IBM Rational solution for Collaborative Lifecycle Management

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Agenda

- Agile Challenges
- Effective Application Lifecycle Management (ALM)
- Getting started on your Agile ALM journey
- Questions
- Demo

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We are a part of a movement that has the potential of being (or perhaps already is) more impactful than the Industrial age...

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Software unleashes our creativity

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Software saves lives

OnWeather

with Paul Douglas

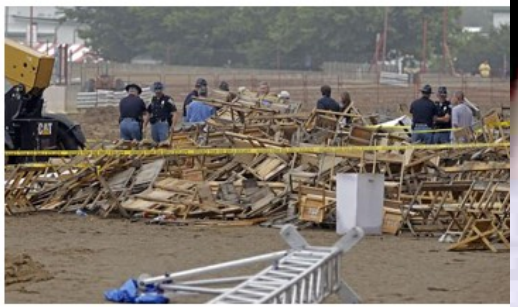
Paul Douglas. Douglas is a nationally respected meteorologist, with over 30 years of television and radio experience. A serial entrepreneur, Douglas continues to seek out new ways to expand on new media and almost limitless on-line opportunities. As Founder and CEO of Broadcast Weather, Douglas and a team of meteorologists are producing and disseminating daily weather feeds for web sites, cable channels, and TV broadcasters.

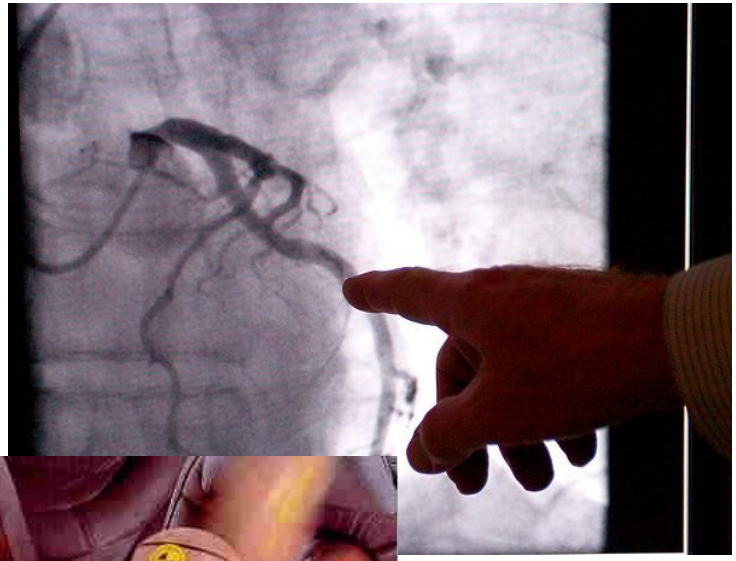
resize text | find us on Facebook | follow on Twitter | subscribe via RSS

Life-Saving Smartphone Apps (no need to get caught in a severe storm)

Posted by: Paul Douglas | Updated: August 14, 2011 - 1:50 PM

2 comments | print





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Software connects us in ways we never imagined

Apps for Autism: Communicating on the iPad

32 Comments
Have Your Say

Email Story
Send to a Friend

Share This
Tell Your Friends

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Tweet This

More
Share It

O MINUTES

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Japan Tsunami & Earthquake – Use of Twitter, Facebook, Skype & other Social Networks

1

The tsunami & earthquake that have struck Japan have affected the communication sector. Mobile phone networks have been jammed & people are finding it difficult to communicate. Twitter, Facebook, Skype & local Japanese social networks have come in handy for people to communicate & keep in touch with the loved ones. Social media has been playing a crcial role in times of natural disasters. In Haiti earthquake also, twitter was used to keep in touch with the world. Several people have posted on their FB wall about their experiences during the quake. The japan Tsunami related topics have been trending in Twitter. Several videos have also been posted in Youtube.

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Innovation is being driven by software

Mobile banking will be the most widely used banking channel by 2020, if not sooner

The average 2010 automobile contains more lines of software code than a fighter jet

Will it perform?

Is it secure?

Are we compliant?

Source: *Mobile banking: A catalyst for improving bank performance*, Deloitte, 2010; and *This Car Runs on Code, Robert Charette,* IEEE Spectrum, 2009.

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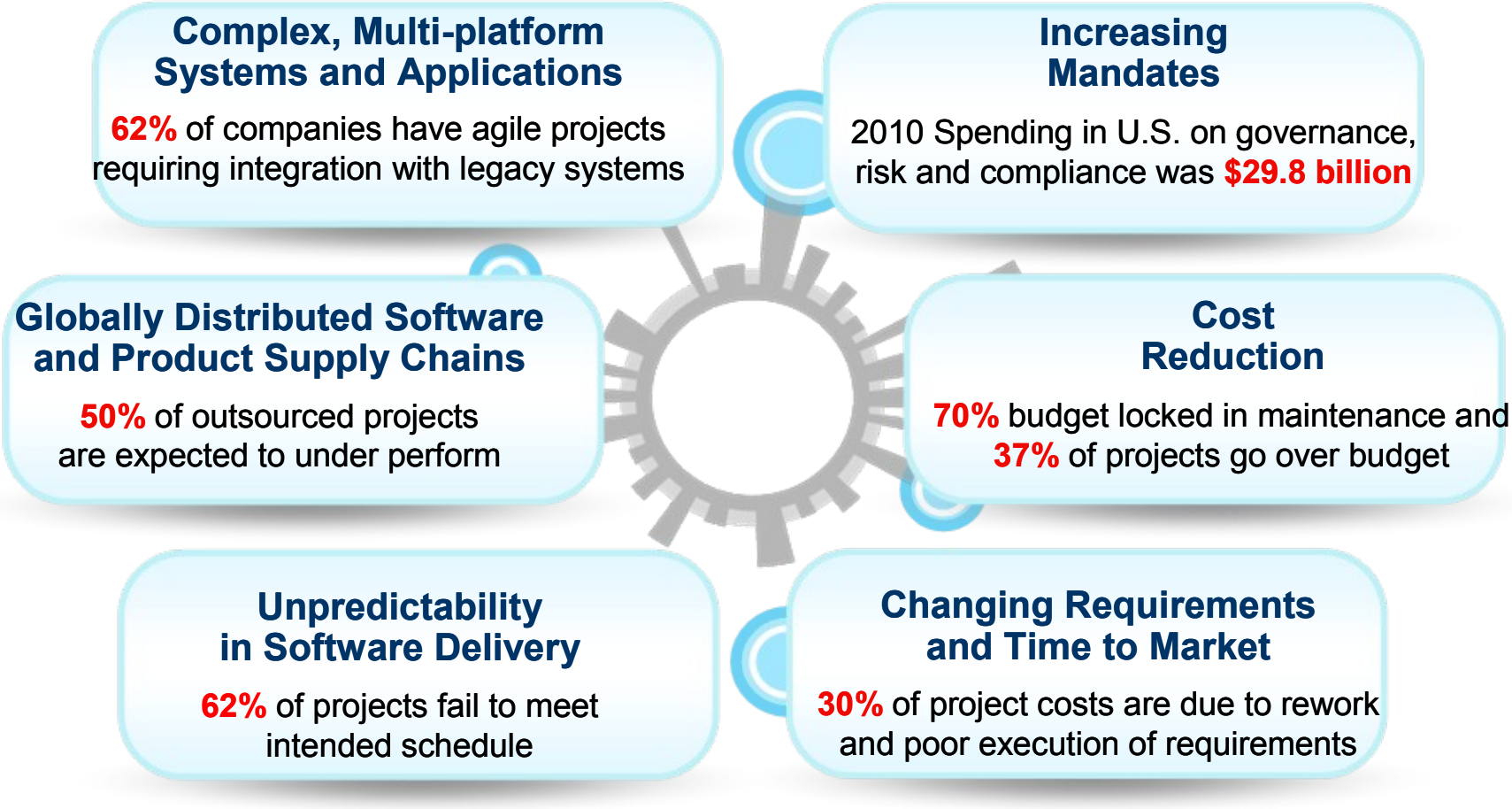
Realities can stall software-driven innovation

Complexities in software delivery compounded by market pressures



Source: Numerous sources, see speaker notes for details

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Agile: Better Software Faster

Stakeholders depend upon the productivity of a multi-disciplinary team to deliver the software they expect...

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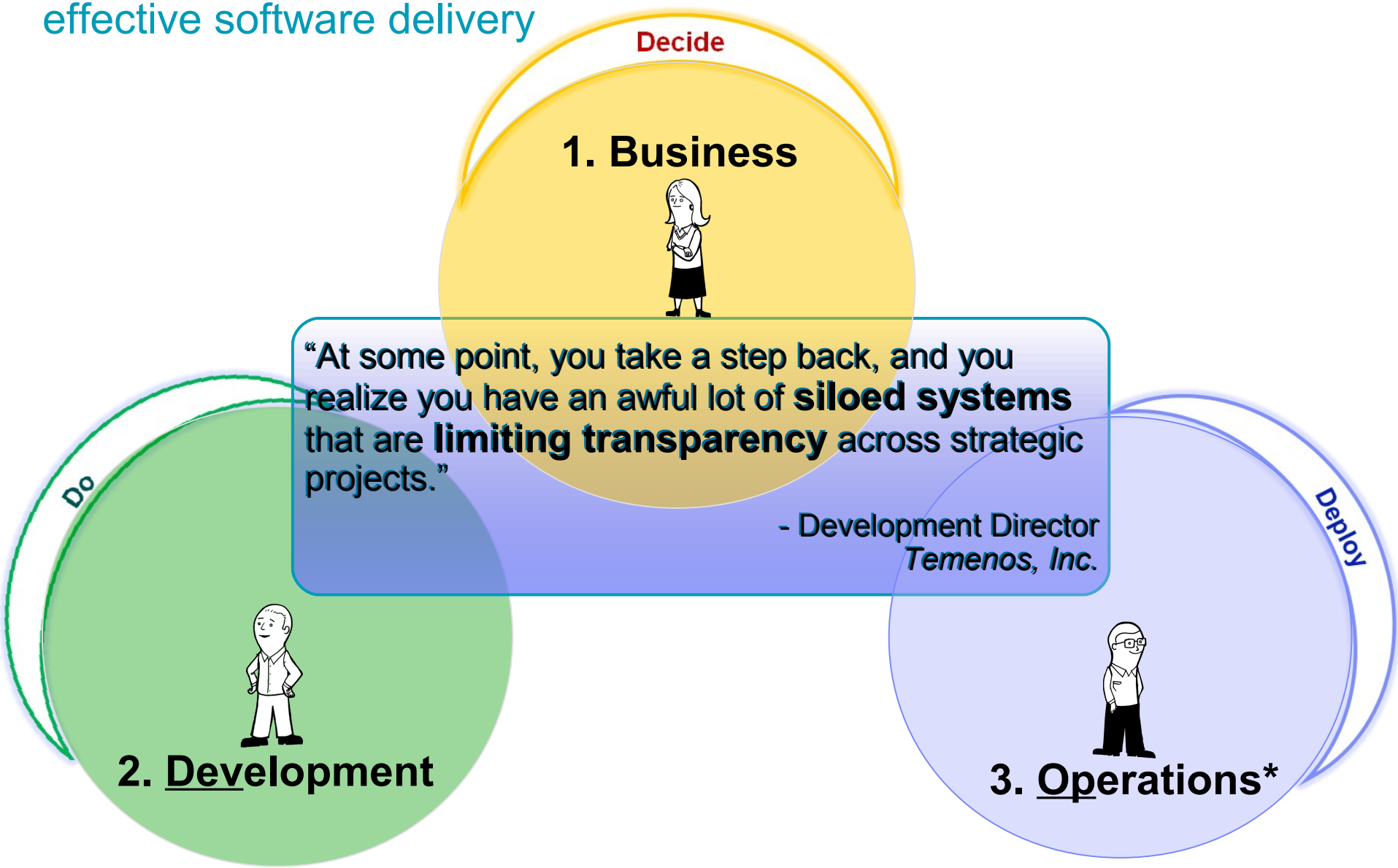
Anytime, for any team, silos create barriers to effective software delivery



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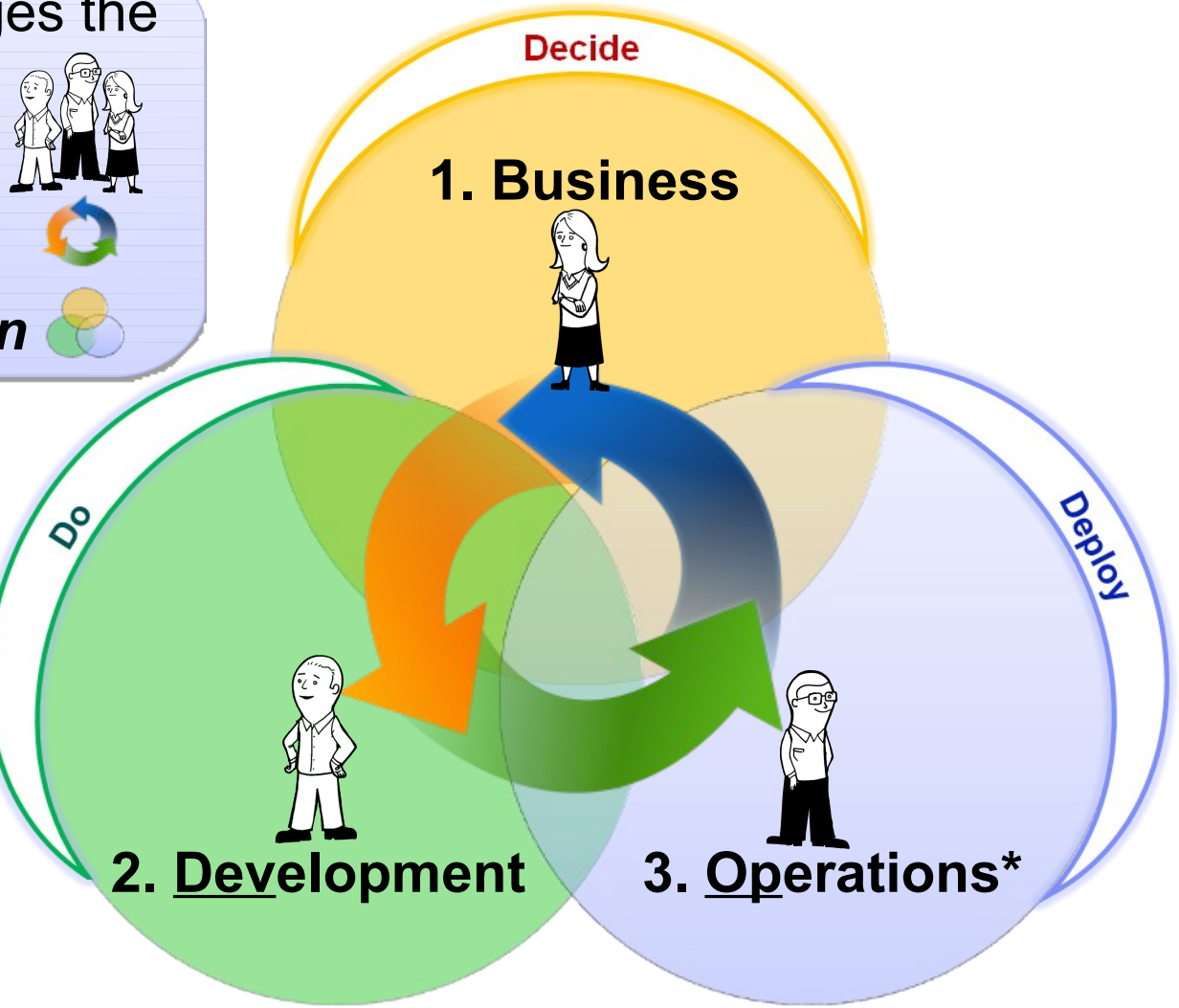
Application Lifecycle Management can help!

