

Attacking complexity in developing
Smarter Products and Systems



Rien Schot
*Business Leader Rational Systems,
South & West Europe*
rien.schot@nl.ibm.com

Innovate2010

The Rational Software Conference

Let's **build** a smarter planet.

The premiere software and product delivery event.
4 de Noviembre, Madrid





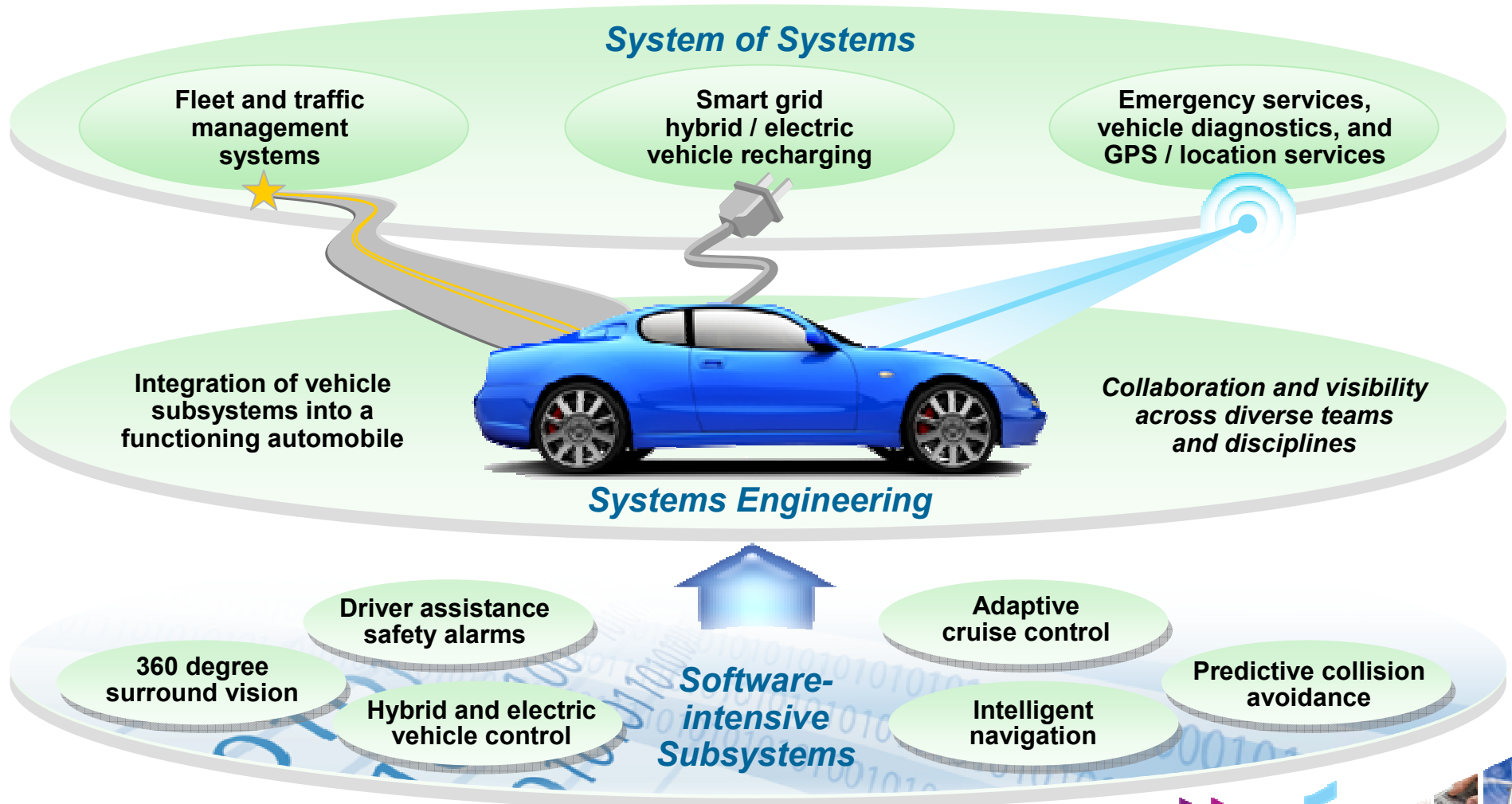
Which one has more software embedded?





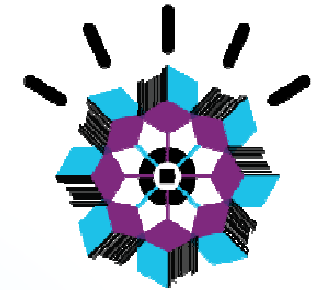
Smart Products Require Innovative Systems

Global interconnection across products, systems, applications and networks





Products of all types are becoming more instrumented, interconnected and intelligent



Smart Products



Let's build a smarter planet.

Building a Competency in Systems is Challenging

Overcoming a history of cost overruns, schedule slips and quality issues

resulting in...



