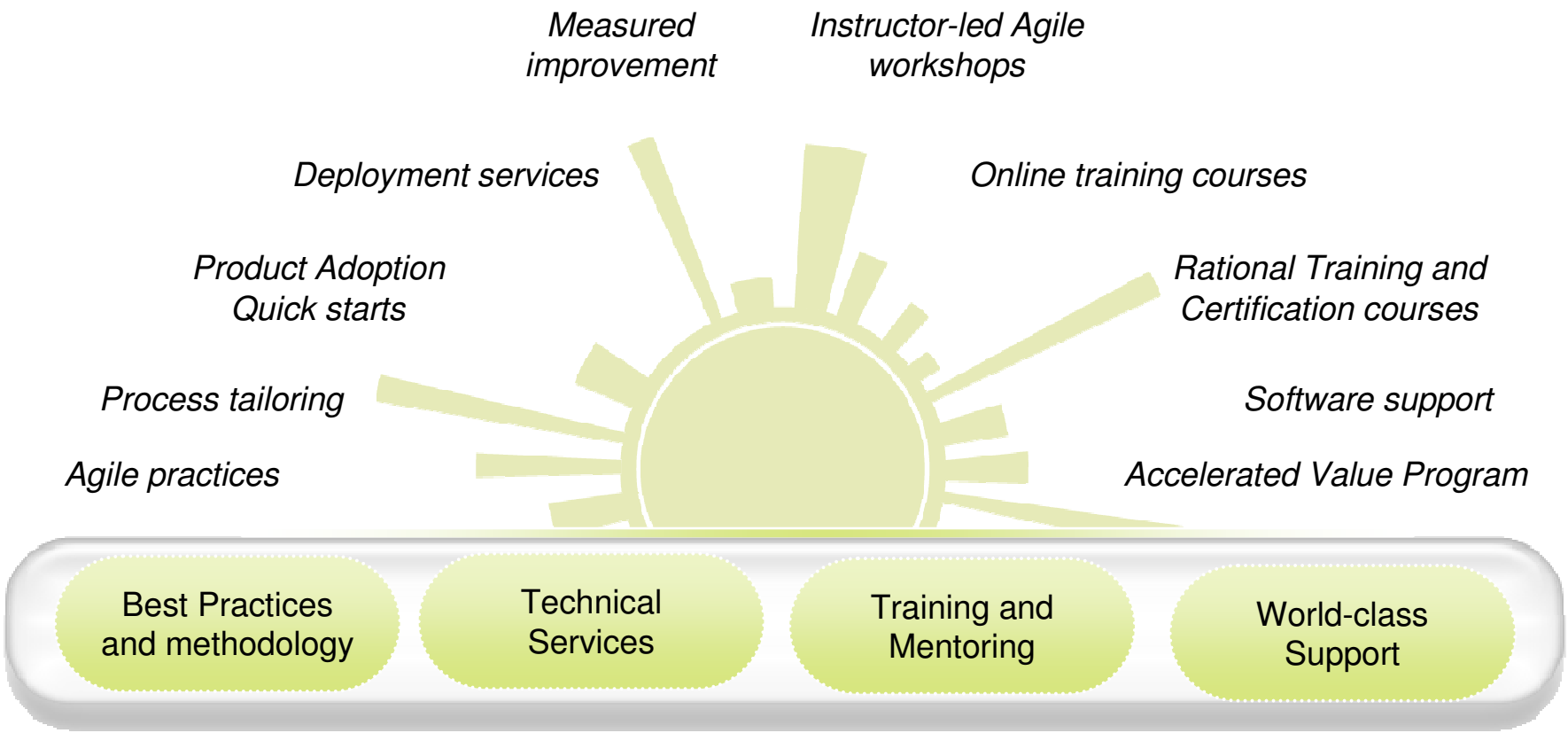
Ensure Success with Rational Collaborative Lifecycle Management



Summary: Rational Collaborative Lifecycle Management

Transforming software and systems delivery

- **Collaborate**
  Bridge the gap between technical and business communities through shared access to enterprise documents, workflows and collaboration solutions.
- **Automate**
  Make it easy for individuals and teams to "do the right thing" and "do things right" by automating team process and workflow.
- **Report**
  Track and measure progress across multiple teams, tools and geographies by leveraging the real-time instrumentation of the software lifecycle.

