

Innovate2011

The Rational Software Conference

11th and 12th of October

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



Innovate2011

The Rational Software Conference

11th and 12th of October

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



Welcome – Mike Kuklenko

WW Sales Director Rational Systems





FIRE INSTRUCTIONS

IF YOU DISCOVER A FIRE

1. Immediately operate the nearest fire alarm call point
2. Try to put out the fire if possible with the appliances provided but without taking personal risks

ON HEARING THE FIRE ALARM

1. The alarm will sound for a short time and then go off. If it does not sound again, it was a practice or a false alarm
2. If the alarm sounds again and remains on, then evacuate as quickly and calmly as possible through the nearest fire exit
3. The duty manager or receptionist will call the fire brigade immediately
4. All persons who leave the building should report to the conference organizer for the day. This person should then inform the manager in charge at the assembly point that everyone is present.
5. The assembly point is: **GODLIMAN STREET**
6. The manager or deputy will take charge of any evacuation and ensure that no-one is left in the building

PLEASE REMEMBER

- Use the nearest available exit
- Do NOT use the lift
- Do NOT stop to collect personal belongings
- Do NOT re-enter the building until you are told it is safe to do so



The Grange St Paul's Important Information Fire Alarm Procedures for all MEETING ROOMS

Overview of Event

Day1

Focus on Benefits of Technology

Day2

*IBM Southbank (IT focus)
and IBM Bedfont (Systems focus)*



Innovate**2011**

Agenda



08:30	09:30	Registration	
09:30	09:40	Welcome and opening address: Mike Kuklenko	
09:40	10:20	Keynote 1 - The Architecture for a Smarter Planet - Mike O'Rourke	
10:20	11:00	Keynote 2 - Software Economics - Walker Royce	
11:00	11:15	Sponsor presentation - Caggemini - Rehan Urli	
11:15	11:45	Refreshment Break	
		Track 1: Measurable and Predictable Software Delivery	Track 2: Strategic Planning for Systems and Software Products
11:45	12:30	AS01: Software Economics In Practice	SE1: Application Portfolio Assessment/ Management
12:40	13:25	AS02 : How to Measure Value. True Progress and Business Agility - Lessons from the Labs	SE2: Planning Technology Strategy in a Tough Economy
13:25	14:25	Lunch	
14:25	15:10	AS03: The Art Of The Possible	SE3: Driving Strategic IT Through Business Architecture
15:20	16:05	AS04: Transforming a Development Organisation	SE4: How to Execute a Market-Driven Product Portfolio
16:05	16:30	Refreshment Break	
16:30	17:15	Guest Speaker - Gary Barnett : The Challenges of Application Development in a World Where Software is Everywhere	
17:15	19:00	Networking reception sponsored by Caggemini	

		Track 3: Transforming Software Delivery	Track 4: Smarter Development for Smarter Products
		TS1: End-to-end Software Delivery with IBM Collaborative Lifecycle Management on Jazz	SP1: Multi-speaker Session: Experiences in Innovating Smarter Development of Smarter products
		TS2: Achieving Large Scale Distributed Agile Delivery	SP2: "Thinking Outside The Box" - The Wild and Wacky World of IBM Research Labs
		Lunch	
		TS3: Are We There Yet? The Journey to Agility in the IBM Labs	SP3: Keynote from Jaguar Land Rover : Smarter Development of Smarter Products in the Automotive Industry
		TS4: Transformation in Action: OLM Group's Journey from Waterfall to Agile using IBM Rational	SP4: Gold-fish Bowl: Is Agile Safety-Critical Development an Oxymoron?