Silos

- Language, culture, time
- Process gaps resulting in rework



Poor Visibility

- Poor project governance and LOB oversight
- Security of IP

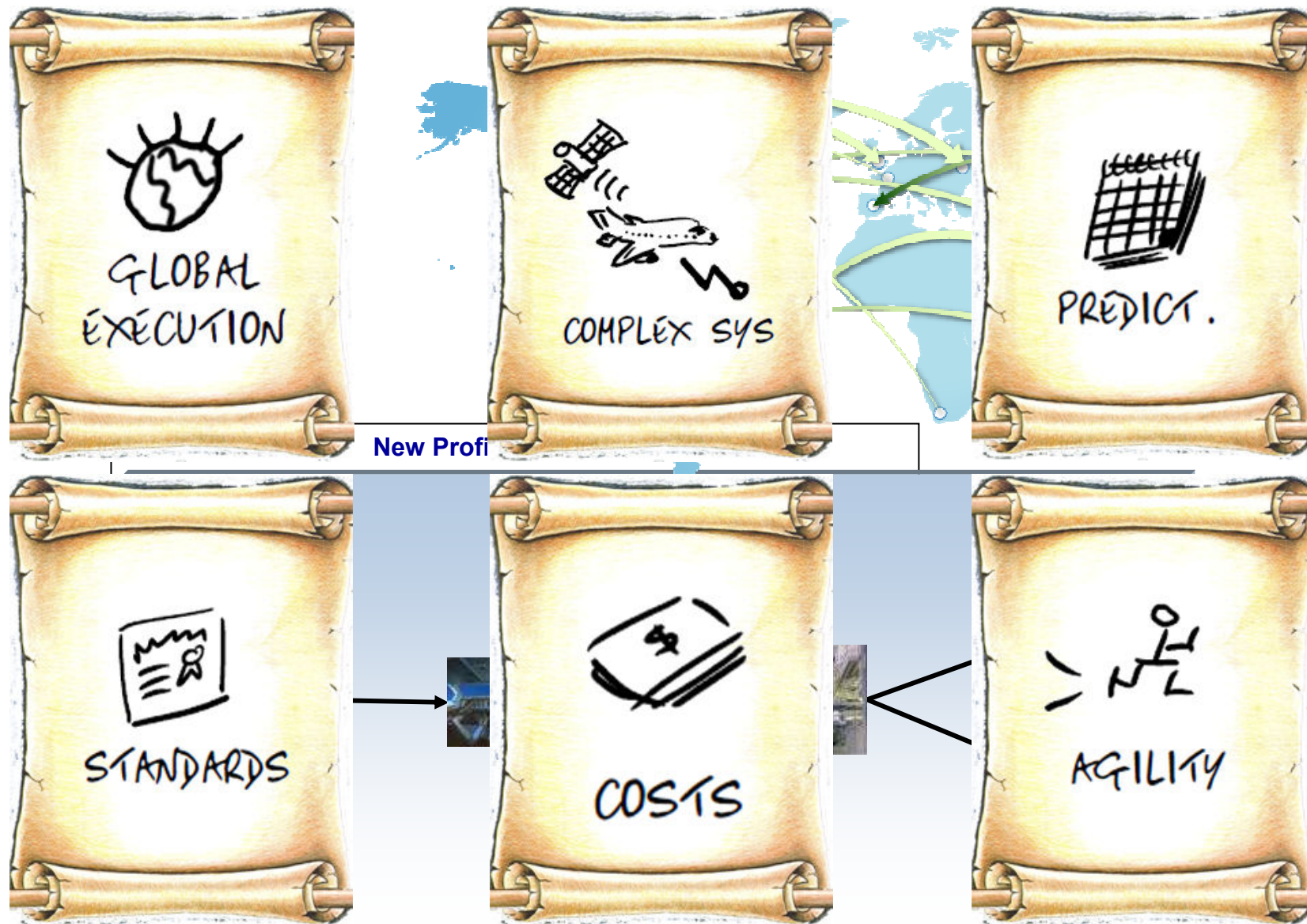


Manual Hand-offs

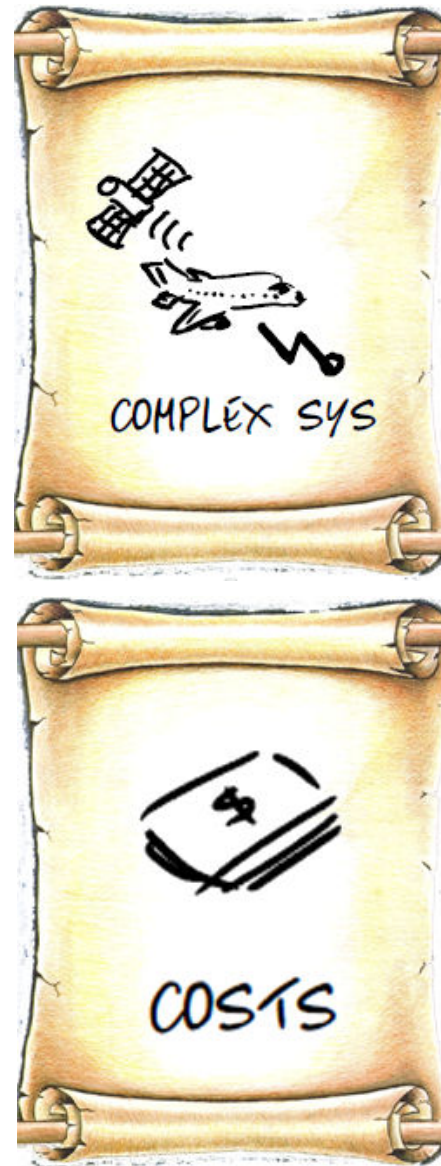
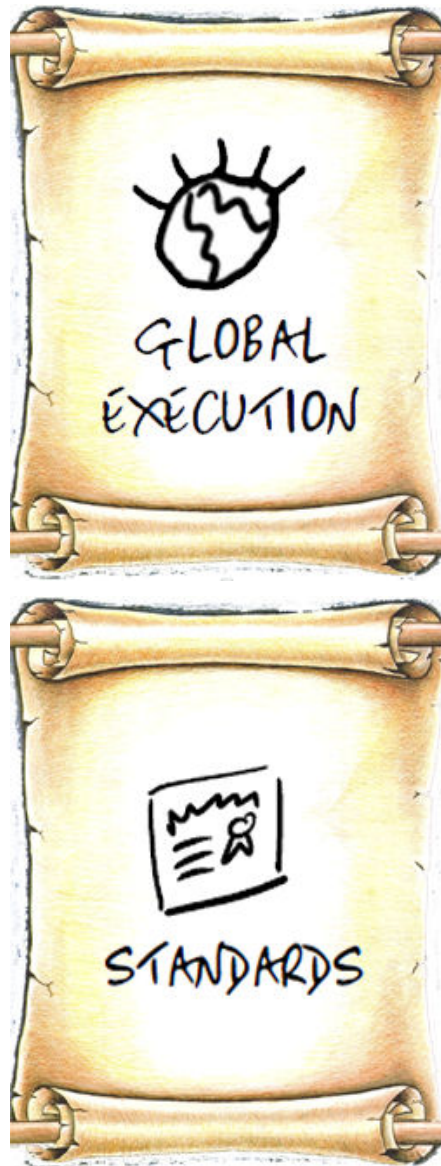
- Unreliable access
- Lengthy on-boarding
- Inflexible integration