ALM manages the flow of:

People

Process

Information



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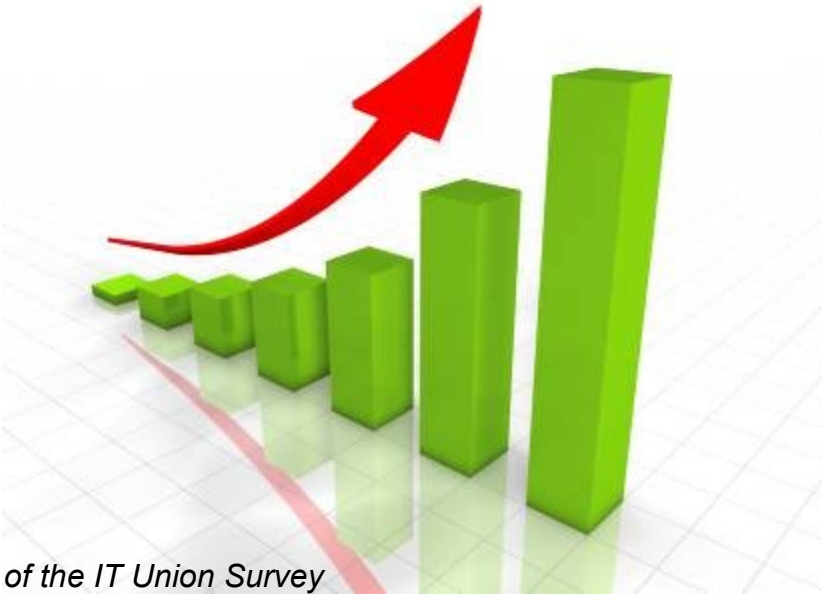
Does *Agile* scale across the application lifecycle?

Yes!

- Majority of *Agile* teams are geographically distributed
- Organizations have reported successful *Agile* programs of 500+ people
- 33% are in regulatory situations
- 75% are doing *Agile* for medium and greater complexity projects
- 17% are successfully applying *Agile* for outsourcing
- 78% are working with legacy systems
- 32% successful interaction between enterprise architects and *Agile* teams
- 11% report that their governance strategy works well with *Agile teams*



Source: Dr Dobb's November 2009 State of the IT Union Survey

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What do agile teams do to improve their productivity?

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Five Imperatives for Effective Application Lifecycle Management to improve organizational productivity

- Maximize product value with **In-Context Collaboration**
- Accelerate time to delivery with **Real-Time Planning**
- Improve quality with **Lifecycle Traceability**
- Achieve predictability with **Development Intelligence**
- Reduce costs with **Continuous Improvement**

Learn more at ALM Everywhere

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"I used to think collaboration was a hippie word leftover from the 1960's...

...now I define it as survival"

A speaker at Innovate 2011, Rational User Conference

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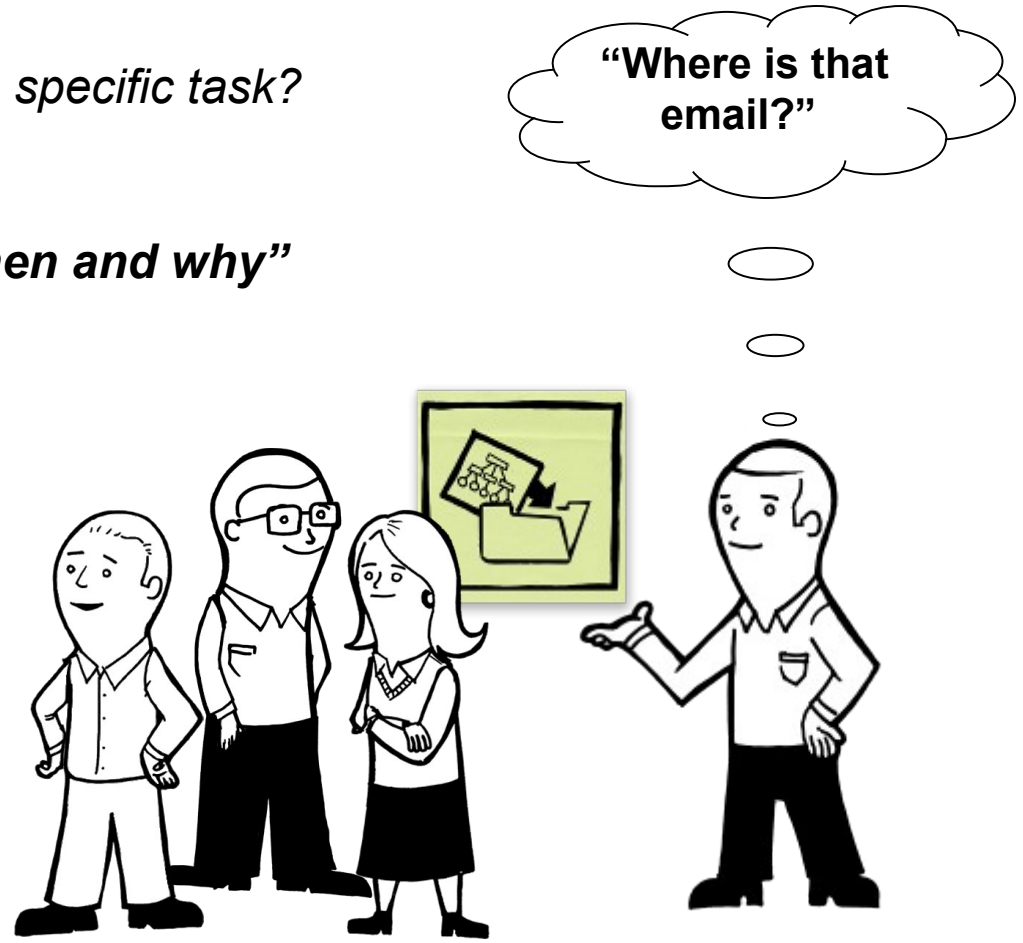
Collaboration challenges

Can your team…

- *…find all the information related to a specific task?*
- *…quickly grasp the **"who, what, when and why"** of team activities?*
- *…bring new team members up-to-speed quickly?*
- *…overcome the barriers of multiple time zones when working with outsourced and distributed team members?*



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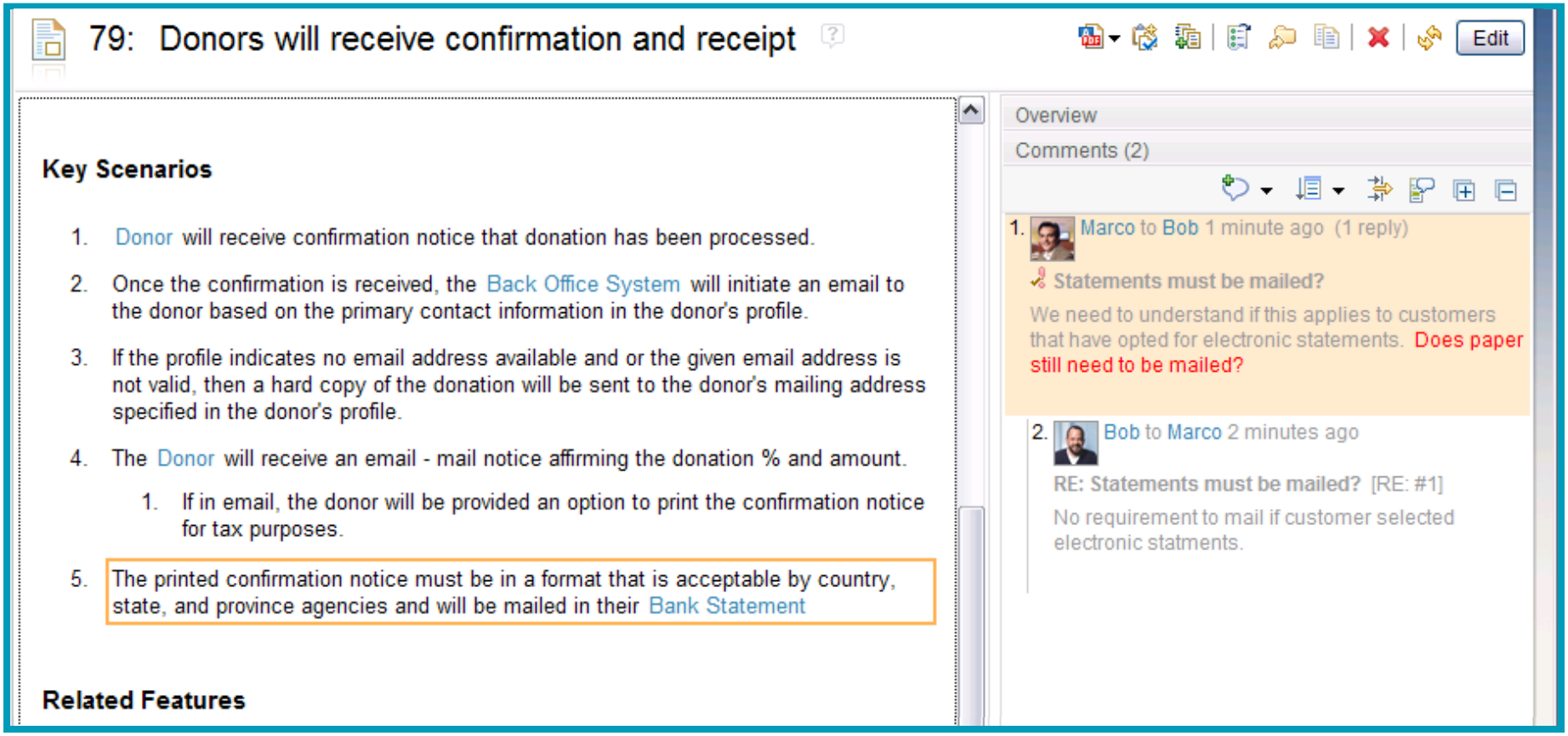
Comments on requirements details are in-context



A click on the comment highlights the text under discussion.

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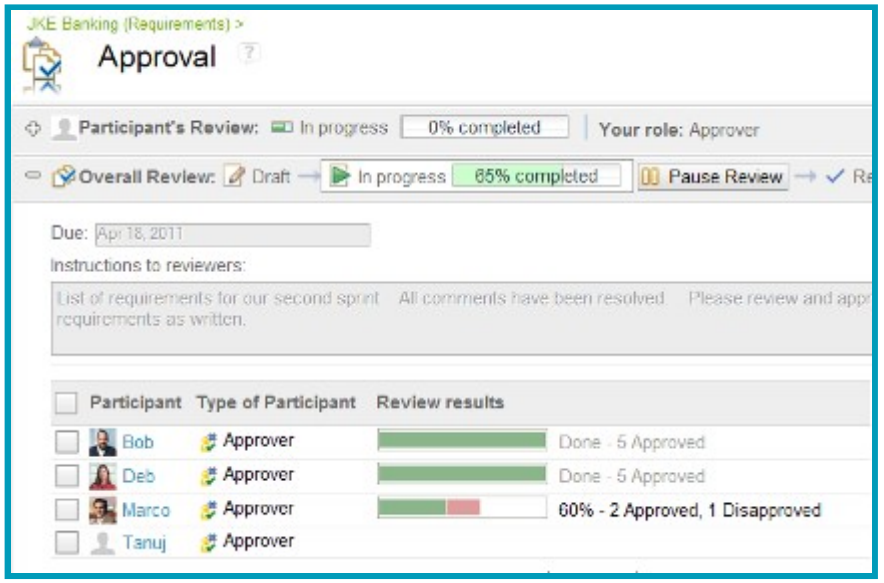
Formal reviews drive agreement & prevent re-work

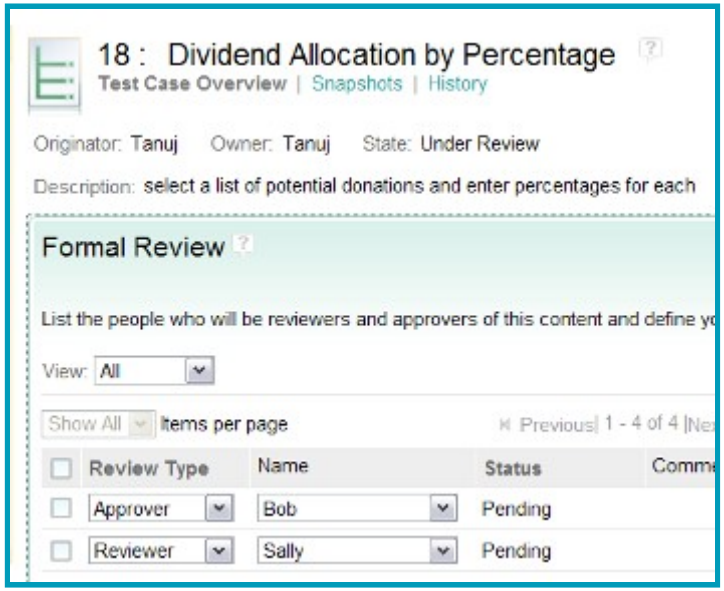
- ✓ Reviews & approvals insures artifacts are reviewed and/or approved by key team members and captures compliance requirements.