Collaborate

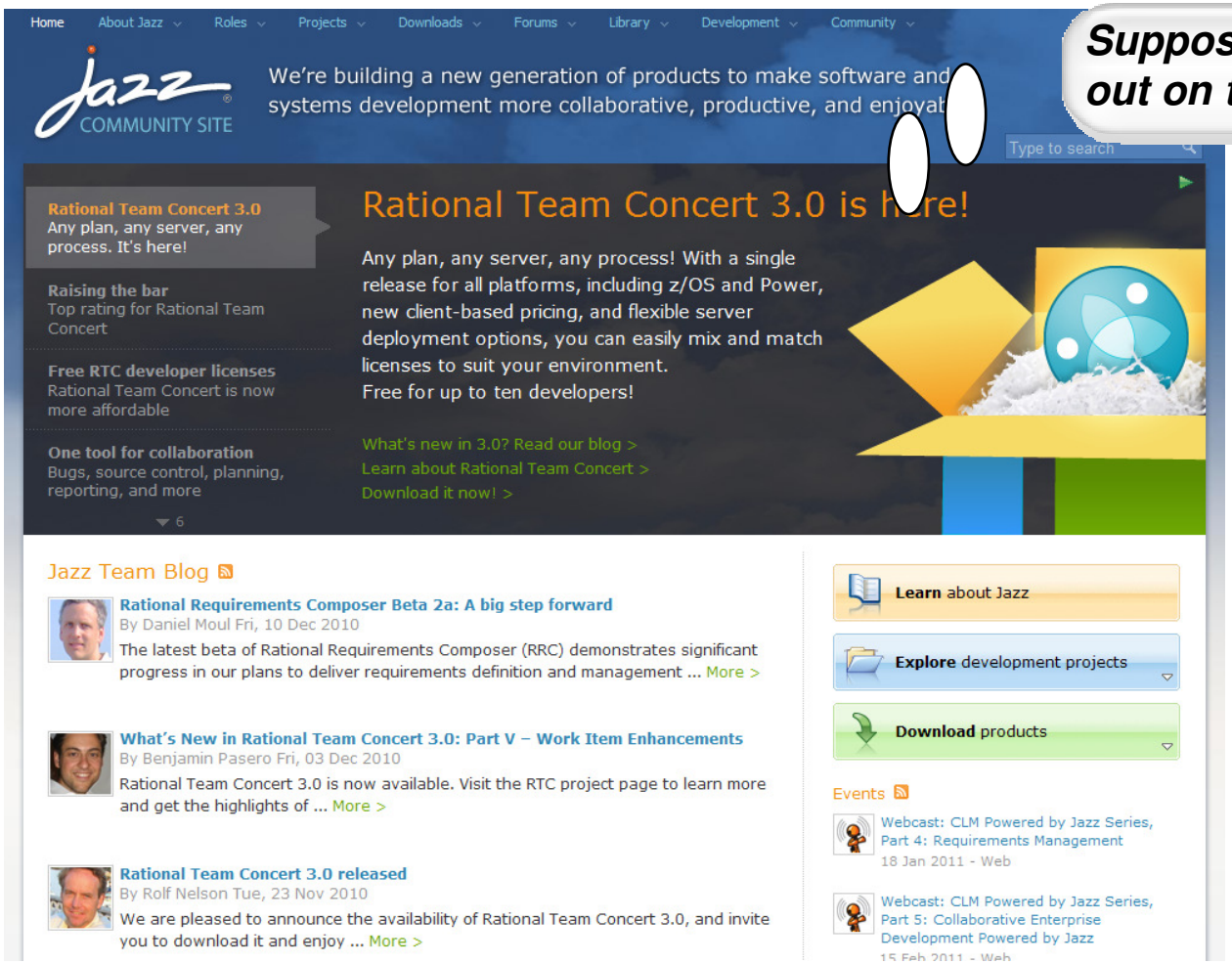
Automate

Report

Helping customers improve the value and performance of their investments in software as strategic business assets

https://jazz.net

Creating a higher-fidelity connection to our customers



Suppose we did our development out on the Internet?

A transparent software delivery laboratory where you can...

- ✓Get answers and insights directly from engineering
- ✓Communicate with the development team
- ✓Track the progress of builds and milestones
- ✓Get the latest product trials and betas
- ✓Join developers and product managers in discussion groups
- ✓Submit defect and enhancement requests

Technical Exploration Center Solution Test Drive Events

Venue : 19th Floor Plaza IBM, Room 1916
8 First Avenue, Persiaran Bandar Utama

Title	Date	Duration	Event Code
Achieve Predictability & Accuracy in Application Delivery Lifecycle Test Drive	6-Sep-11	1	TDR001-1
Release your application with confidence with IBM Rational Deployment Planning and Automation Solution	7-Sep-11	1	TDR002-1
Emerging Trends & Countermeasures on Internet Security Test Drive	8-Sep-11	1	TDR003-1
Successful IT Delivery Strategies for Staying ahead of Competition Test Drive	9-Sep-11	1	TDR004-1
Achieve Predictability & Accuracy in Application Delivery Lifecycle Test Drive	15-Nov-11	1	TDR001-1
Release your application with confidence with IBM Rational Deployment Planning and Automation Solution	16-Nov-11	1	TDR002-1
Emerging Trends & Countermeasures on Internet Security Test Drive	17-Nov-11	1	TDR003-1
Successful IT Delivery Strategies for Staying ahead of Competition Test Drive	18-Nov-11	1	TDR004-1

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