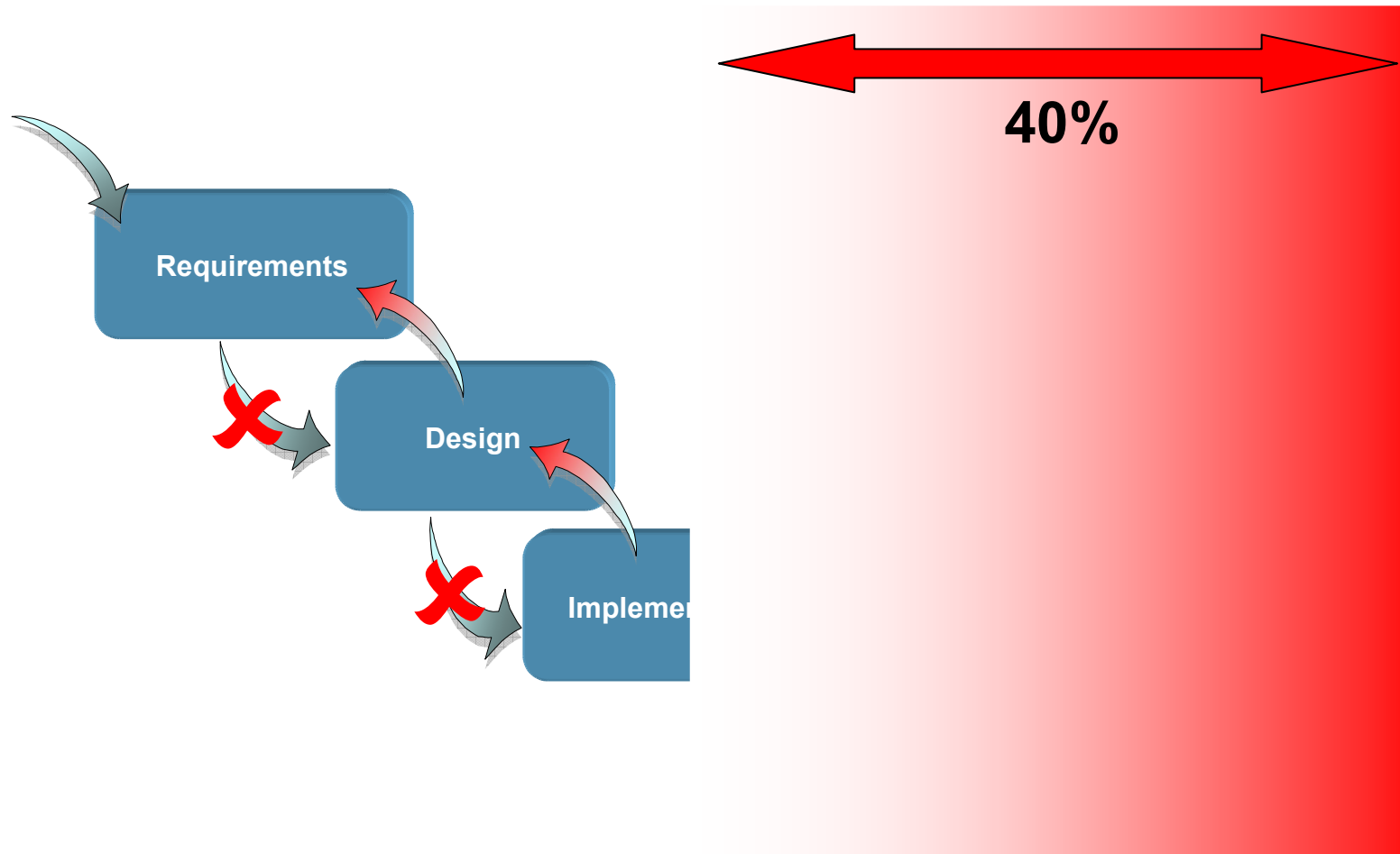
Market Realities and Trends



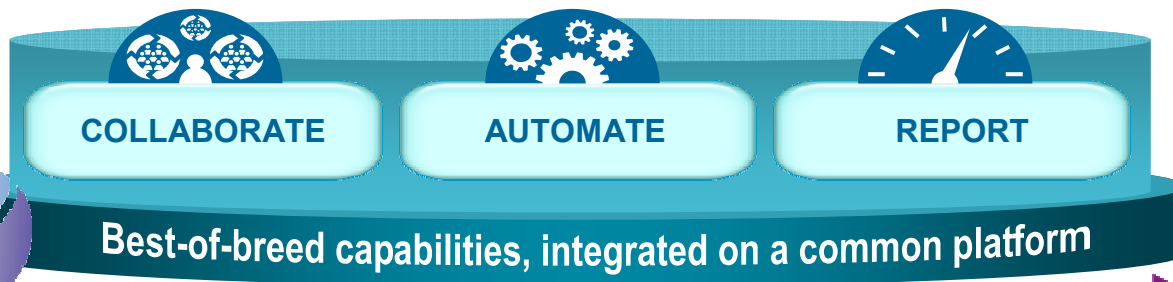
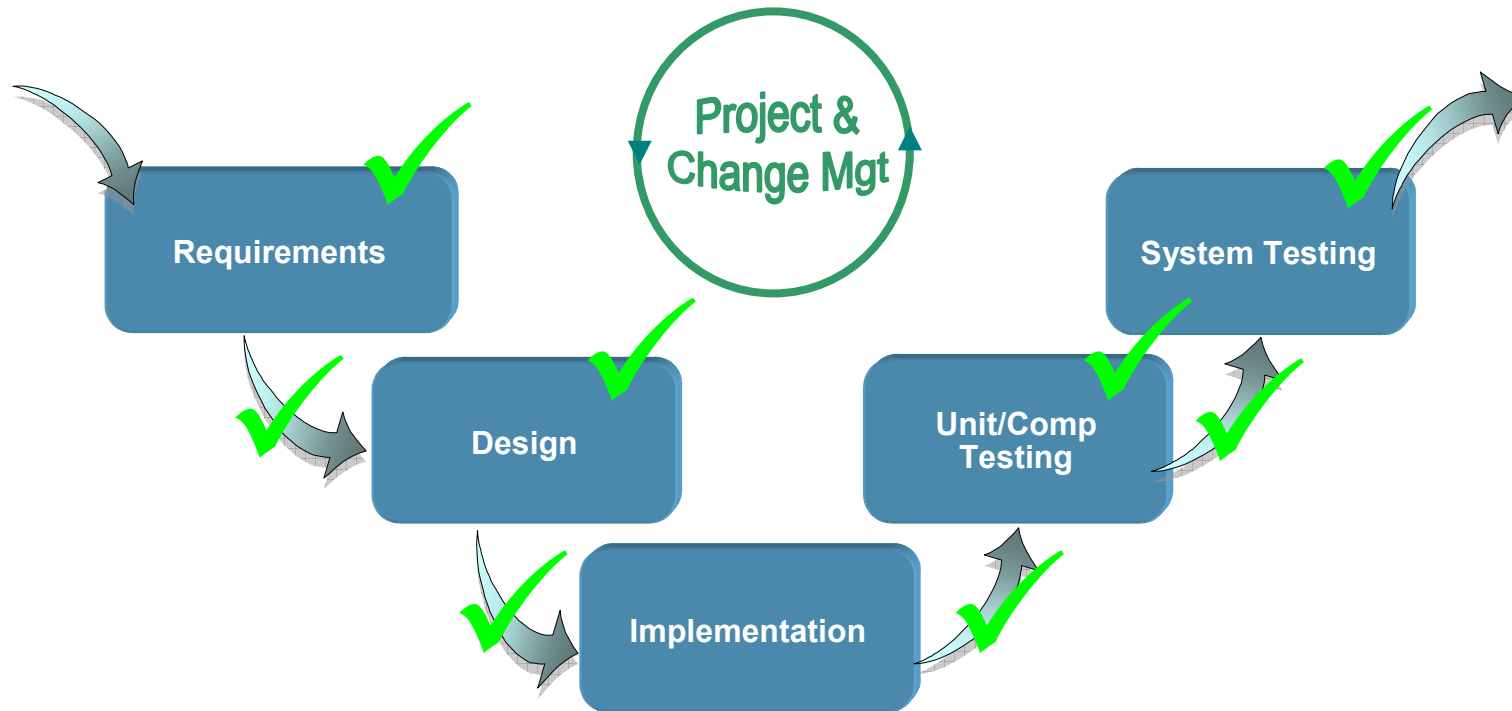
Market Realities and Trends



What do development organizations struggle with?