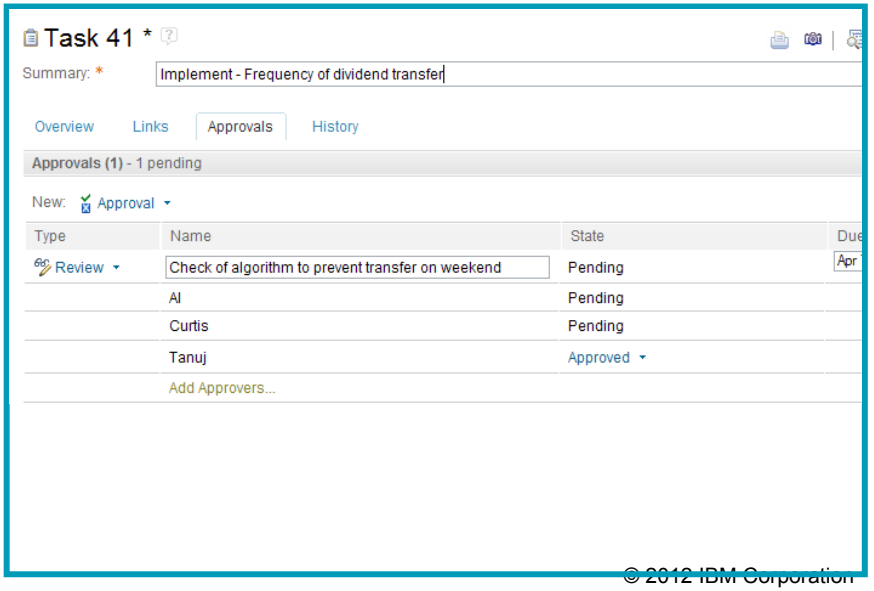
Requirements



Test Artifacts

Work Items





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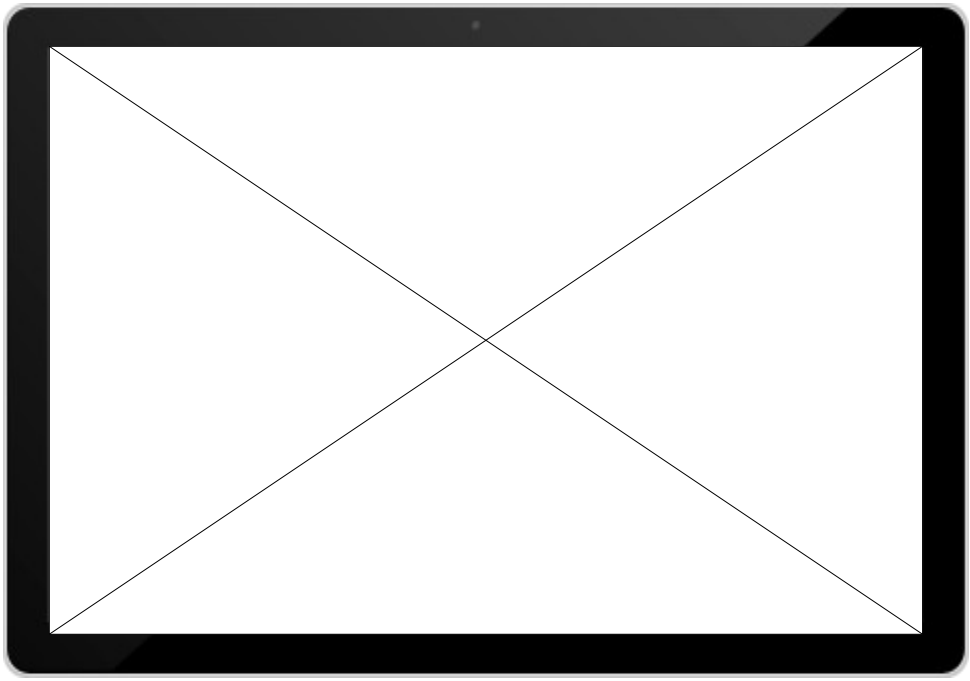
In-Context Collaboration in action…

- Watch the video to see how to leverage In-Context Collaboration to
  - Find information at your fingertips
  - Understand what the team is working on and why
  - Have the team's collective intelligence a click away
  - Keep all team members aligned across time zones

- Read the blog for more information on this imperative



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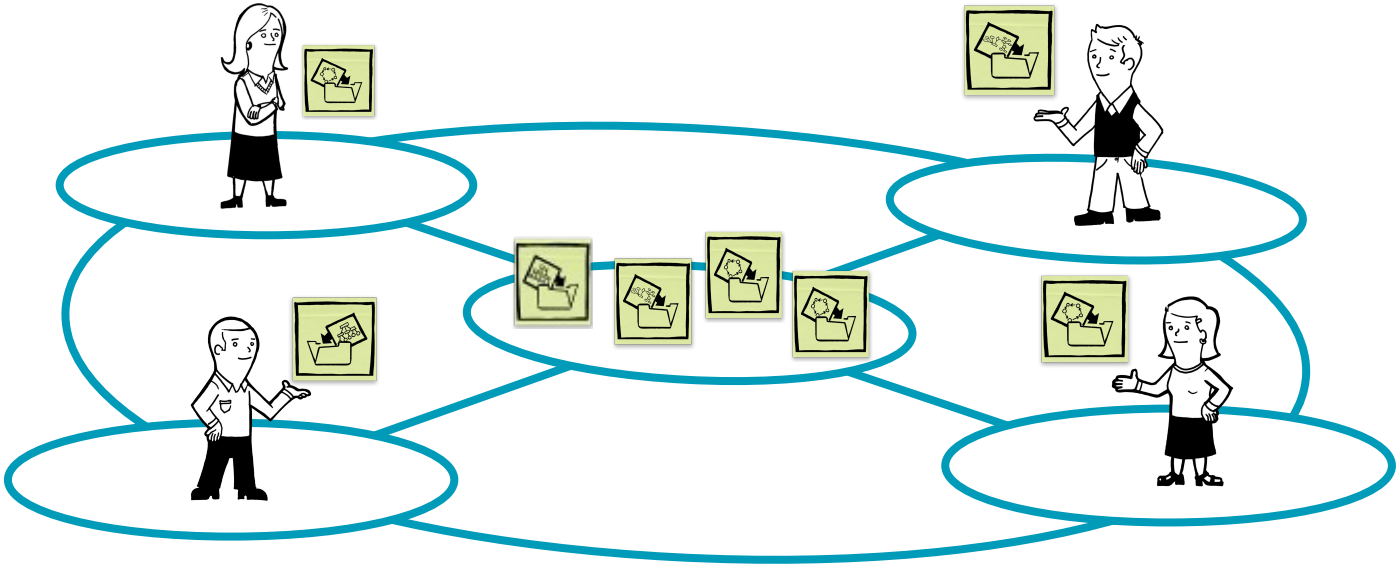
In-Context Collaboration improves product value

- Empower teams to collaborate on and review software development artifacts so they can **incorporate feedback early and often** aligning delivery with stakeholders' vision
- Provide a **single source of truth** hosted in a shared repository so that team members can collaborate effectively around the globe to build a collective intelligence
- Make **information immediately accessible** to all team members in the context of their work



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"Observe always that everything is the result of change, and get used to thinking that there is nothing Nature loves so well as to change existing forms and make new ones of them."

Marcus Aurelius, emperor of Rome (121-180 AD)

"He, who could foresee affairs three days in advance would be rich for thousands of years."

Chinese Proverb

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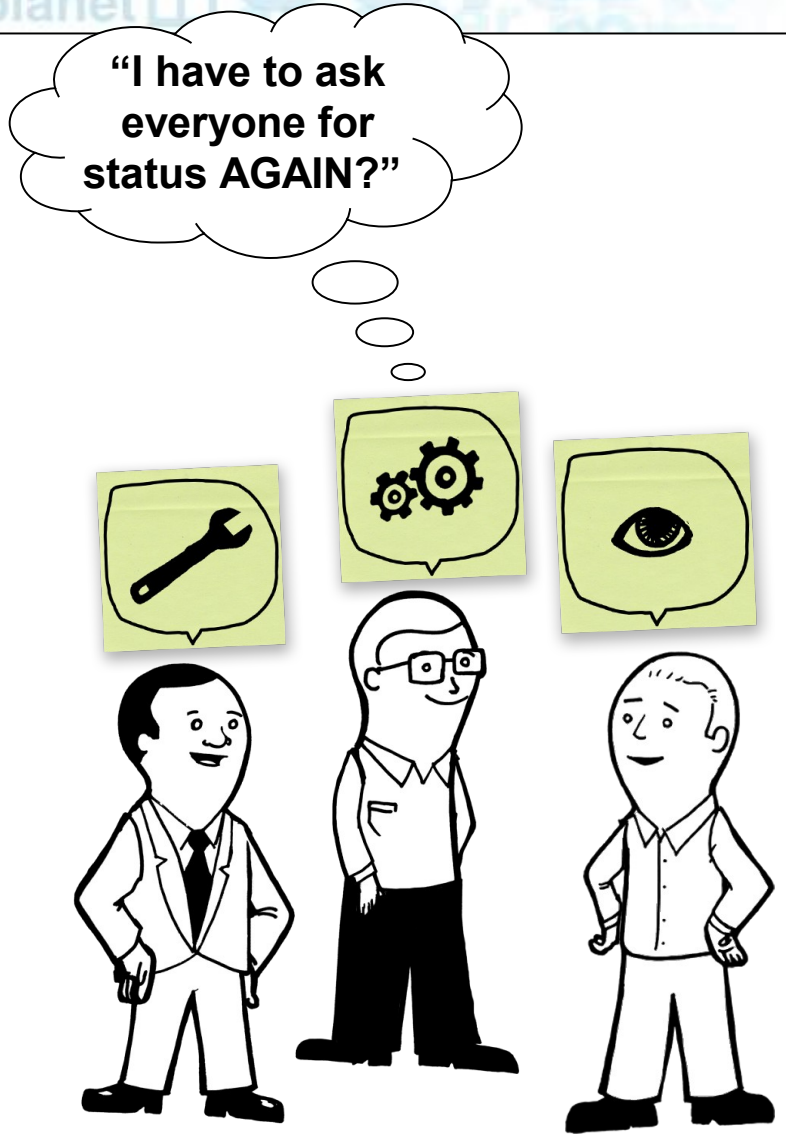
Planning challenges

Does your team…

- *…plan across the entire team?*
- *…manually collect and report status?*
- *…instantly see the impact of a change in project scope or resources?*
- *…**integrate planning with execution?***
- *…plan for waterfall, iterative and agile environments?*



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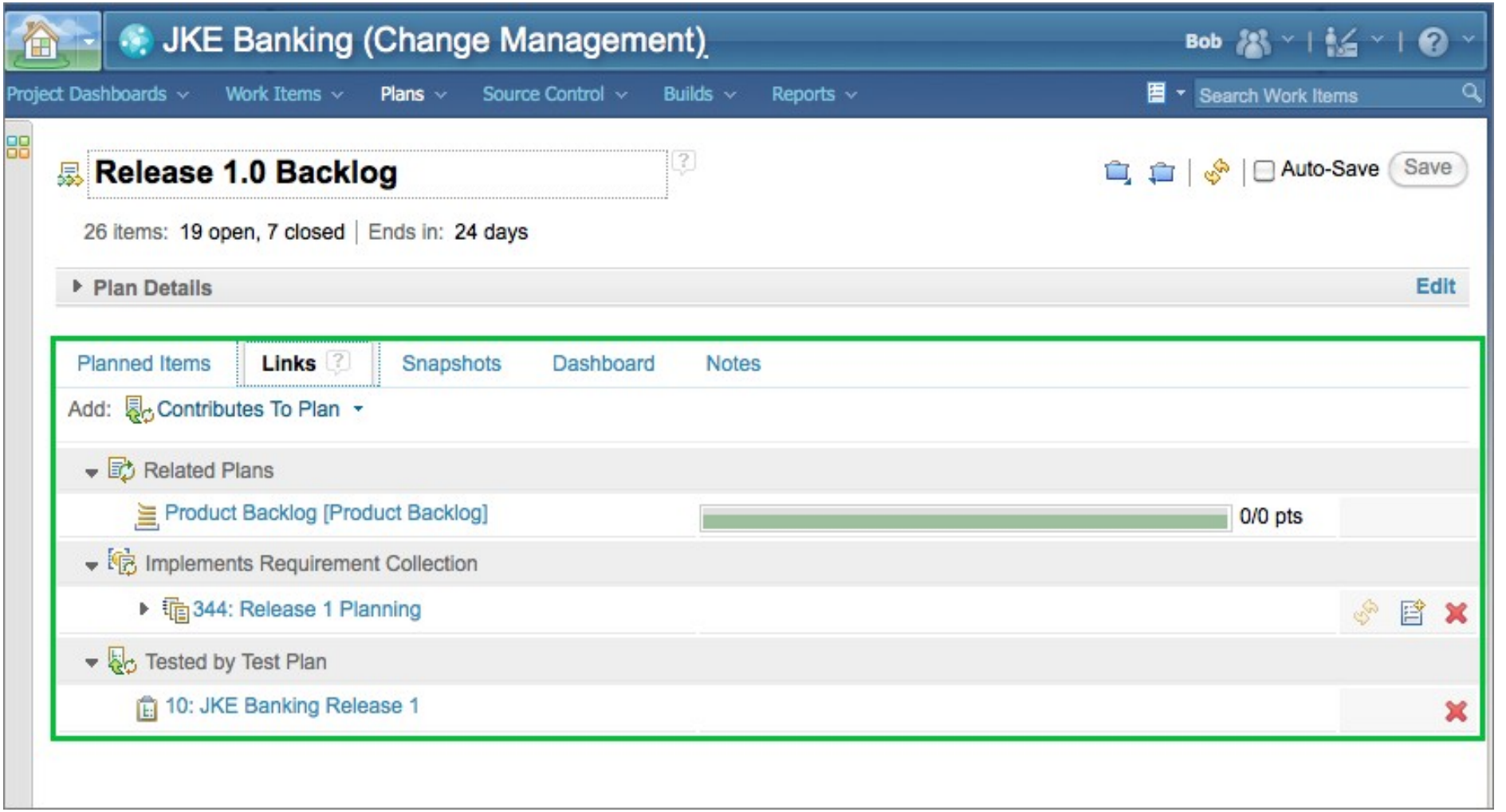
Ensure alignment across the business, development and test teams