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11:15	11:45	Refreshment Break	
		Track 5: zEnterprise & Power Innovation	Track 6: DevOps - Bridging the Gap
11:45	12:30	IZ1: Teaching the Elephant to Dance - Becoming Agile Using Rational Team Concert and Rational Developer for System z	COL1: Accelerated Adoption with Ascendant Technology
12:40	13:25	IZ2: Driving Business Value with Application Modernisation on Power Servers	COL2: Beyond Deployment Automation
13:25	14:25	Lunch	
14:25	15:10	IZ3: Case Study on Modernisation of IBM Applications for ISGN and Military Cars	COL3: Goldfish Bowl: What is DevOps (and does it matter)?
15:20	16:05	IZ4: Rational Solutions Aiding Mainframe Application Management from Waterfall to Agile	COL4: Deployment Planning and Automation Tools for Service Management
16:05	16:30	Refreshment Break	
16:30	17:15	Guest Speaker - Gary Barnett : The Challenges of Application Development in a World Where Software is Everywhere	
17:15	19:00	Networking reception sponsored by Caggemini	

		Track 7: Software Quality and Security
		SQS1: Agile Test Management Practices with IBM Rational Quality Manager
		SQS2: Extending Rational Performance Tester, The Art of the Possible...
		SQS3: Testing Without Blowing Thousands of Dollars - Rational Solutions for SAP
		SQS4: Solving Test Management and Test Automation Challenges on a Large Programme Across Multiple Organisations



Binary



CONSULTING.TECHNOLOGY.OUTSOURCING



WebSphere software



Social Business

People don't do business with companies. People do business with people. Here is why and how to become a Social Business.