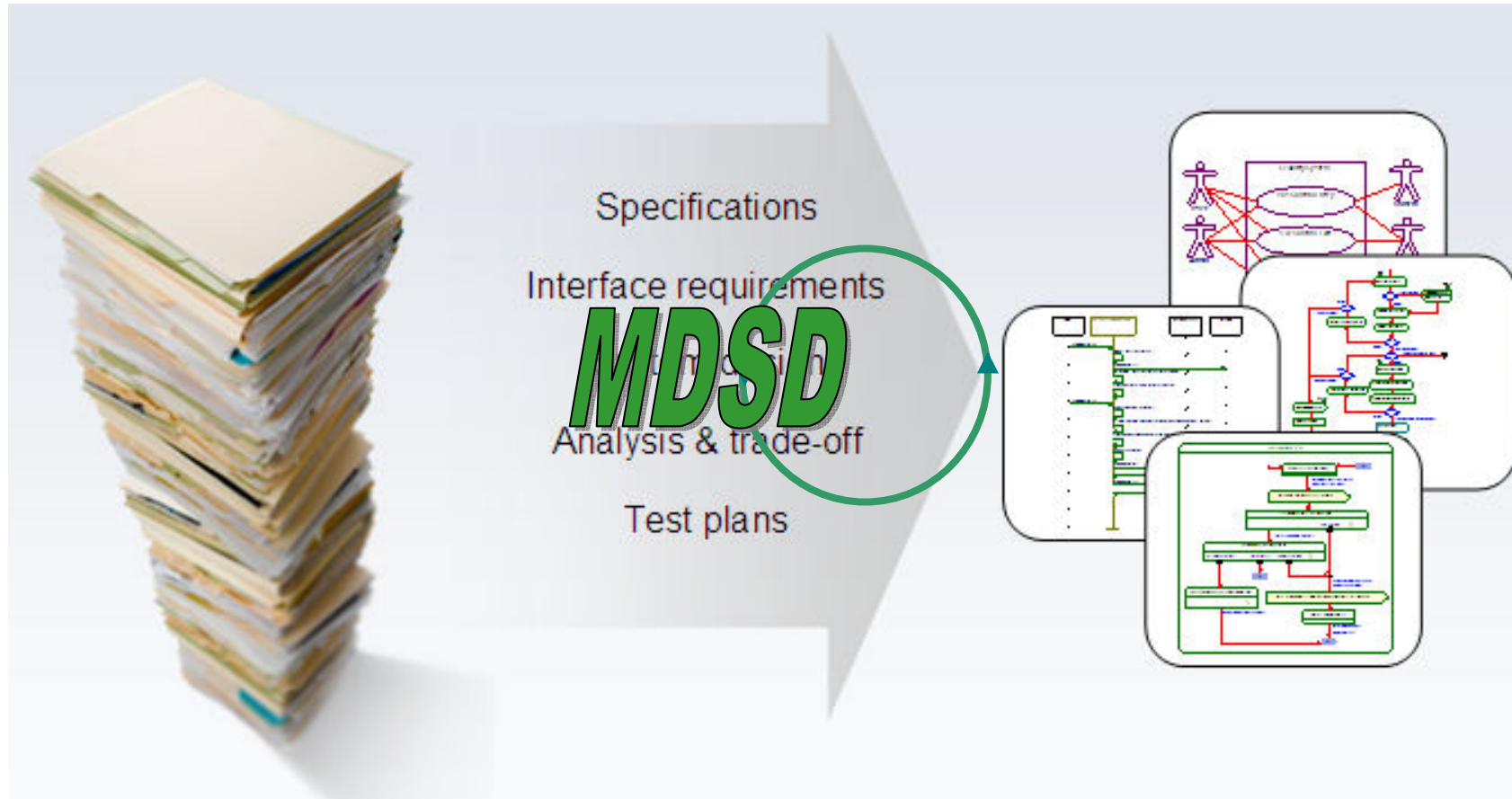
IBM Rational Systems Solutions - part 1



Jazz



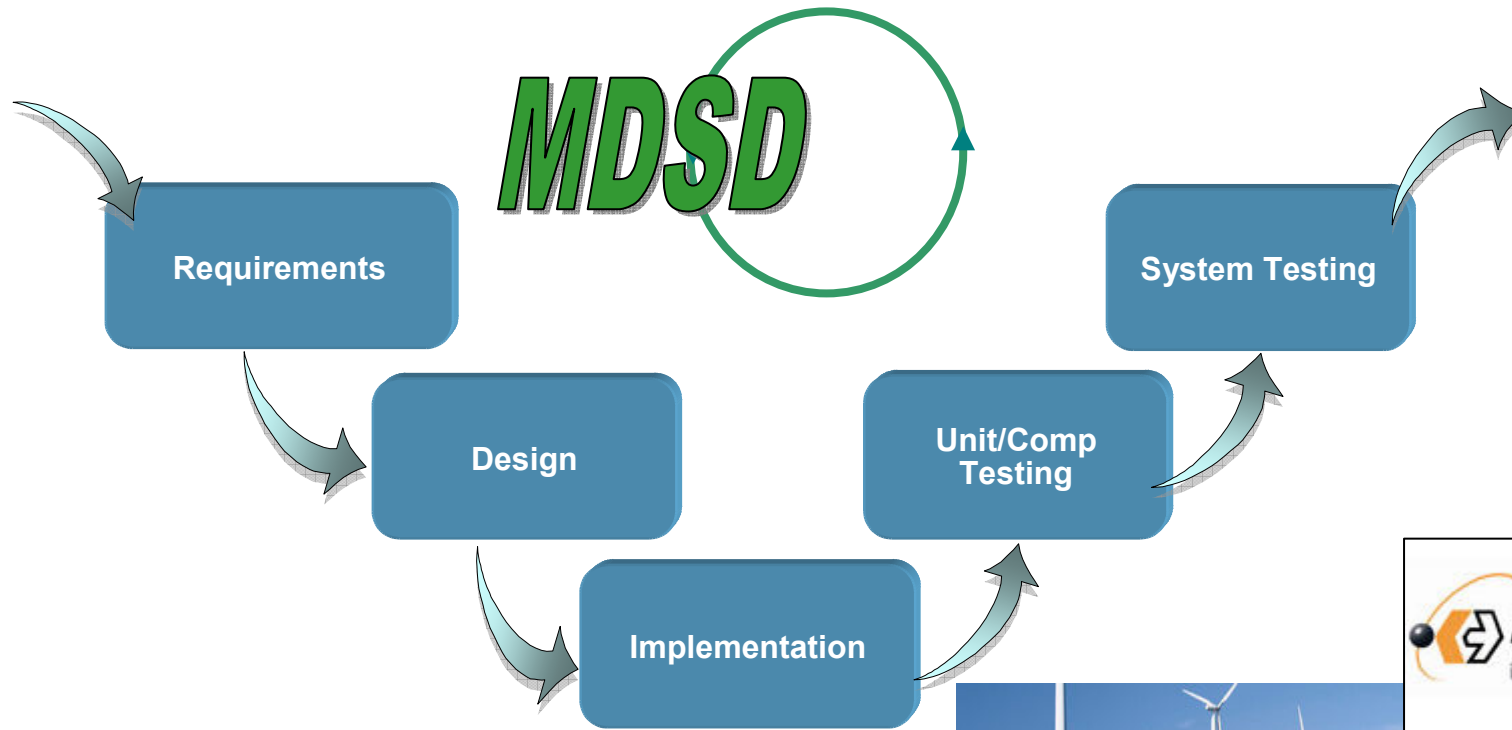
IBM Rational Systems Solutions - Advanced concepts