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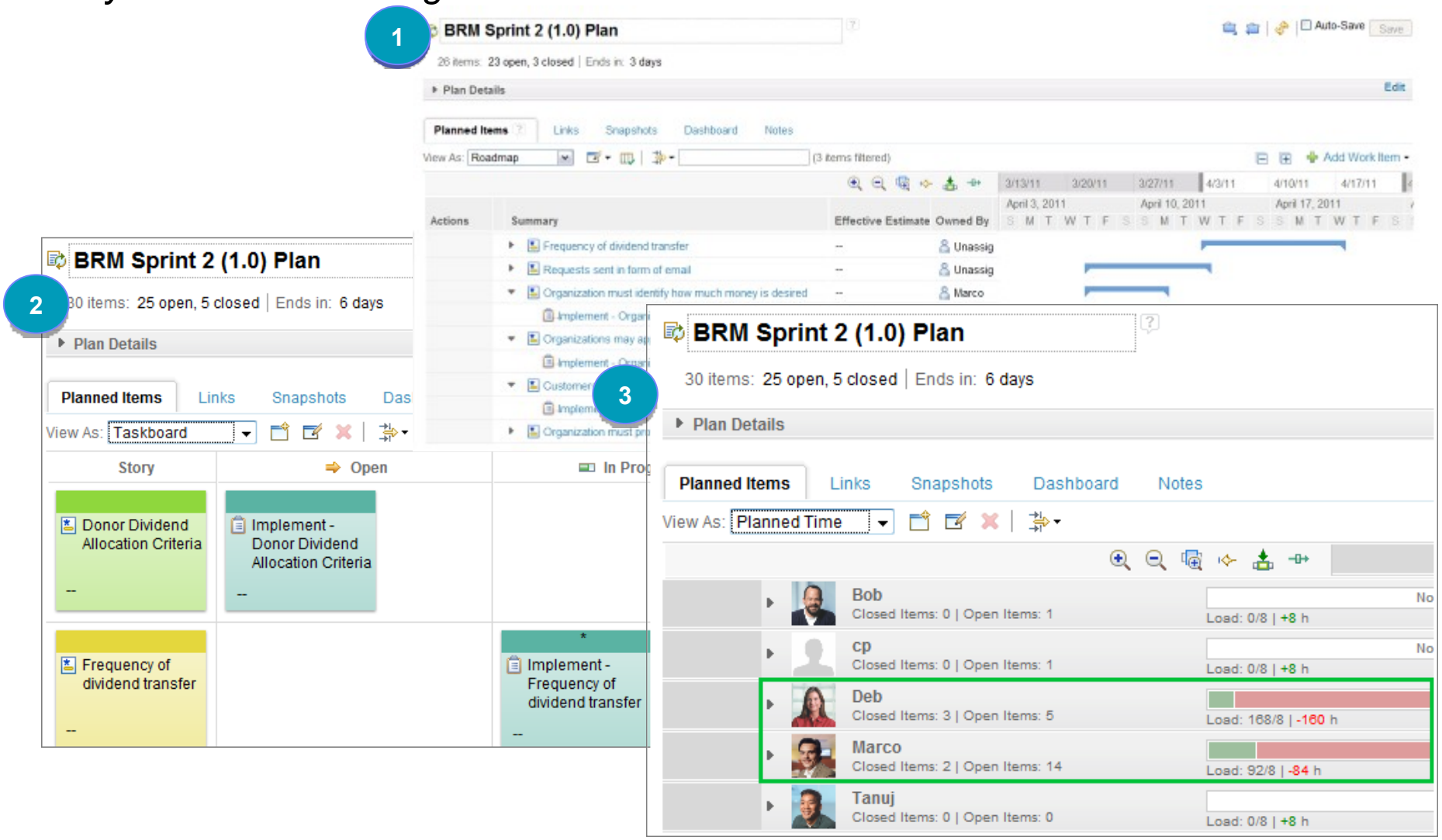
One plan with multiple views

Everyone sees meaningful data in the context of their work



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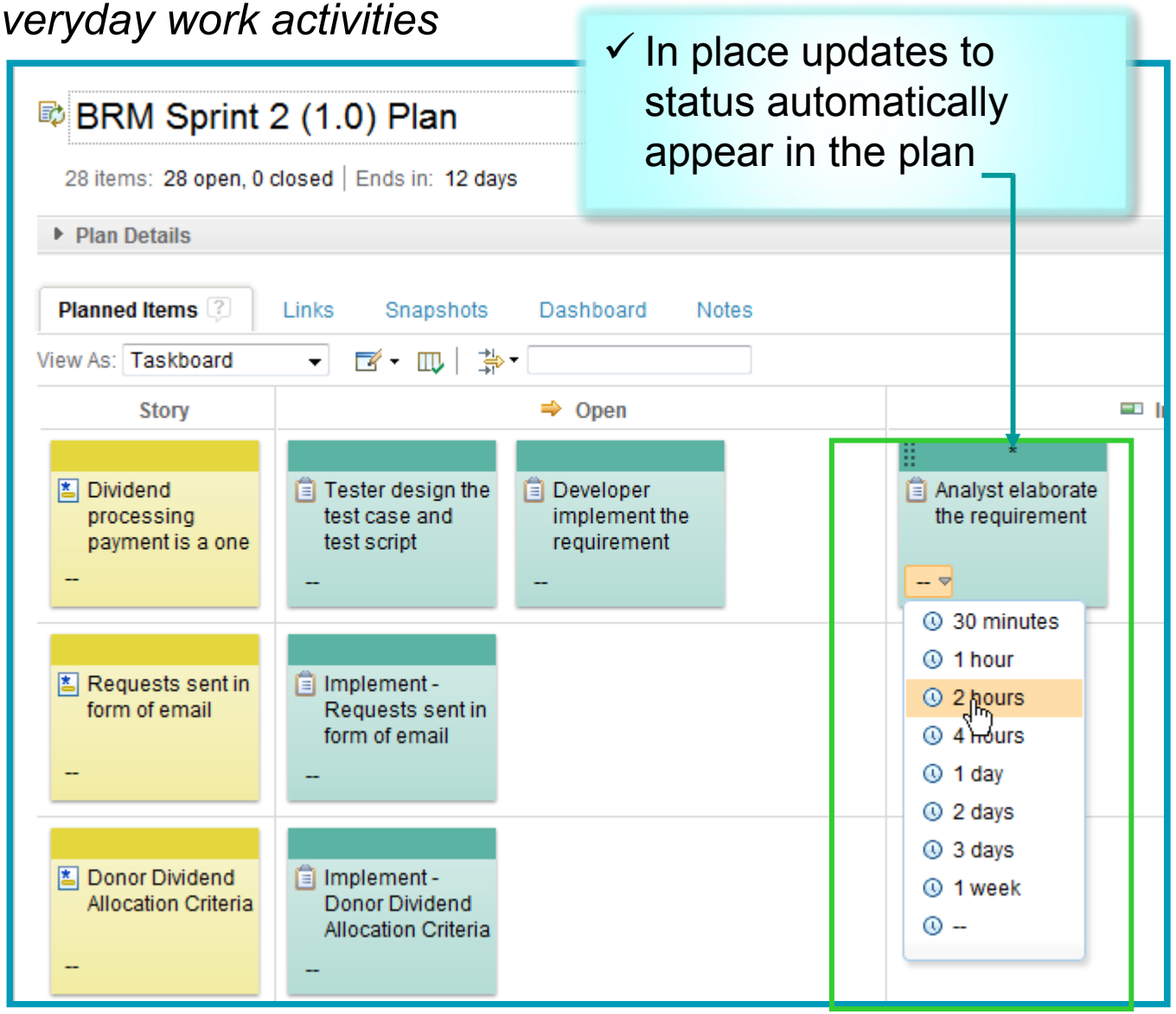
Status updates

Part of everyday work activities



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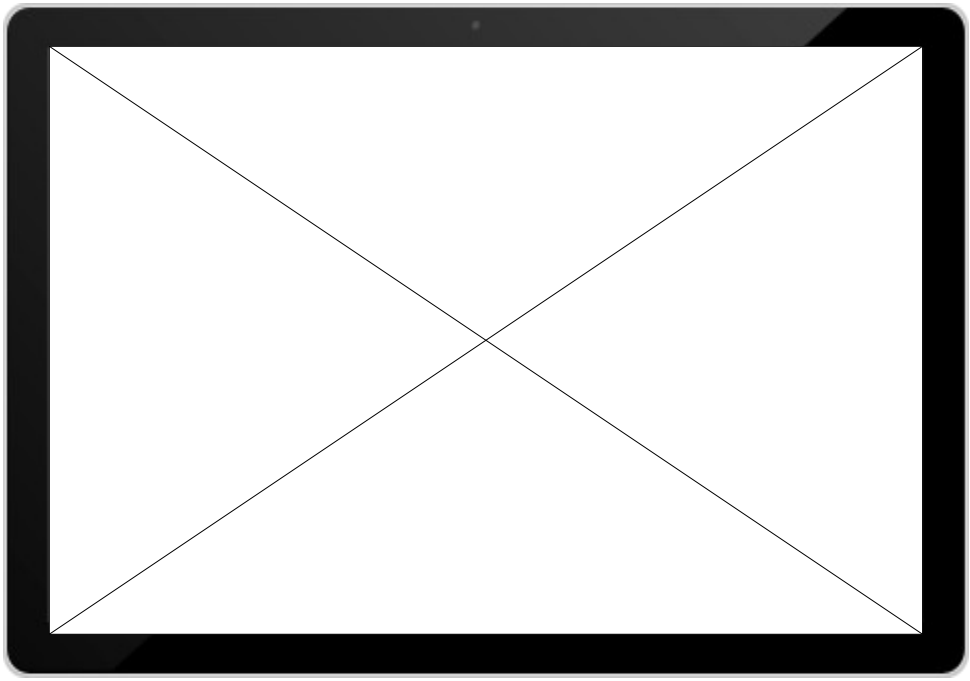
Real-Time Planning in action…

- Watch the video to see how to leverage Real-Time Planning to
  - Connect your team's plans across the disciplines
  - Integrate planning with execution to automatically provide real-time status
  - Leverage real-time data to respond to change

- Read the **blog** for more information on this imperative



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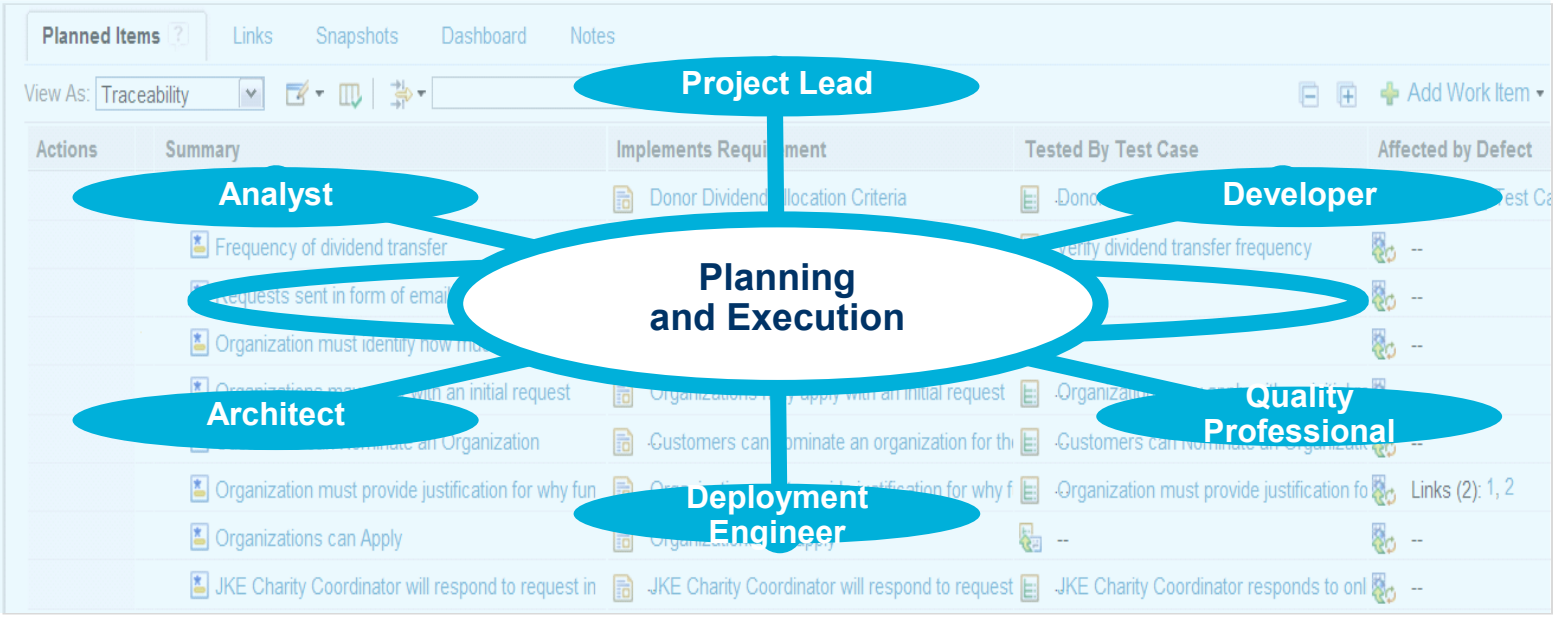
Real-Time Planning accelerates time to delivery

- Provides a **single plan** that spans requirements, development, and test, ensuring the whole team understands the overall scope of a project
- **Integrates planning with execution** ensuring the entire team understands the true project status
- Allows **everyone to participate** in keeping the plan current and accurate
- Helps teams **respond to the unexpected** in a timely manner ensuring the team stays on schedule



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The head bone's connected to the neck bone… the neck bone's connected to the backbone… the backbone's connected to the hip bone…

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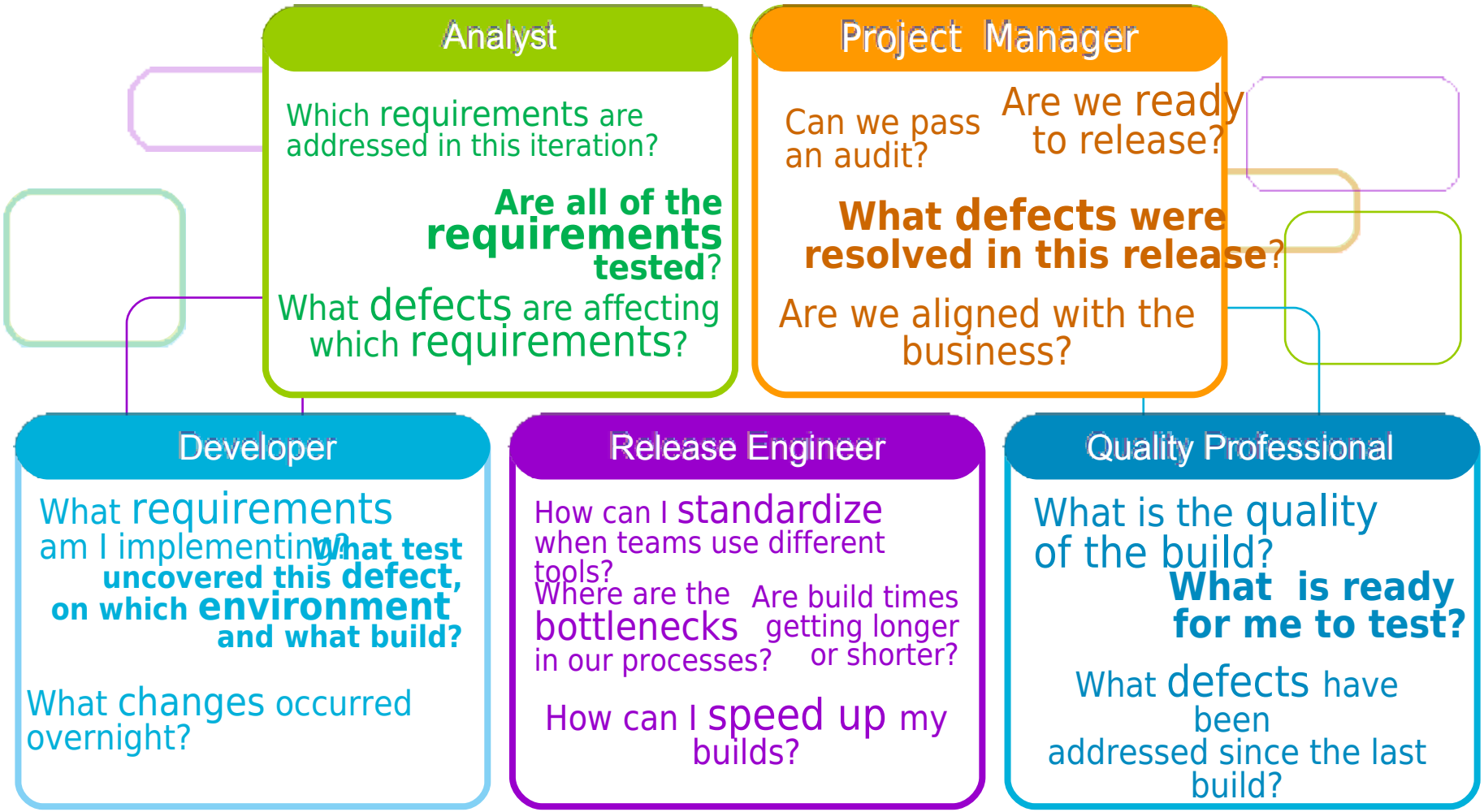
Lifecycle Traceability challenges