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Platinum Sponsor



Modernization Zone on Level -1

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Software-driven Innovation

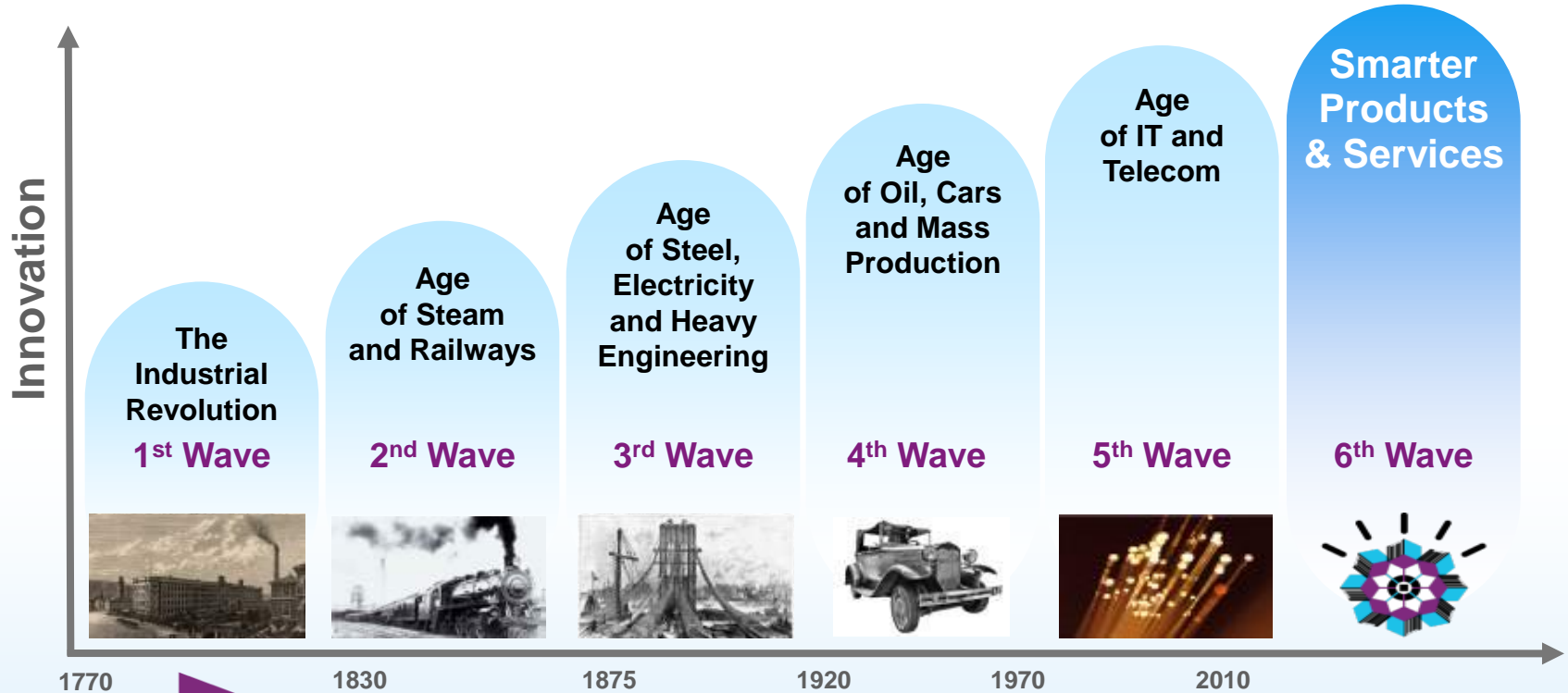
Michael O'Rourke

VP, Rational Offerings Strategy and Delivery

mikeorou@us.ibm.com



We have entered a new wave of innovation

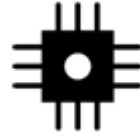


Source: "Next Generation Green: Tomorrow's Innovation Green Business Leaders",
Business Week, Feb 4, 2008.

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 **Software. Everyware.**

Our World is Getting Smarter



Our world is becoming

INSTRUMENTED



Our world is becoming

INTERCONNECTED



Virtually all things, processes and ways
of working are becoming

INTELLIGENT



Macro Trends are Changing the Software Landscape



Information from Everywhere



- Data and content
- Apps, web and sensors
- At rest and in motion
- Integrated and federated

Radical Flexibility



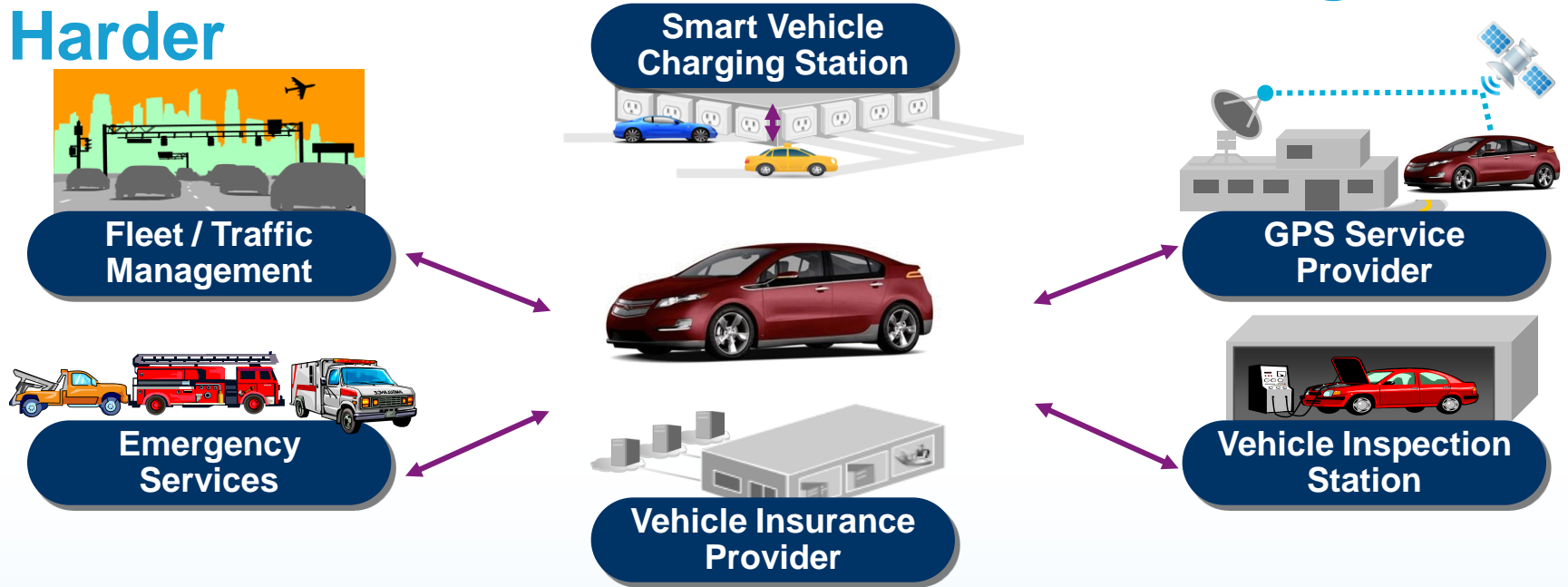
- Cloud computing
- Virtualization at every level
- Automated administration
- Easy-to-use analytics