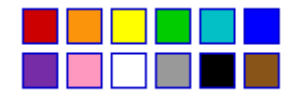
Model Driven Systems Development



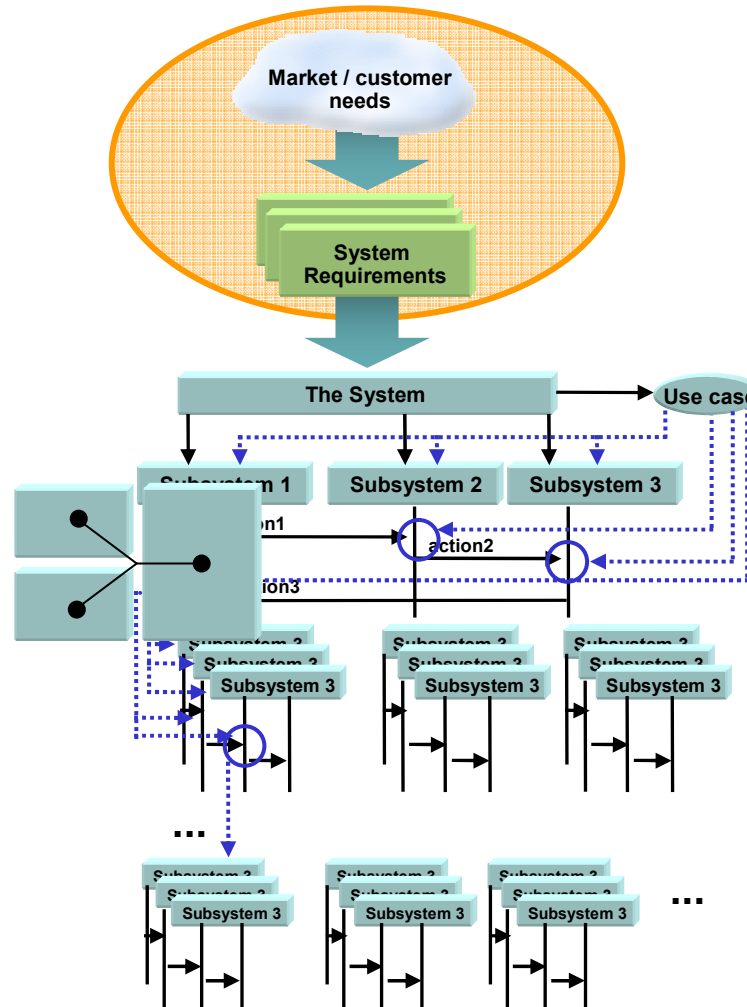
IBM Rational Systems Solutions - Advanced concepts



Portfolio Mgt & Product Line Engineering



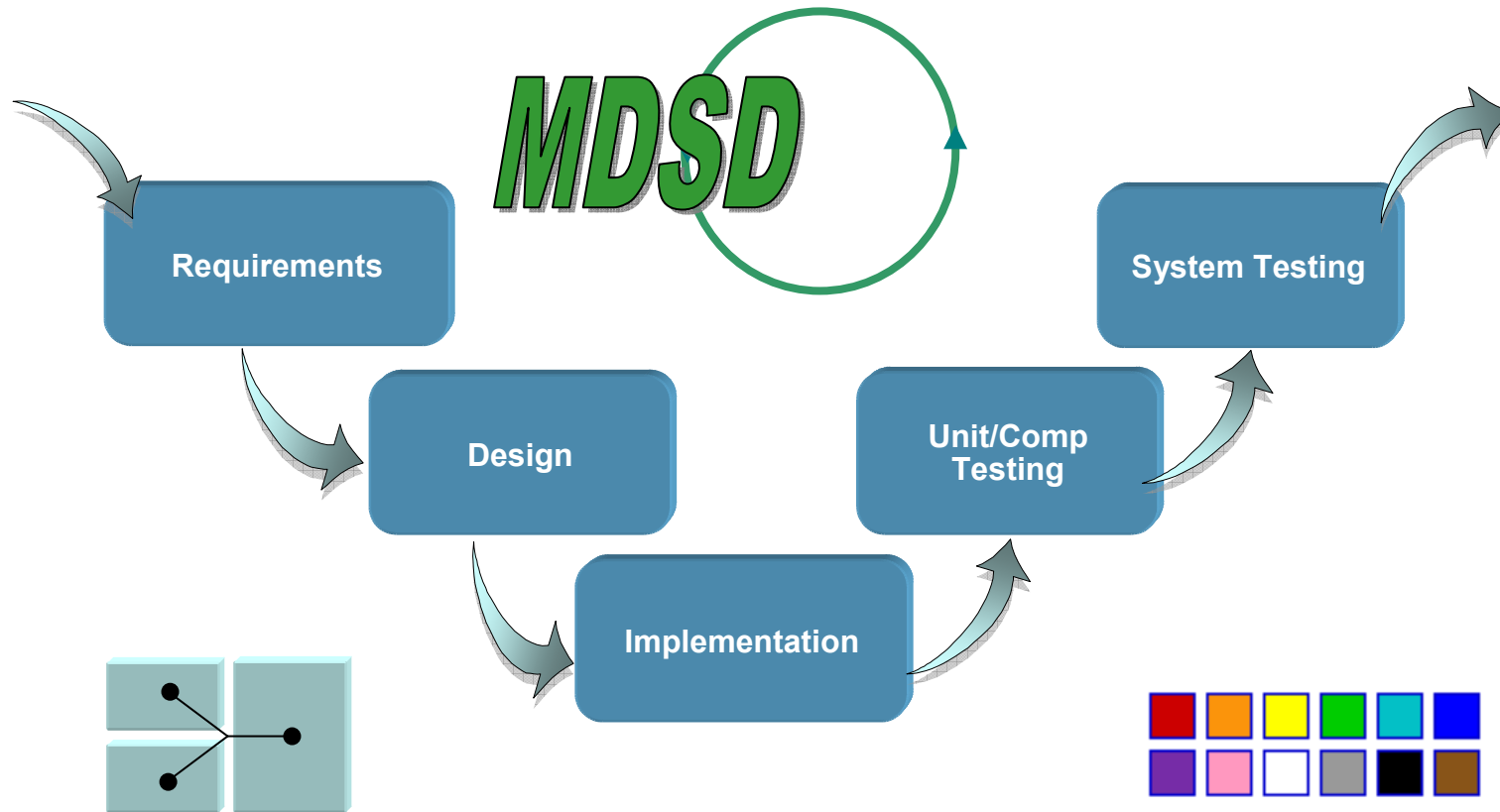
IBM Rational Systems Solutions – Advanced concepts



System Architecture



IBM Rational Systems Solutions – Advanced concepts

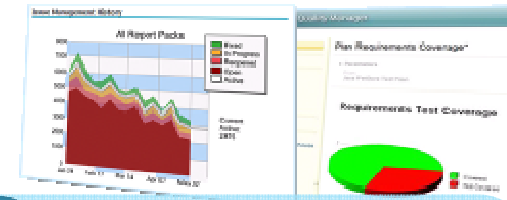
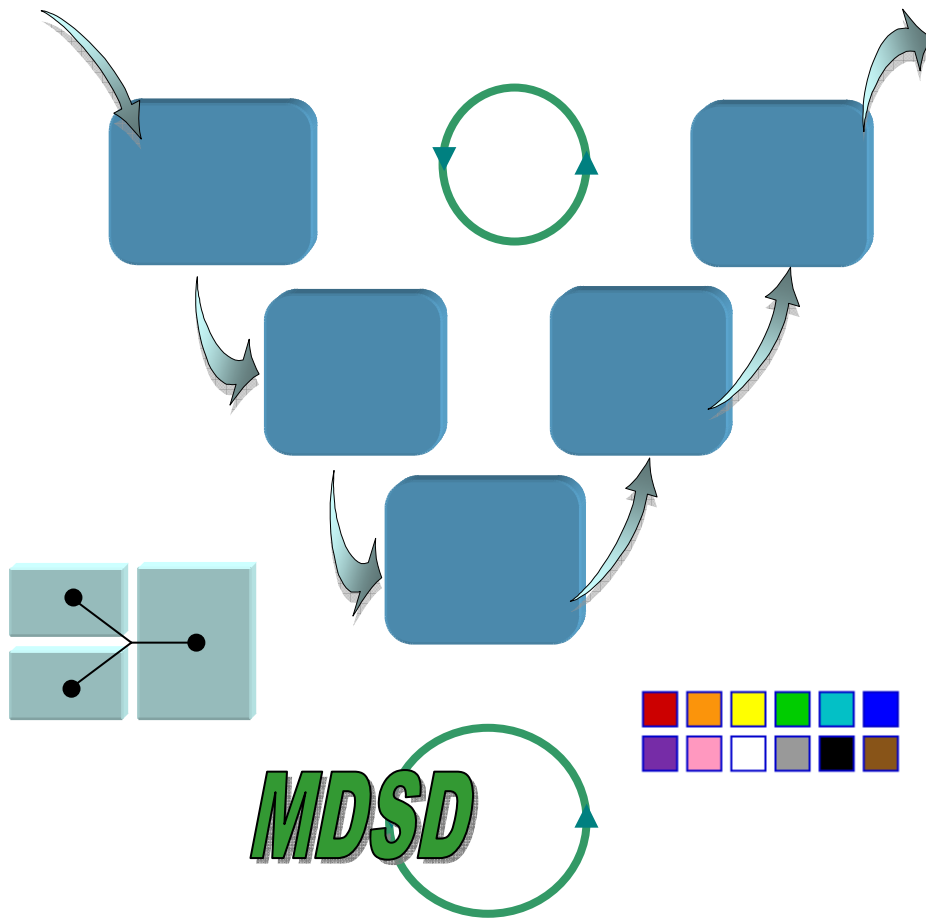