Can your team answer…



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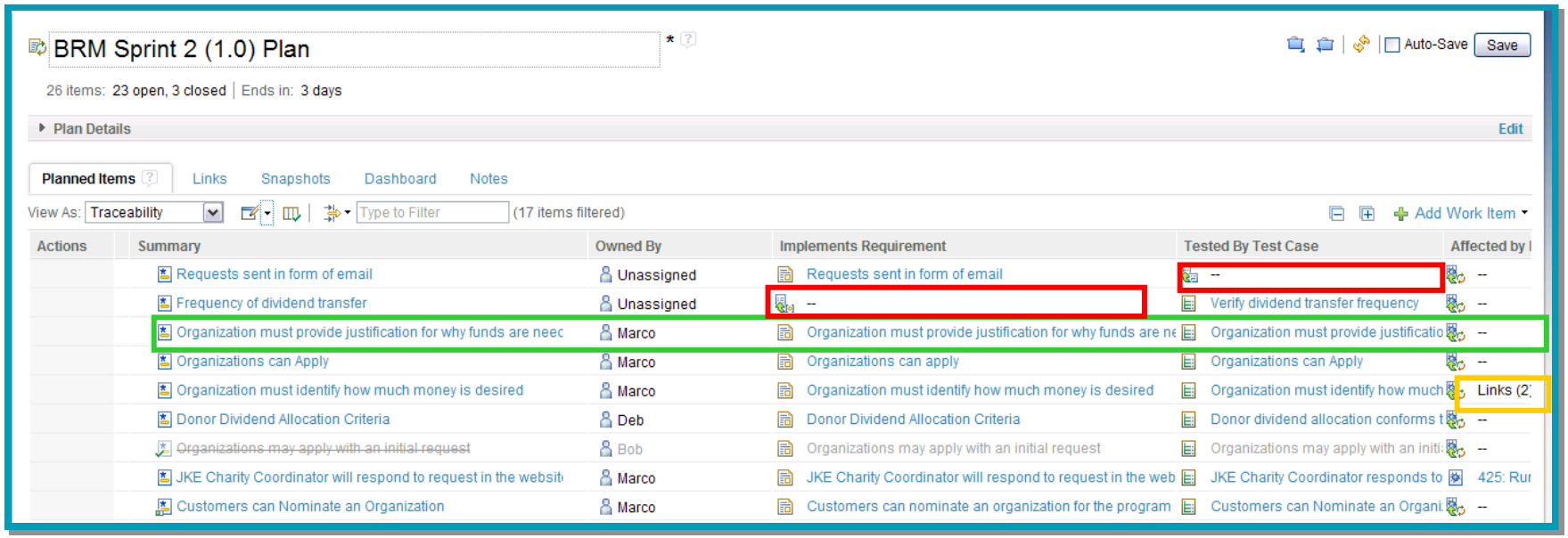
Team leads have visibility into coverage & completeness

- Proactively respond to gaps (in red) as they surface throughout the project
- Issues are quickly highlighted and resolved (in yellow)



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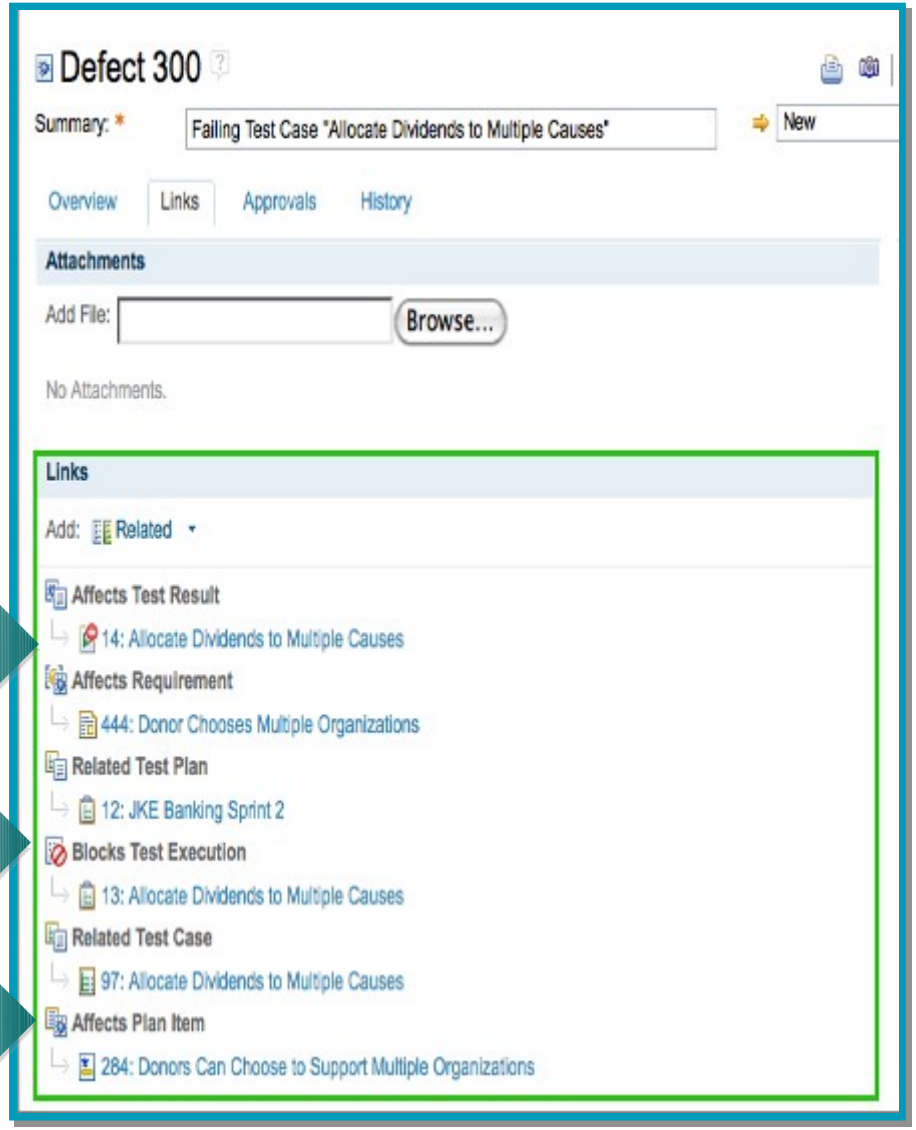
Linked data is visible on all artifacts

- All **roles** can view the links on their artifacts.
- Each user has their own perspective and user interface for viewing links.
- Create, delete, navigate links on artifacts

- Example: Developer sees the relationships on a defect
- Traceability links on defects are automatically created



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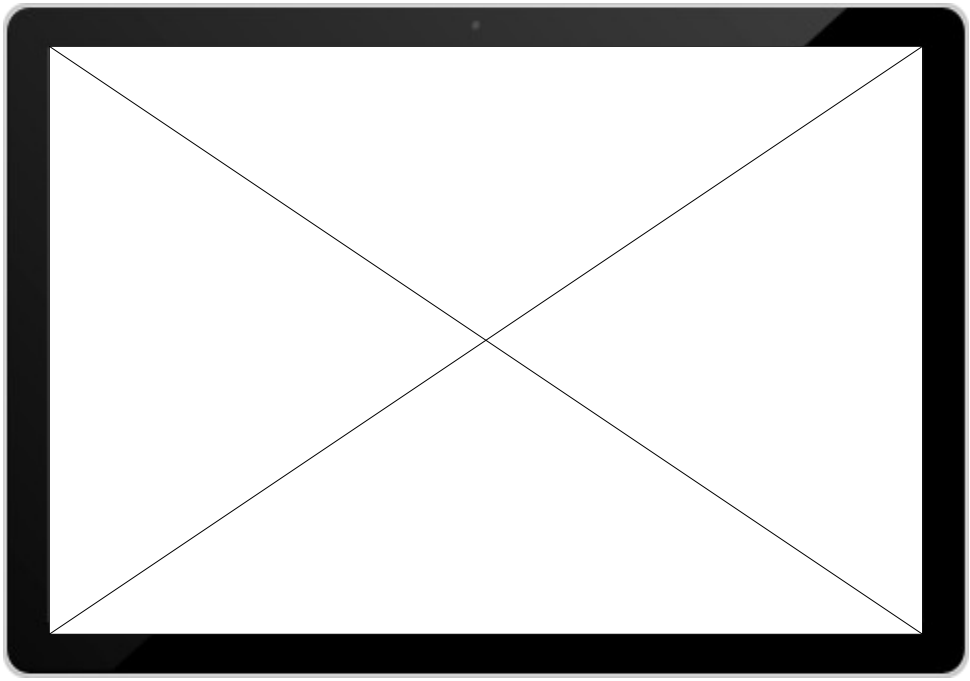
Lifecycle Traceability in action…

- Watch the video to see how to leverage Lifecycle Traceability to
  - Identify and close gaps across all disciplines
  - Answer the hard questions about completeness
  - Provide teams access to related artifacts allowing informed decisions

- Read the **blog** for more information on this imperative



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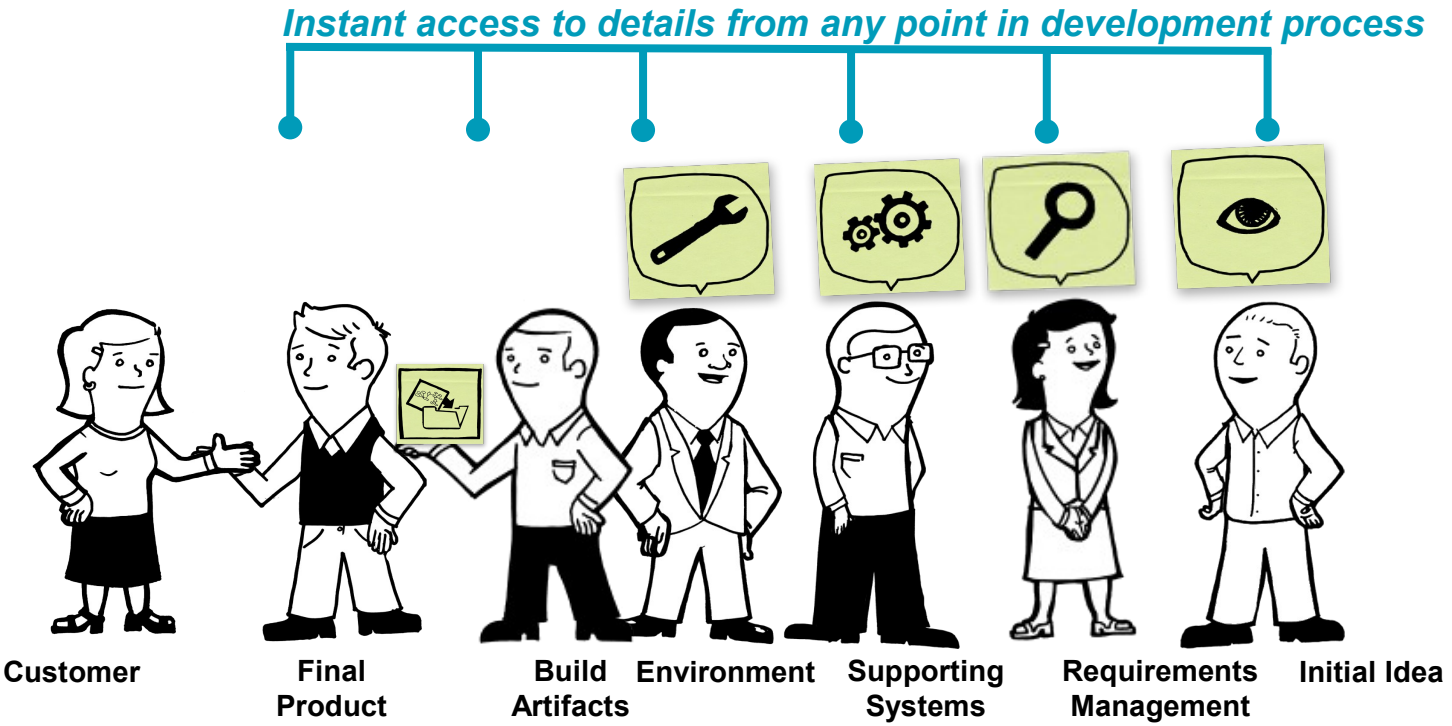
Lifecycle Traceability improves quality

- Establish **relationships between software artifacts**
- **Identify and close artifact gaps,** ensuring **coverage** across disciplines
- Provides visibility into the **completeness** of planned items by inspecting all related artifacts
- Provides easy **access to related artifacts** ensuring everyone shares the same view
- Delivers transparency which enables everyone to make **fully informed decisions** based business priorities



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Are we there yet?

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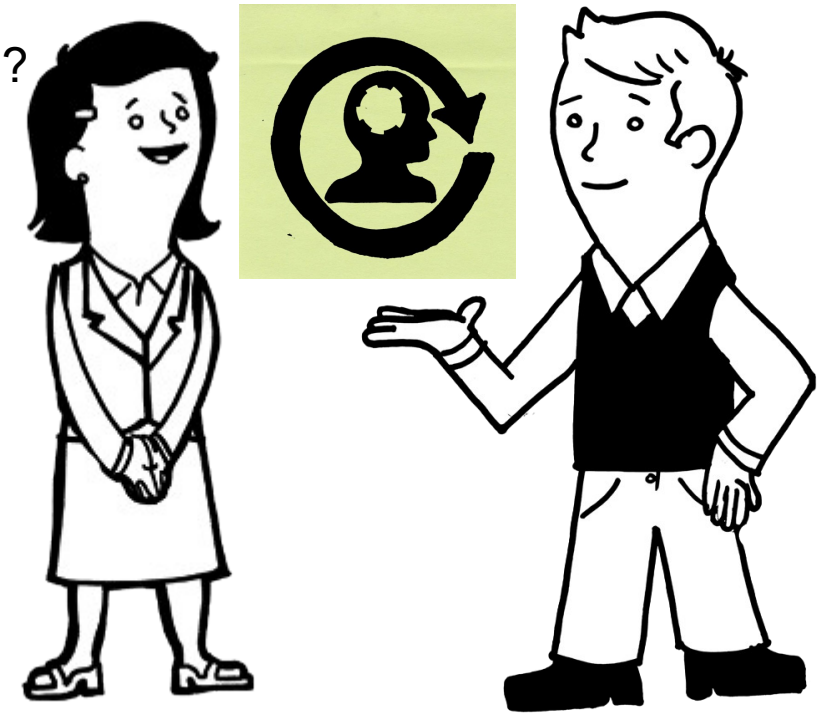
Measuring and steering challenges

Can your team…

- …provide one view of project health at multiple levels?
- …**make steering decisions based on facts rather "guesstimates"?**
- …track desired improvements with metrics?
- …minimize administrative overhead by relying on your environment to capture metrics?