Extreme Scalability



- “Big data” analytics
- Real-time stream processing
- Efficient parallelism
- Workload-optimized

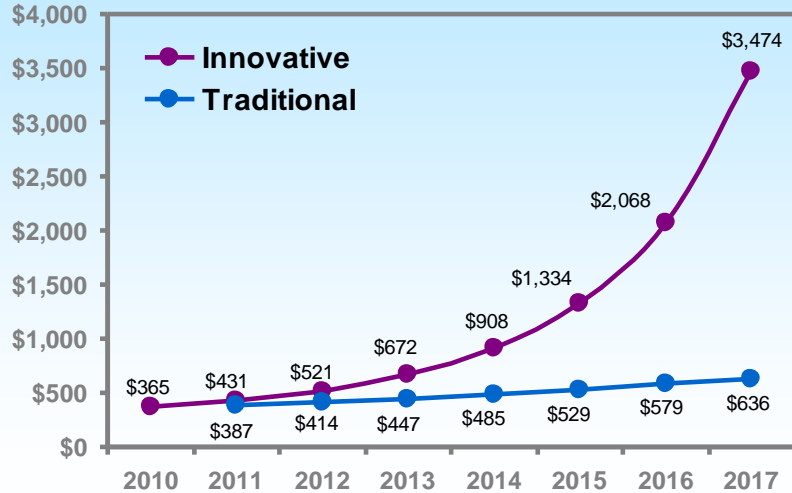
Product and Service Innovation is Getting Harder



45+ interconnected systems, 20+ different stakeholders, each with a different agenda

Businesses are Prioritizing Innovation for Growth

Comparative Value of Innovation Worldwide Product Market Forecasts U.S. Dollars in Millions



- Top-performing CIOs integrated business and technology to drive innovation **2x more** than underperforming CIOs
- Top-performing CIOs cited **integration** and **collaboration** between IT and business as critical success factors

Sources: "Innovation as a Market Driver of the Globally Integrated Enterprise", WinterGreen Research, Inc., June 2011; and the IBM CIO Study, 2011

Innovation is increasingly delivered through software

Robotic surgery has decreased the mortality rate of bypass surgery by more than sixfold



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

Sources: *Robotic surgery*: USA Today, April 30th, 2008
Mobile banking: A catalyst for improving bank performance, Deloitte, 2010
This Car Runs on Code, Robert Charette, IEEE Spectrum, 2009

Realities can stall software-driven innovation

Complexities in software delivery are compounded by market pressures



Complex, Multi-platform Systems and Applications

62% of companies have agile projects requiring integration with legacy systems

Globally Distributed Software and Product Supply Chains

50% of outsourced projects are expected to under perform

Unpredictability in Software Delivery

62% of projects fail to meet intended schedule

Increasing Regulatory Compliance Pressure

Driven by Safety and Compliance

Cost Reduction

70% budget locked in maintenance and **37%** of projects go over budget

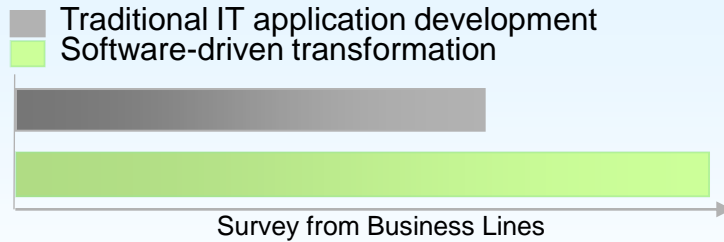
Changing Requirements and Time to Market