MDSM, PPM & PLE, Syst Arch



Technology, Best Practices and Services

accelerate time to value



- Phase 1** Establish business and operational objectives
- Phase 2** Prioritize practices and define roadmap
- Phase 3** Accelerate adoption with tools and services
- Phase 4** Report, analyze and act on results

Start next incremental improvement



Best-in-class product development companies enjoy significant advantage in the marketplace

Best in class performance:

83%

of products met product launch deadlines

13%

reduction in development time

10%

reduction in product cost

8%

increase in product profit margins



“Good system engineering practices offer a lot of opportunity for greater profitability. However, poor system engineering practices are extremely costly.”

Michelle Boucher, Aberdeen Group

Source: “System Engineering”, Aberdeen Group, Michelle Boucher, October 2009



Summary

- Software is driving a new wave of innovation for smarter products & services
- Delivery of smarter products and services will require new investments in software and systems
- Systems engineering will serve as the core functional discipline to enable a more holistic product development process
- IBM has a broad portfolio of systems engineering solutions



IBM is your Systems Engineering partner



Questions



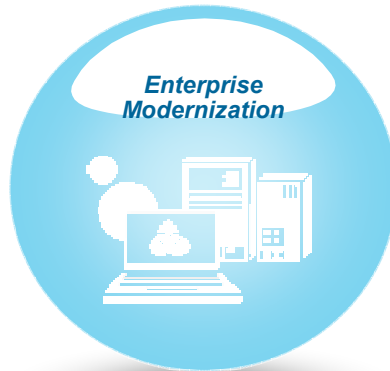


www.ibm/software/rational

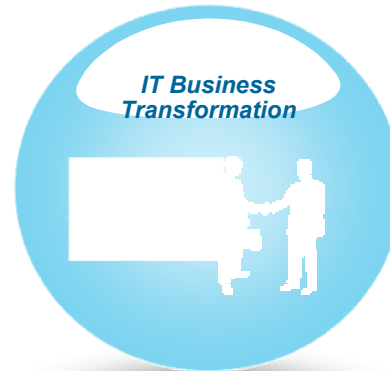
© Copyright IBM Corporation 2010. All rights reserved. The information contained in these materials is provided for informational purposes only, and is provided AS IS without warranty of any kind, express or implied. IBM shall not be responsible for any damages arising out of the use of, or otherwise related to, these materials. Nothing contained in these materials is intended to, nor shall have the effect of, creating any warranties or representations from IBM or its suppliers or licensors, or altering the terms and conditions of the applicable license agreement governing the use of IBM software. References in these materials to IBM products, programs, or services do not imply that they will be available in all countries in which IBM operates. Product release dates and/or capabilities referenced in these materials may change at any time at IBM's sole discretion based on market opportunities or other factors, and are not intended to be a commitment to future product or feature availability in any way. IBM, the IBM logo, Rational, the Rational logo, Telelogic, the Telelogic logo, and other IBM products and services are trademarks of the International Business Machines Corporation, in the United States, other countries or both. Other company, product, or service names may be trademarks or service marks of others.