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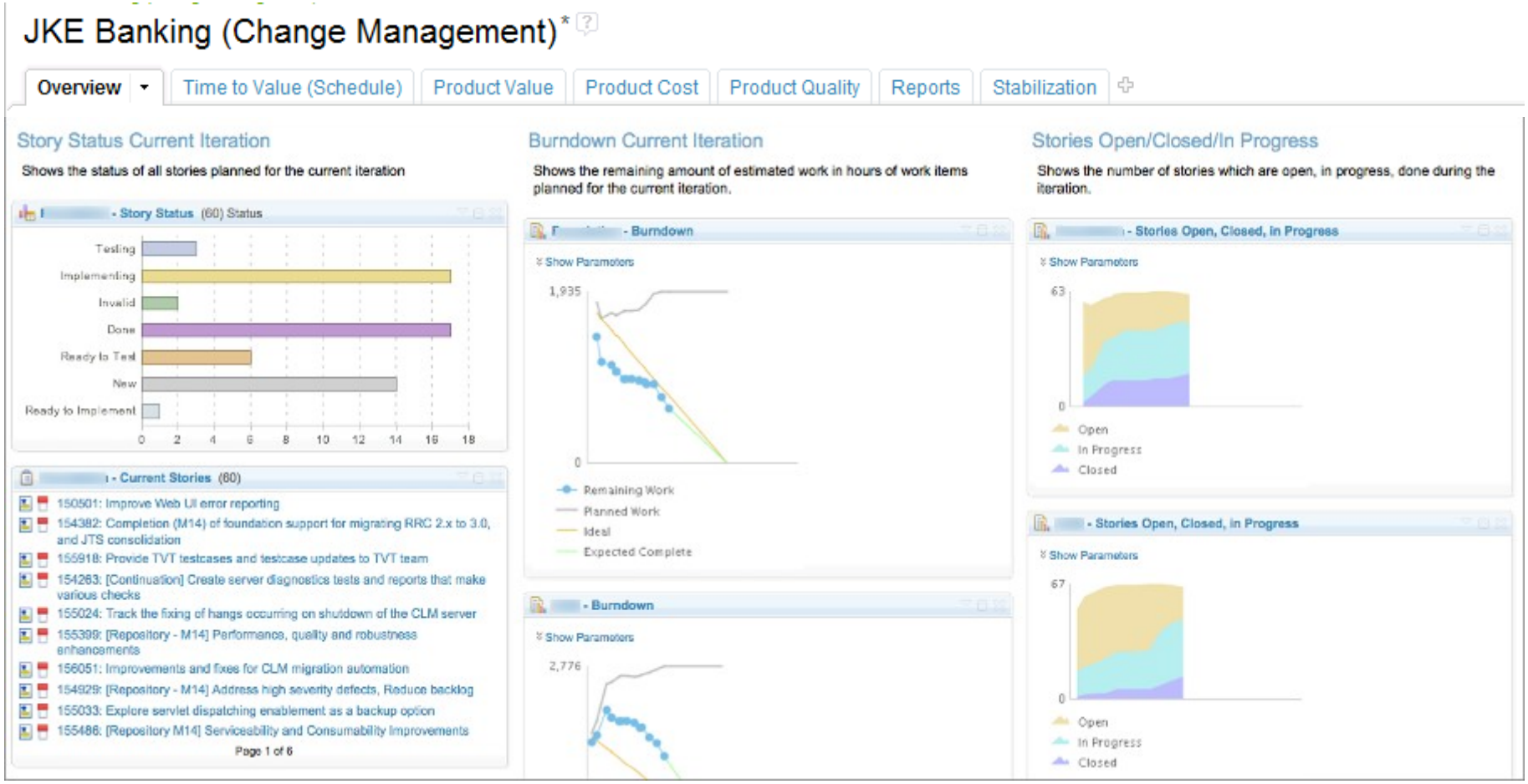
Use dashboards to provide that one view of project health (information radiator)



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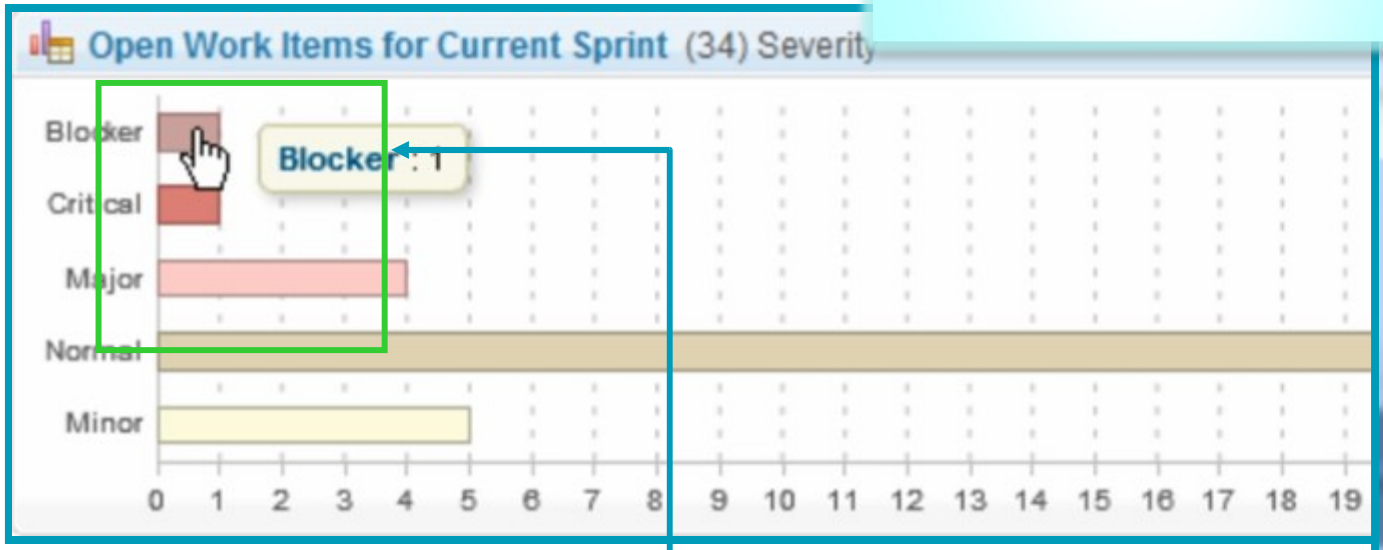
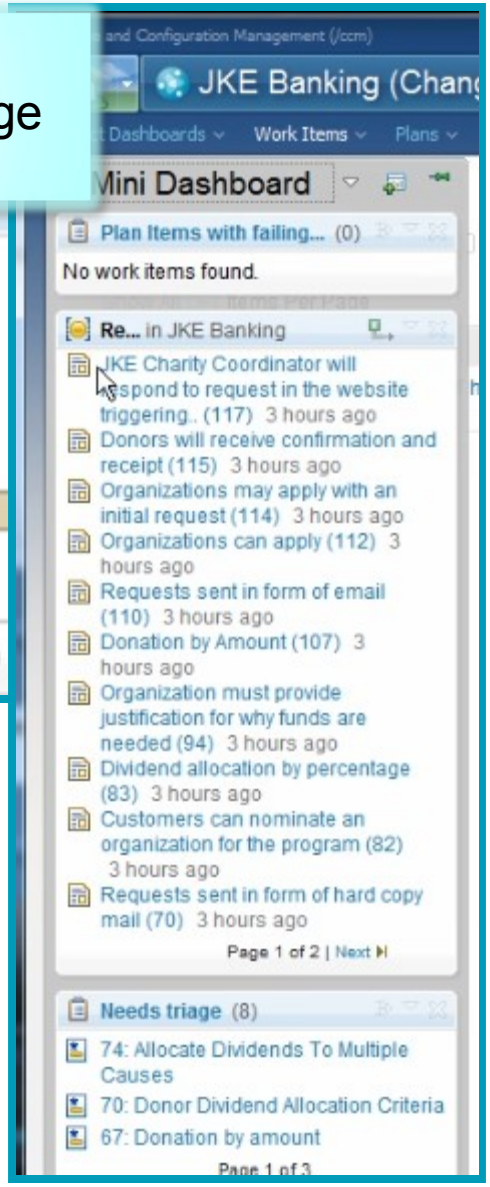
Dashboard details

Easily answer steering questions

- ✓ Mini-dashboards: available on any page





- ✓ Click thru on the viewlet to drill into information

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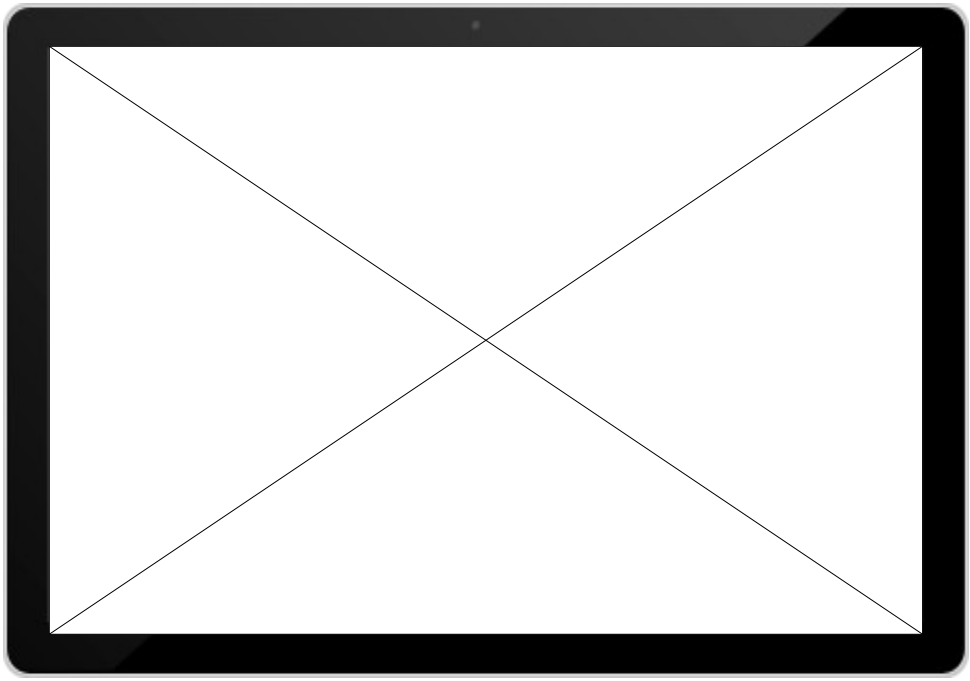
Development Intelligence in action…

- Watch the video to see how to leverage Development Intelligence to
  - Leverage the information radiator to keep the team aligned
  - Mitigate risk early
  - Personalize dashboards and mini-dashboards to stay on top of “breaking news”

- Read the **blog** for more information on this imperative



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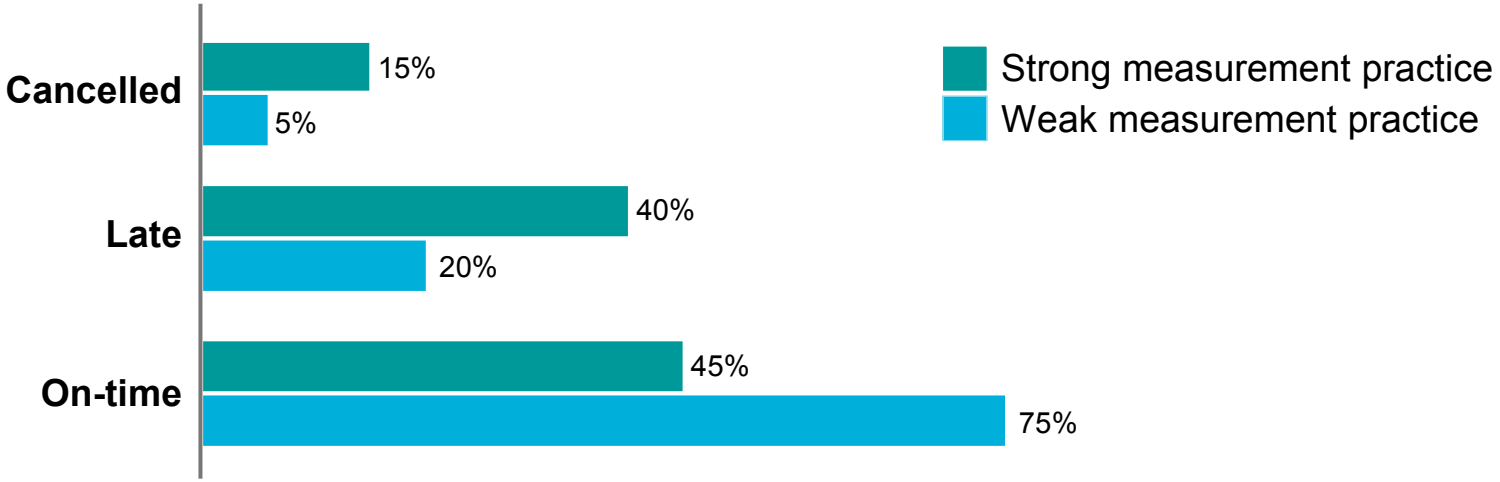
Development Intelligence improves predictability

- Enable **fact-based decision making** (to communicate status, monitor progress, diagnose problems, identify corrective actions)
- **Steer projects and programs** to deliver on-time
- Apply **Business Intelligence techniques** to software and systems development

Measurement Practices Impact Project Success



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Capers Jones, Software Engineering Best Practices, Copyright © 2010 McGraw-Hill

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“Failure happens all the time. It happens every day in practice. What makes you better is how you react to it.”