30% of project costs are due to rework and poor execution of requirements

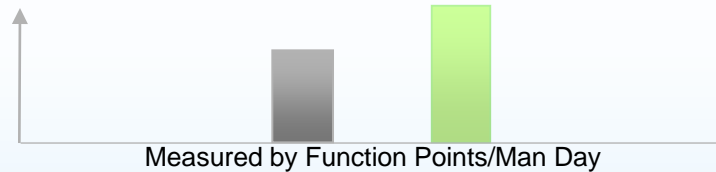
Software and systems delivery transformation brings dramatic business results



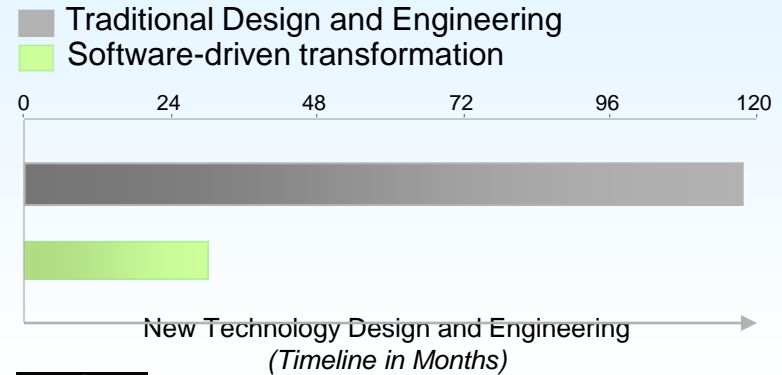
Dramatically Improve Customer Satisfaction



Dramatically Improve Development Productivity



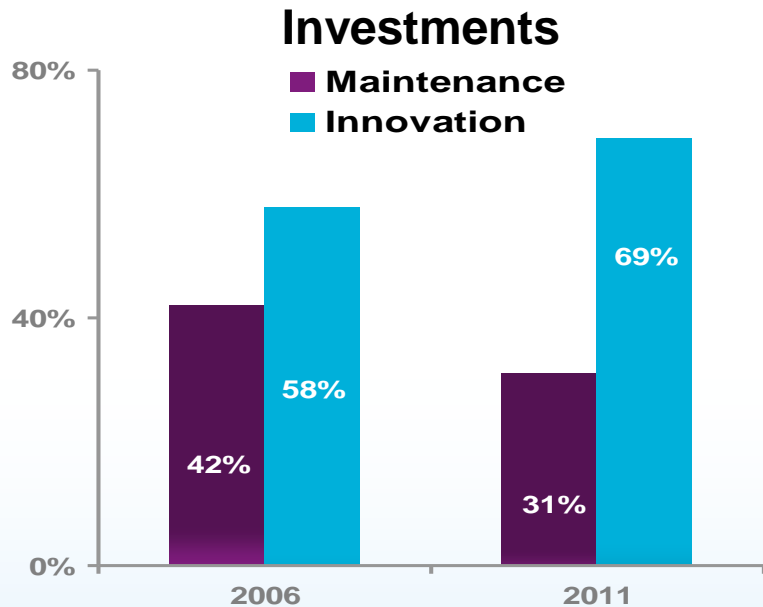
Volt was designed and engineered in 29 months!



中國銀行
BANK OF CHINA

Rational Transformation

Improved Efficiency Means More Innovation



Efficiency Measures

2006 → 2011

On time delivery

47%

95%

Defect backlog in months

>9

2.7

Beta defects fixed before GA

3%

95%

Agile / iterative projects

5%

85%

Three key actions of transforming software and systems delivery



Integrate

***Connecting process
and information***
Software, data, and tools

Collaborate

Unifying teams
Projects, and
organizational cultures

Optimize

Simplifying governance
Plans, scope,
and measures



Realized benefits:

- Improved quality and time to market
- Reduced risk and cost
- Tighter alignment to business priorities



Software-driven innovation with IBM Rational

Addressing IT, systems, and enterprise modernization

↑
STRATEGIC
VALUE

Business Planning and Alignment

Measure business effectiveness of projects | Prioritize investments
Understand business value | Manage risk and impact of change

Integrated Application and Systems Lifecycle Management

Collaboration across teams, roles, platforms and geographies

Security

↓
REDUCED
COSTS

Design, Development and Deployment

Requirements | Architecture and Design | Development | Testing | Deploy & Release | Operations

Open Platform for Data and Tools Integration and Automation

IBM announces...