Systems is one of Rational's 3 solution domains



**Enterprise
Modernization**



**IT Business
Transformation**

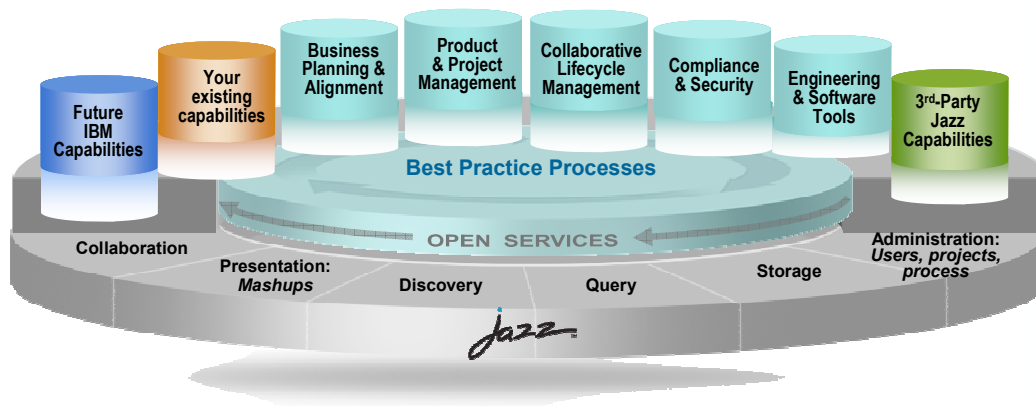


**Complex/Embedded
Systems**

Development of Smarter Products and Systems



Jazz Provides the Foundation for Innovation



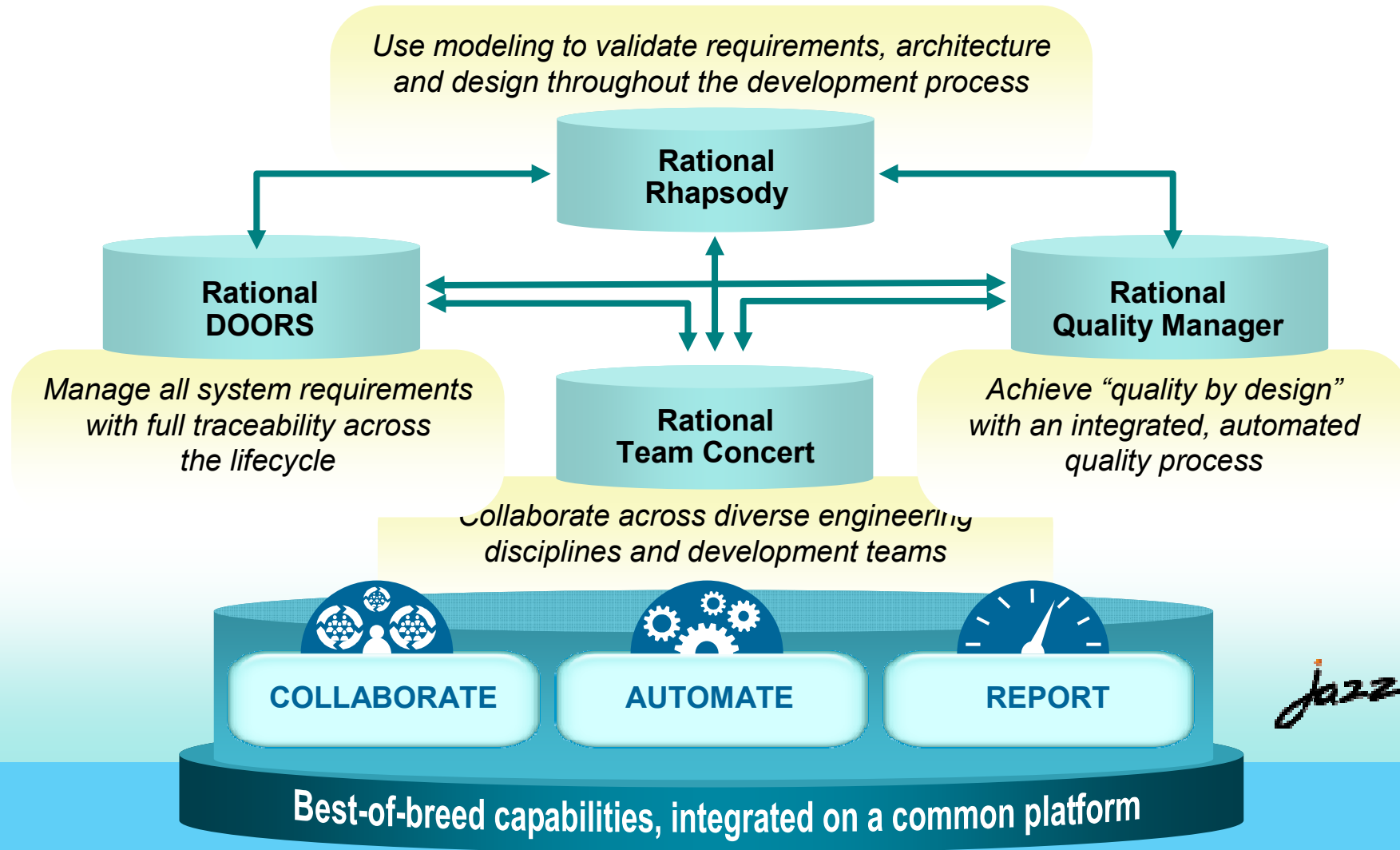
A platform for transforming how people work together to deliver greater value and performance from their systems and software investments.

Jazz is...

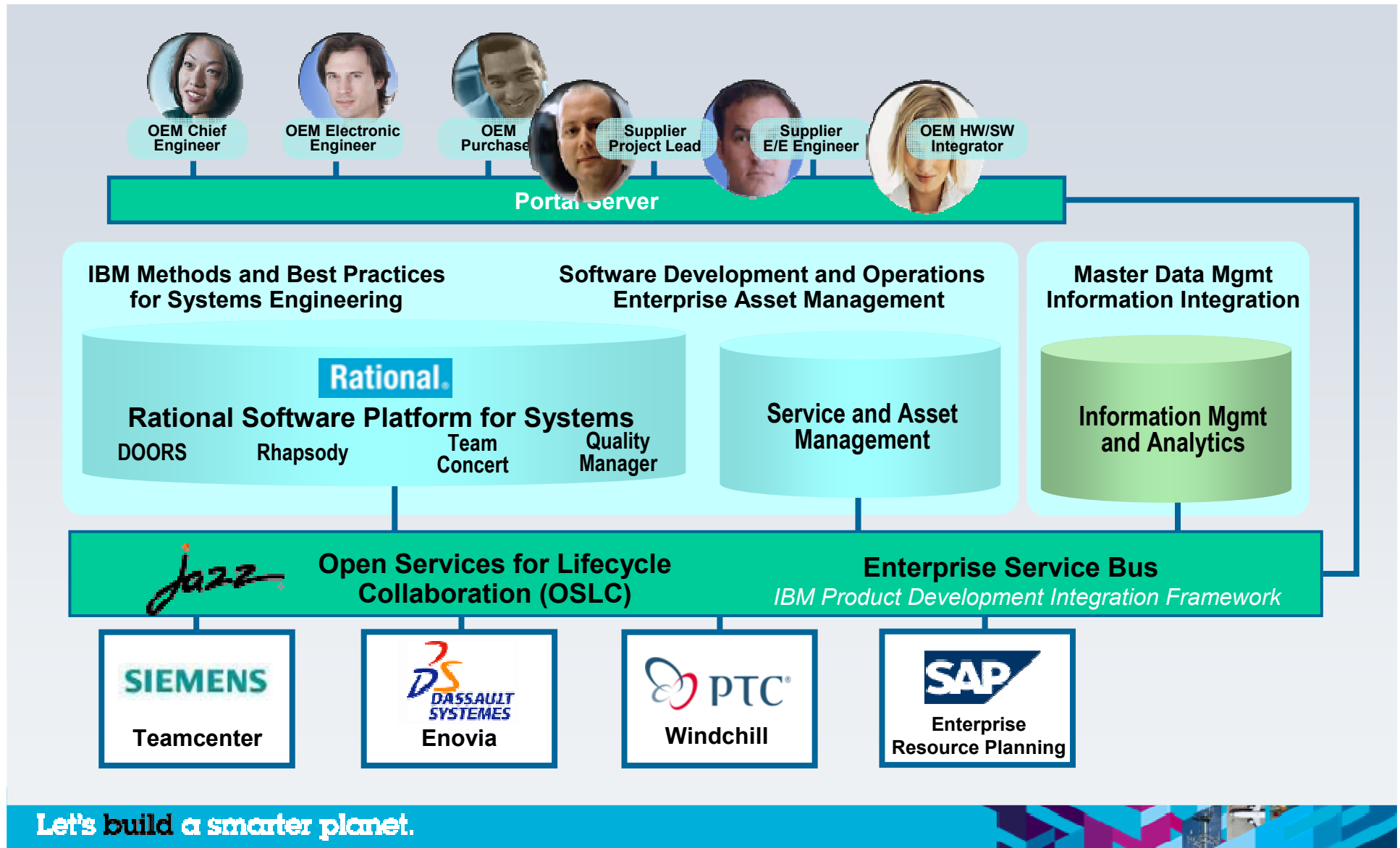
- A scalable, extensible team collaboration platform for systems and software delivery
- An open integration architecture enabling mashups and non-Jazz products to participate
- A community at Jazz.net where Jazz products are built
- An evolution of our portfolio over time