Mia Hamm, first female FIFA World Player of the Year

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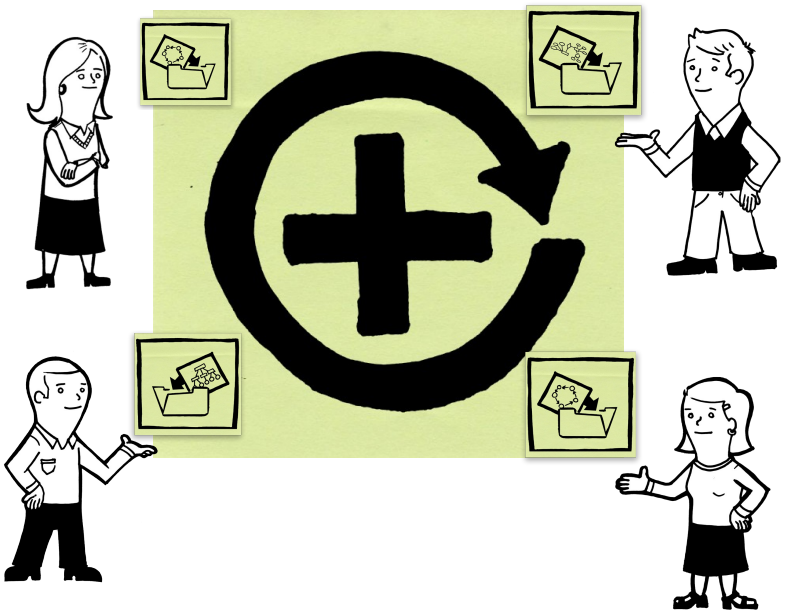
Continuous improvement challenges

Can your team…

- …leverage out-of-the-box templates that support traditional and agile workflows?
- …change process “on the fly” as part of a continuous feedback loop?
- …allow team leads to determine how strict or lax the “rules of the road” should be?
- …modify process enforcement over the life of a project, to encourage early-stage experimentation and end-game stability?



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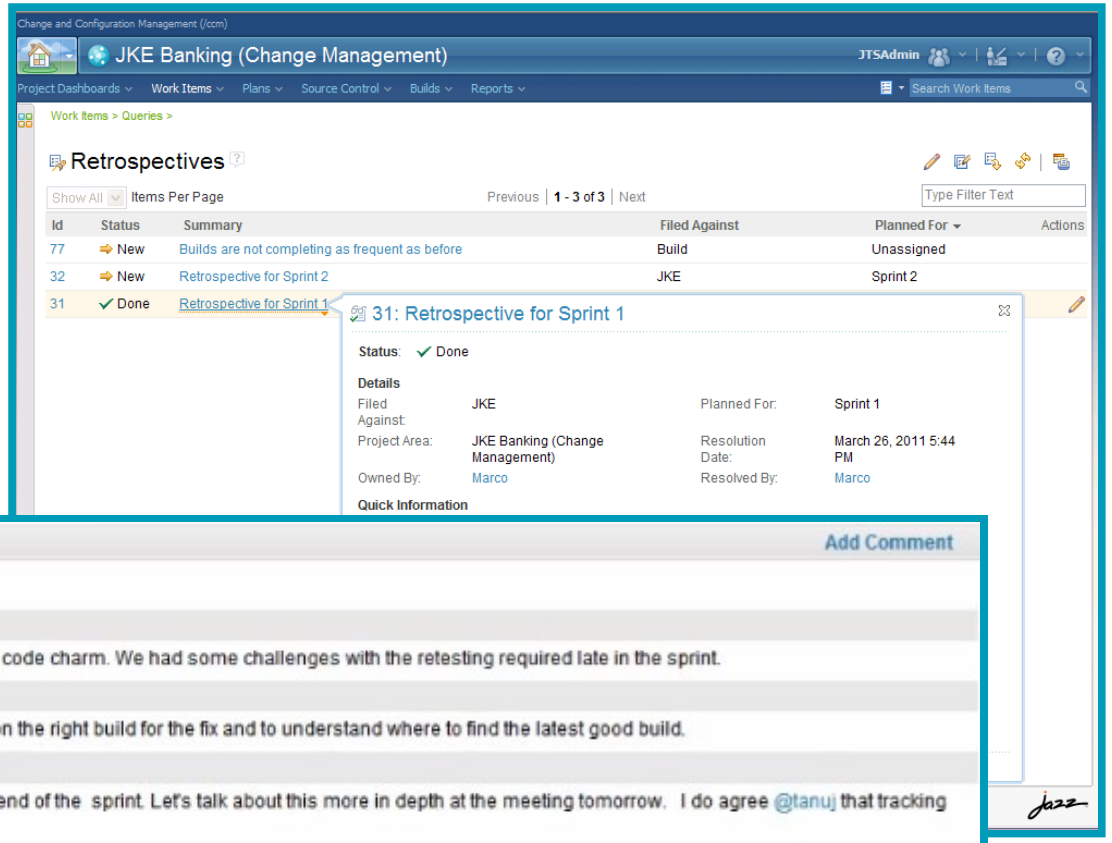
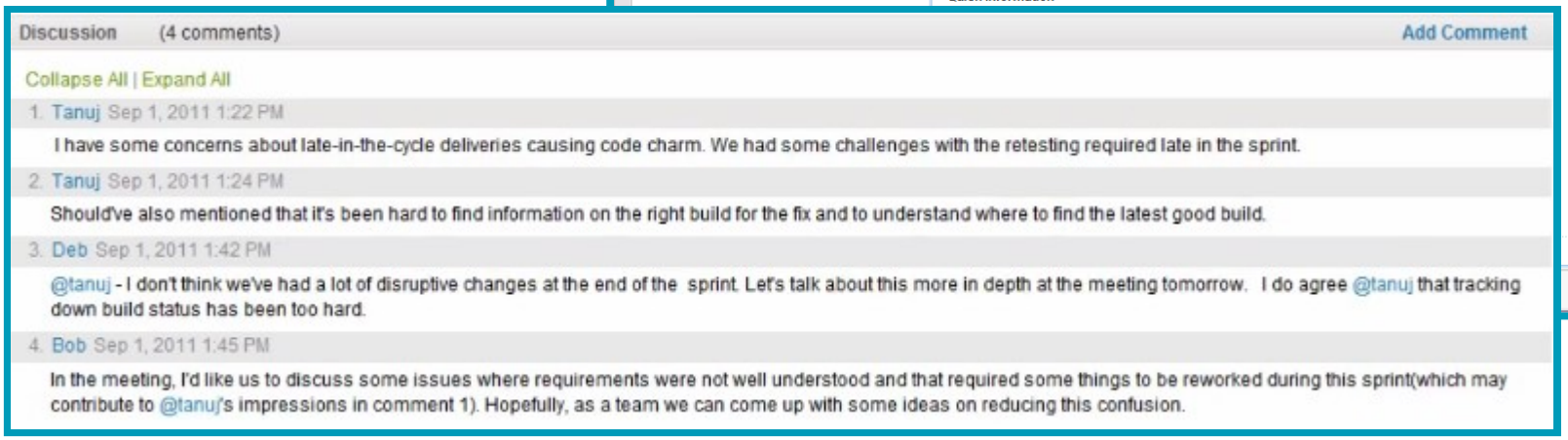
Team retrospectives help identify areas of improvement

- Tracking Retrospectives help team members to collaborate on improvements
  - Ranking of process improvements help to focus on where the team feels the biggest pain





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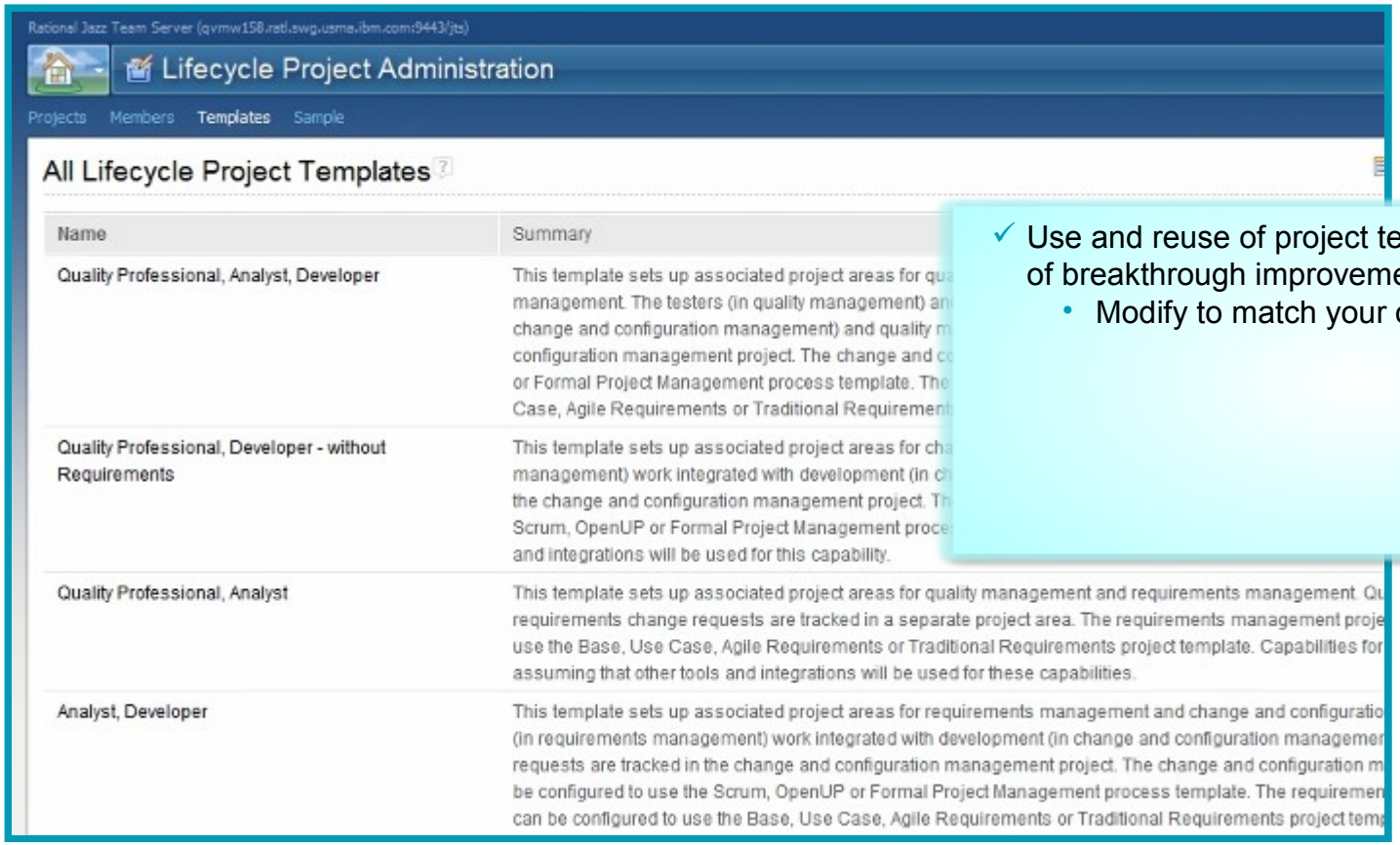
Templates

Support breakthrough improvement



- ✓ Use and reuse of project templates is an example of breakthrough improvement
  - Modify to match your organization's process

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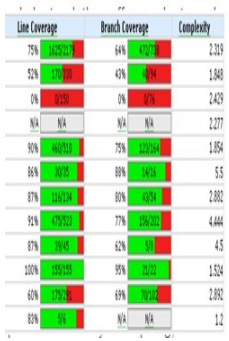
Beyond milestones…

Continuous Integration testing for builds

"Green" builds have passed **meaningful** integration tests

Compile

Unit Test



Install & Configure

Integration Test Environment

Run Tests

Rational Quality Manager

Publish Results

Nightly build is not **published** until integration tests run.

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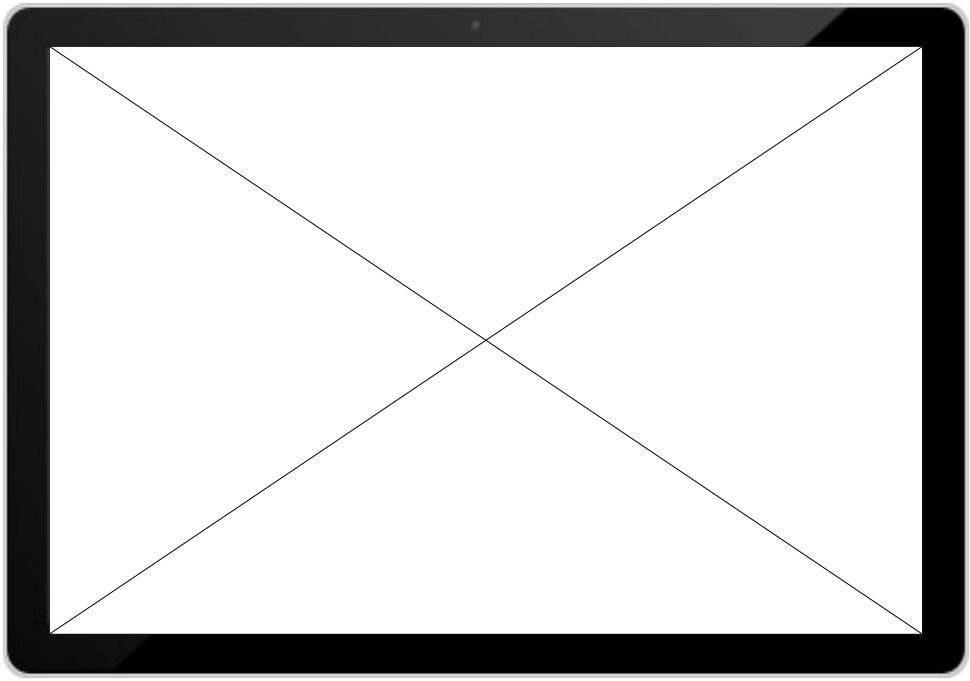
Continuous Improvement in action…

- Watch the video to see how to leverage Continuous Improvement to
  - Recreate best practices for reuse across multiple teams
  - Leverage dashboards for incremental, on-the-fly improvements during a project
  - Automate repetitive tasks

- Read the **blog** for more information on this imperative



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Continuous Improvement reduces cost

- Improve software delivery through the ongoing **adoption of best practices and automation** to reduce manual, non-creative and error prone tasks
- Promote **incremental improvement of a project** when needed
- Enable breakthrough improvement by **capturing best practices and reusing** across teams
- Allow **everyone to participate** with easy to adopt best practices at your fingertips.

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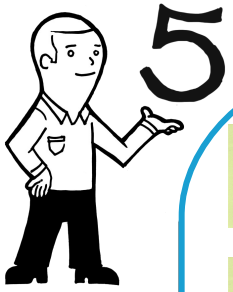
Five Imperatives for Effective Application Lifecycle Management to improve organizational productivity



- Maximize product value with **In-Context Collaboration**
- Accelerate time to delivery with **Real-Time Planning**
- Improve quality with **Lifecycle Traceability**
- Achieve predictability with **Development Intelligence**
- Reduce costs with **Continuous Improvement**

Learn more at ALM Everywhere

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IBM Rational is a recognized leader in ALM

"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."