NEW

**Collaborative
Design
Management**

ENHANCED

**Collaborative
Lifecycle
Management**

ENHANCED

**Software
and Systems
Engineering**

ENHANCED

**Collaborative
Development &
Operations**

JazzHub



*Open Services for Lifecycle Collaboration
and
Integration Services*

**Rational
Community at
developerWorks**



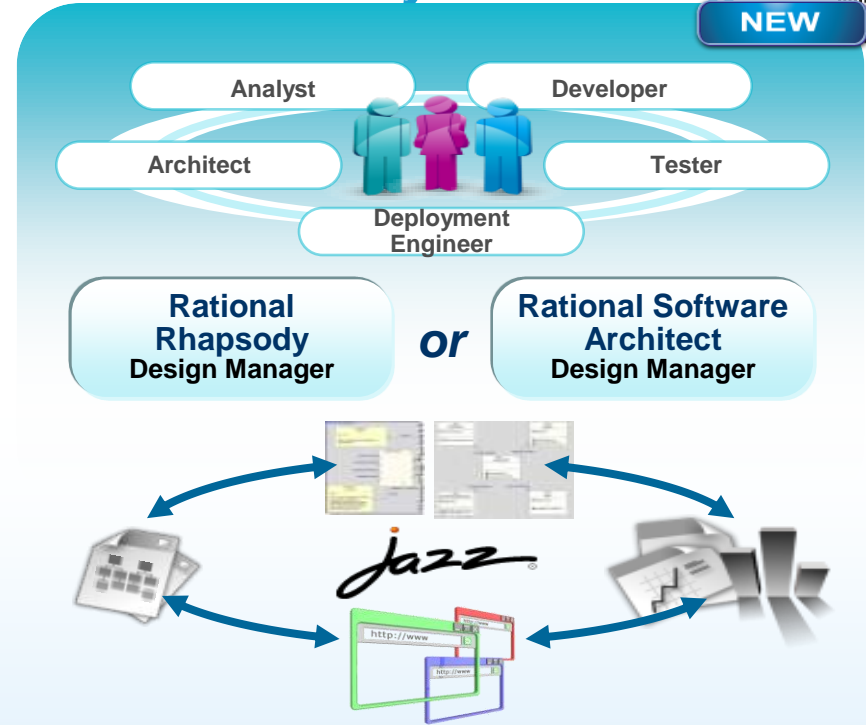
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 **Software. Everyware.**

Rational Collaborative Design Management

Enhance cross-team collaboration on software and systems design

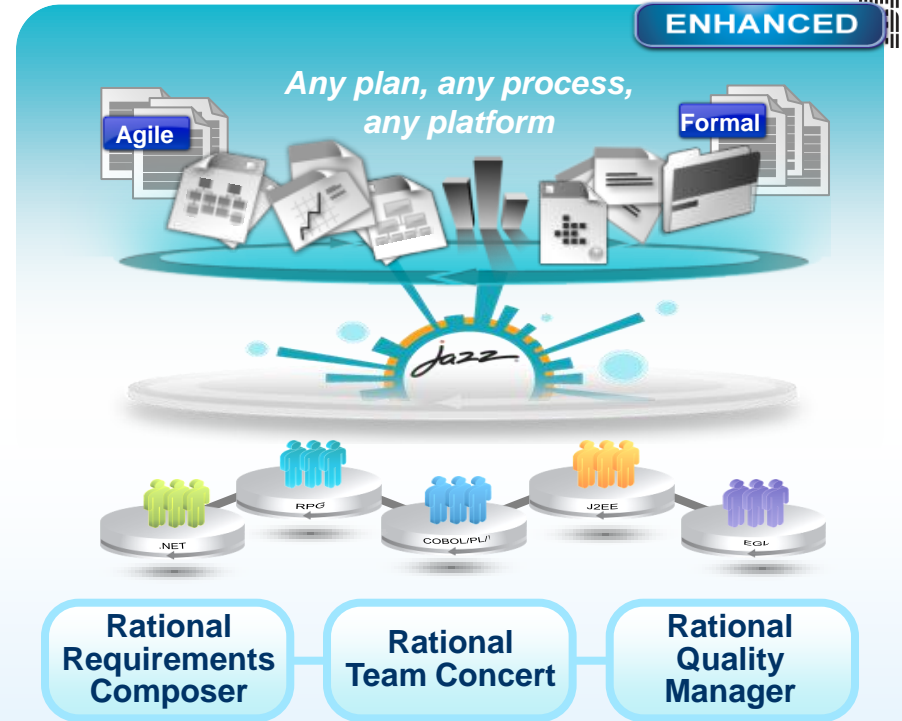
- Reduce cycle time by engaging all stakeholders and accelerating design review process
- Reduce complexity and increase flexibility with impact analysis and automated reporting