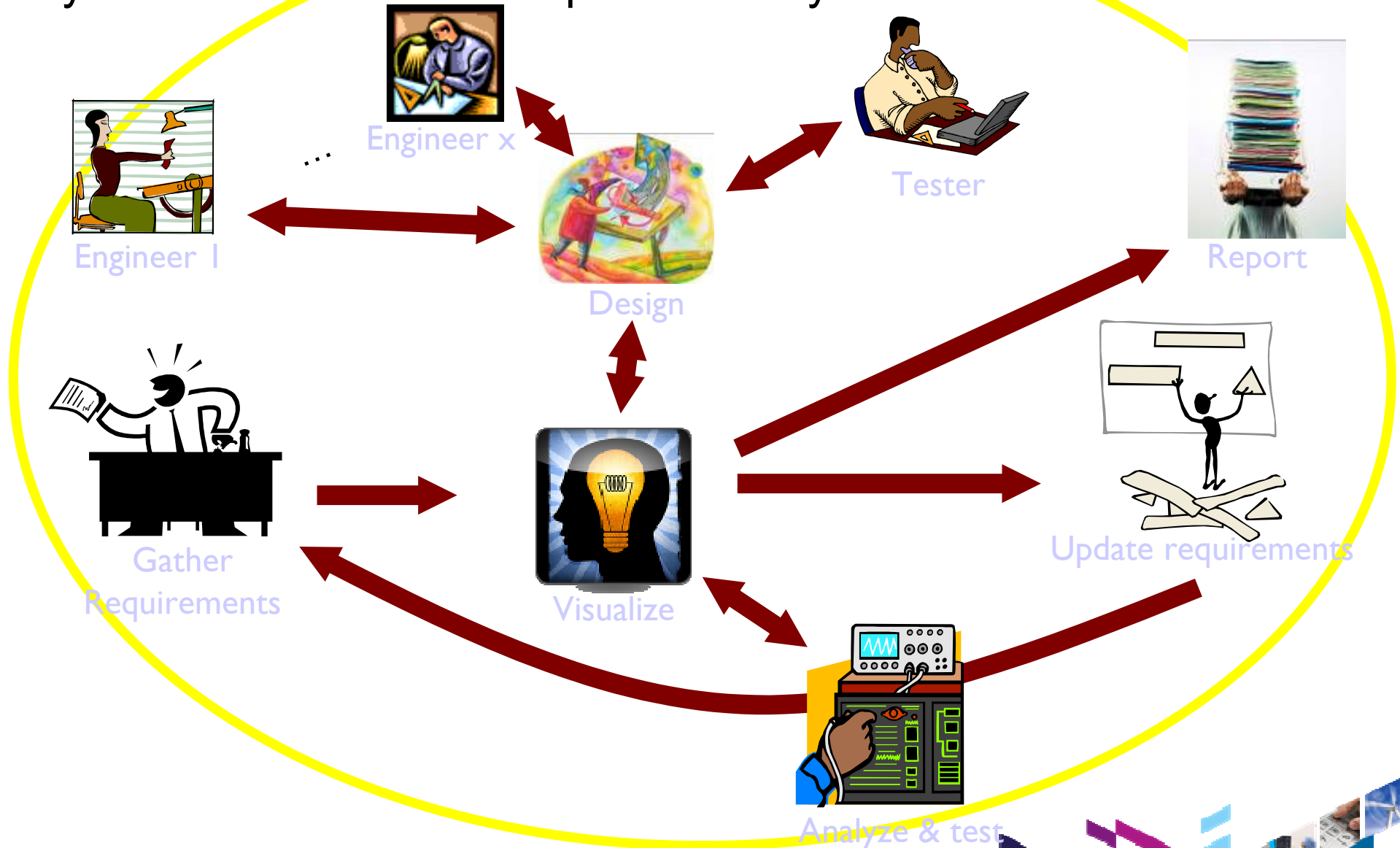
Rational Workbench for Systems and Software Engineering



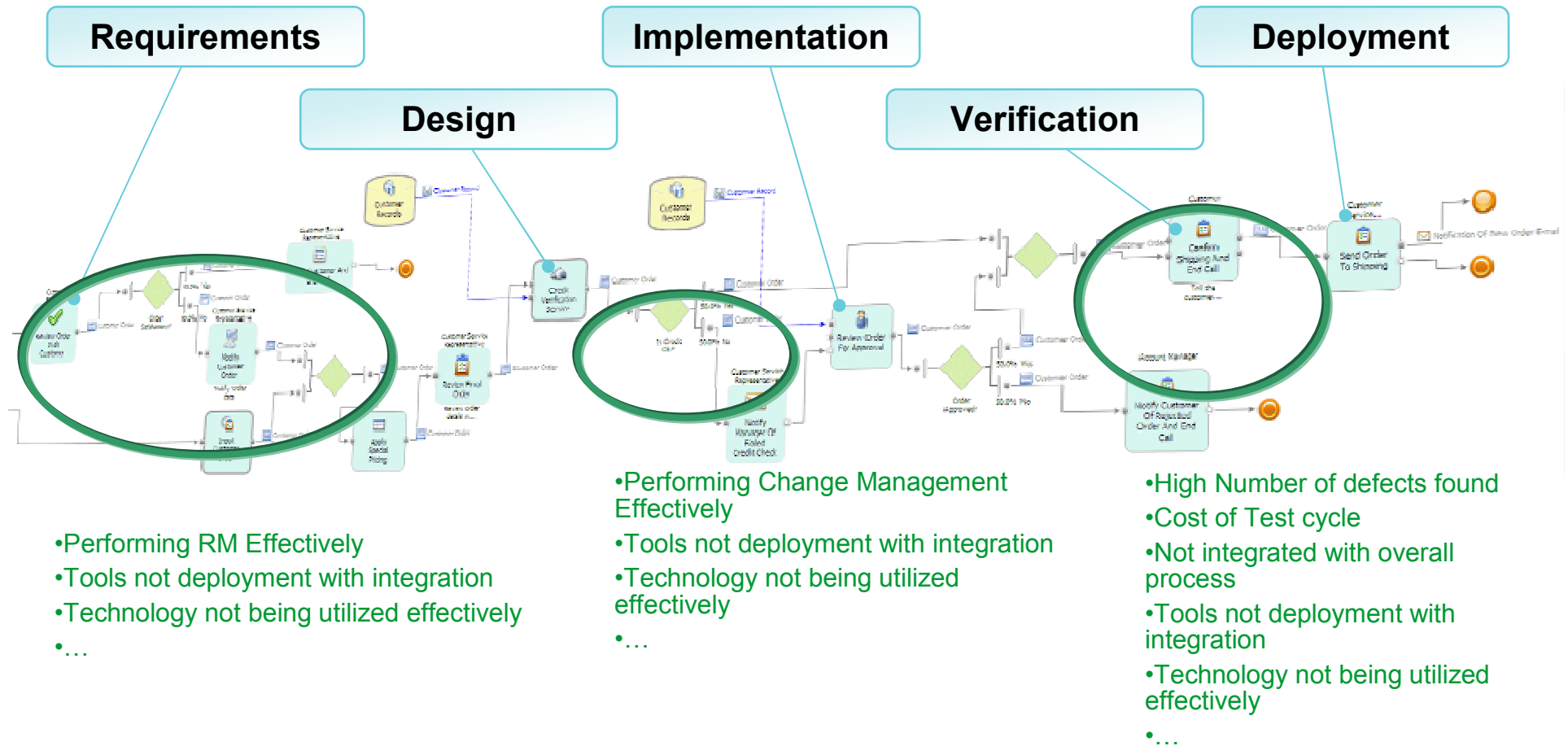
Rational Software Platform for Systems connects to existing PLM solutions: *Via Jazz, OSLC and IBM PDIF (Product Development Integration Framework)*



Systems/Software Development Lifecycle Workflow



Focus on the Systems Engineering Processes and Practices that need to be improved



Assess current state of Systems Delivery maturity

Assessment for Customer X