Duggan, Jim & Murphy, Thomas E., "MarketScope for Application Lifecycle Management," Gartner, Inc., 11 November 2010 ID Number: G00208572 , pp2,6

IBM earns "Strong Positive" — the

	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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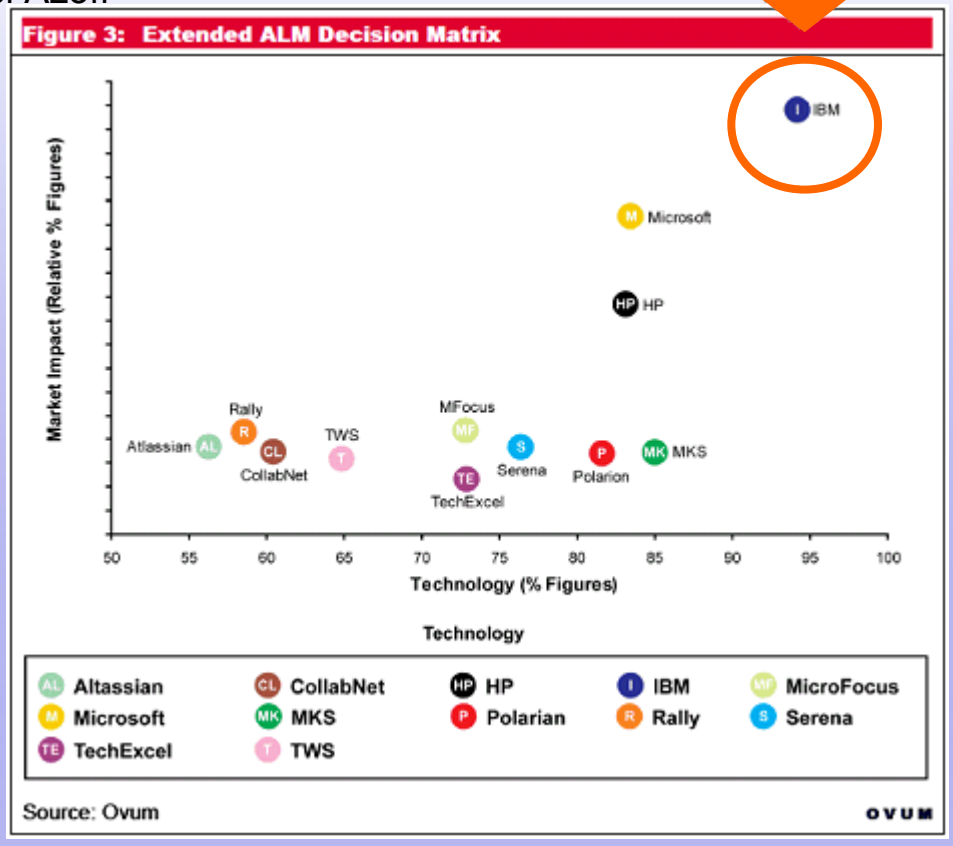
Ovum Decision Matrix: Selecting an ALM Vendor

Reference Code: OI00068-002 Publication Date: March 2011
Authors: Chandranshu Singh, Tony Baer, Michael Azoff

Report Highlights

- "IBM has the broadest and arguably the ***deepest portfolio among all vendors profiled in this report***."
- IBM's Technology Score: **94.3%**
- IBM's Market Impact score: **10/10**
  - The highest score!
  - All other vendors were ranked relative to IBM
- "Furthermore, the vendor has ensured that it stays ahead of the pack by having a ***good grasp of market demand and meeting it through tool support***."



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Q. Do you need the perfect set of tools to achieve effective ALM?

A. Adopt the ones to address your greatest pain!

Rational customers experience a tremendous productivity lift by incrementally adopting the ALM Strategy

Match your most critical needs with the best-suited adoption path

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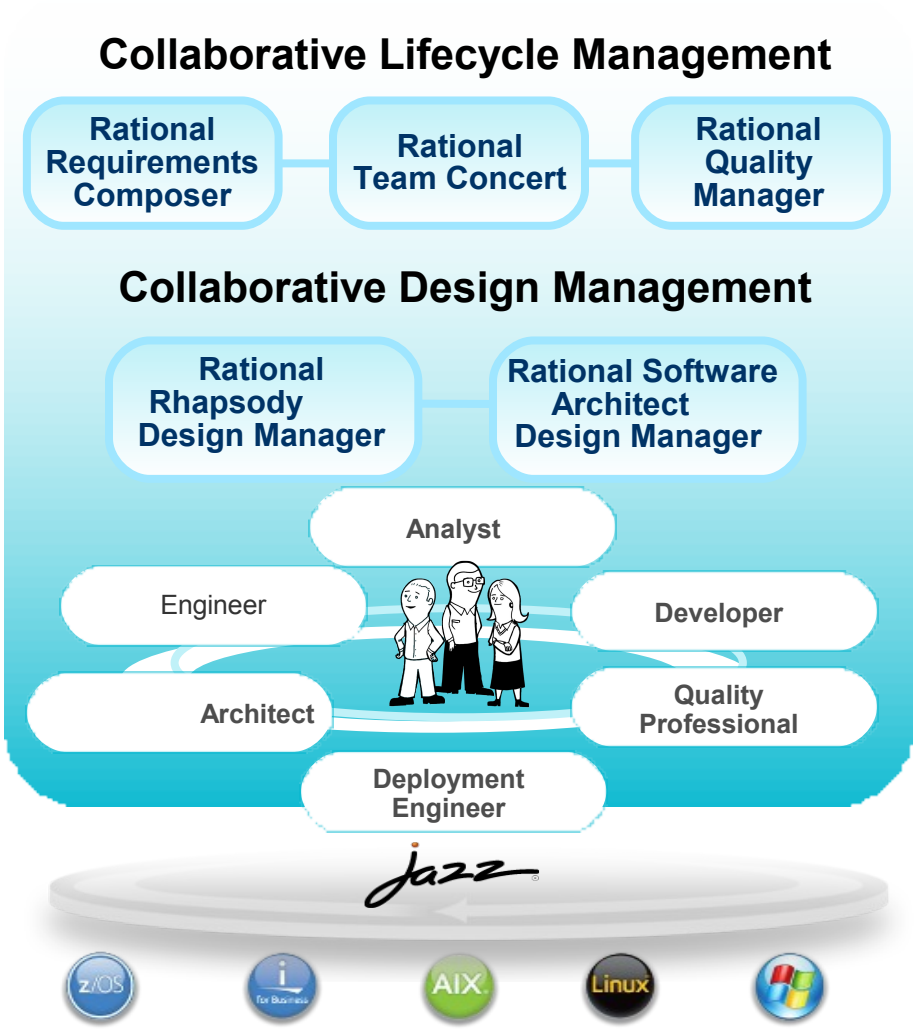
Core Application Lifecycle Management offerings

Reduce the costs of inefficient, multiplatform software development with integrated ALM solutions!

- Optimize your team's productivity through the 5 ALM Imperatives
- Collaborate across teams and create deep integrations across the lifecycle
- Extend as your needs evolve with role-based licensing
- Unify your infrastructure and protect your current investments with a single, open, extensible platform

IBM Rational ALM Solutions

Get Up and Running Quickly



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ALM Services to support your journey…

Quick Starts for Common Entry Points

- Requirements Definition
- Quality Management
- Collaboration, Planning, Change, Configuration & Build Management

EXIT

Collaborative Lifecycle Management

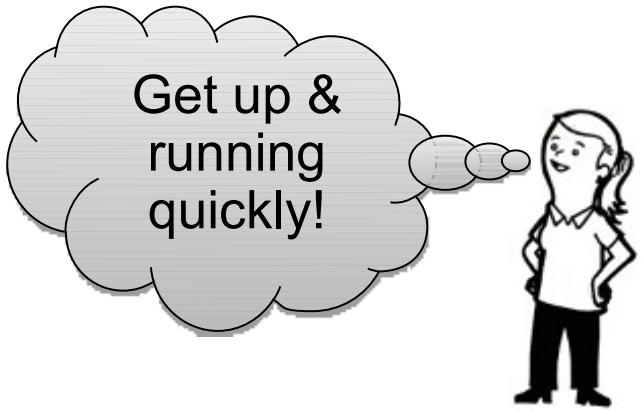
- **Rational Requirements Composer** *Quick Start*
- **Rational Team Concert** *Quick Start*
- **Rational Quality Manager** *Quick Start*

Disciplined *Agile* Delivery with Rational Team Concert

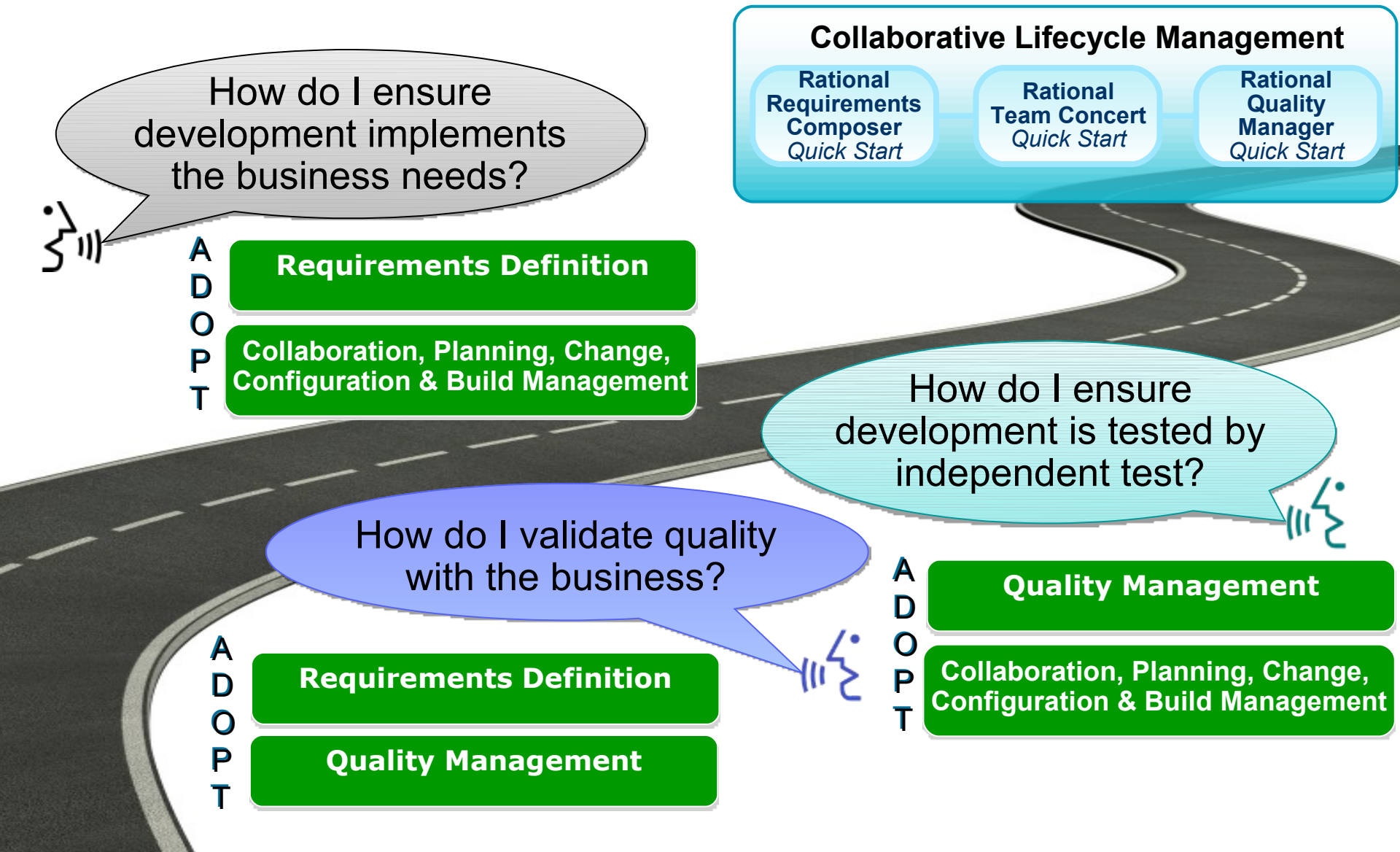
Planning and Governance with Rational Team Concert

***Agile* Jump Start Deployment Package**

Introducing Rational Team Concert Into Legacy Environment Assessment

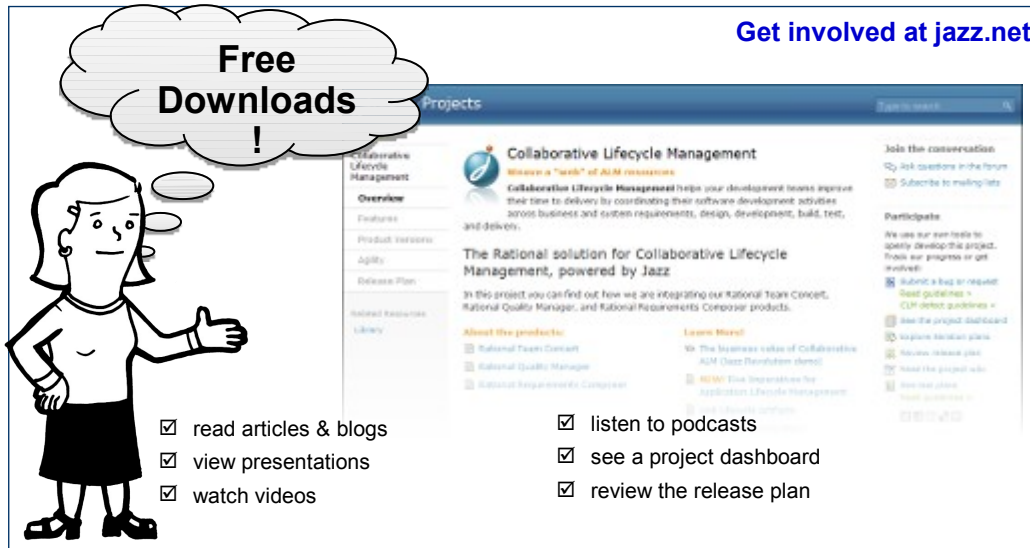


ALM Services for continued adoption…



Get Started! Collaborative Lifecycle Management

Get involved at jazz.net!



- ☑ read articles & blogs
- ☑ view presentations
- ☑ watch videos
- ☑ listen to podcasts
- ☑ see a project dashboard
- ☑ review the release plan

Try it out at jazz.net!

1 Download RTC, RRC or RQM for CLM
https://jazz.net/downloads/rational-team-concert/

Sample scenarios for CLM
https://jazz.net/wiki/bin/view/Main/MTM_Lifecycle_Welcome

Track our progress at jazz.net!

We openly develop our software with our own tools!
https://jazz.net/projects/clm/

Interactive White Board

Short, simple way to share the ***5 ALM imperatives***
ibm.co/alm-everywhere

Role-based Demo

VP of Development, a Business Analyst or Project Owner, Agile Team Lead, Developer and Test Lead.
bit.ly/jazzCLMdemo

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www.ibm.com/software/rational

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