Rational Collaborative Lifecycle Management

Improve productivity across organizations, languages and platforms

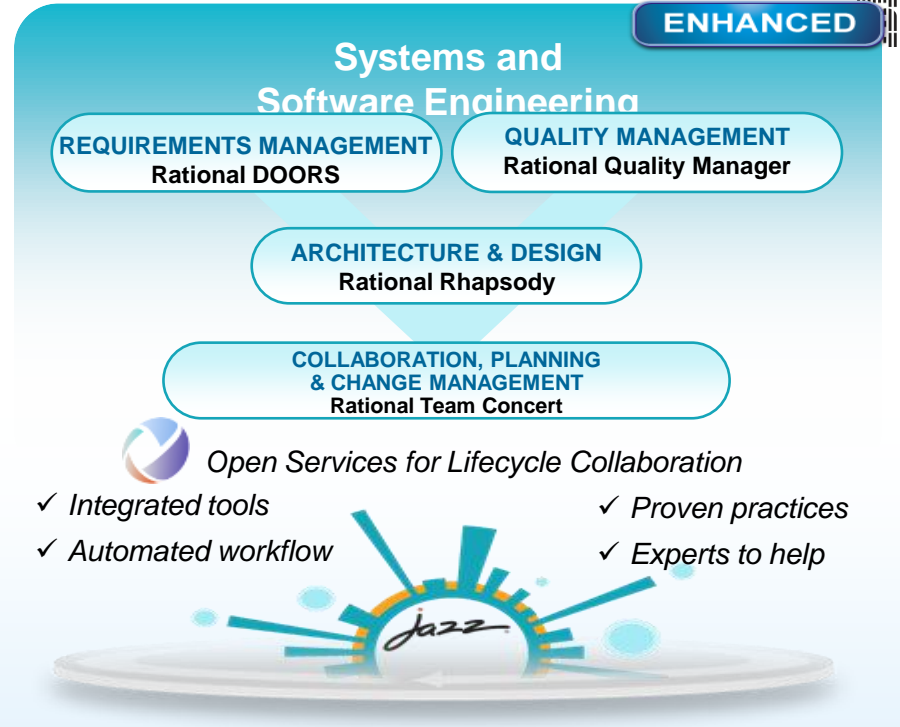
- Real-time planning
- Lifecycle traceability
- In-context collaboration
- Development intelligence
- Continuous improvement
- Single install
- Robust educational content
- Best practice templates



Rational Systems and Software Engineering

Use an end-to-end approach to build and validate complex products, systems and the software that powers them

- Practice library on demand
- Tool mentors
- Process execution templates
- Solution support to meet industry specific standards



IBM Collaborative Development and Operations

Transform your development-operations process

- Image management
- Workload optimization
- End-to-end lifecycle automation
- Federated asset repositories
- Deployment planning and automation
- Collaborative incident management



Jazz provides open collaboration across the software and systems lifecycle



COMMUNITY

Transparent collaboration and exchange of ideas



PRODUCTS

Application lifecycle tools that leverage the Jazz platform

PLATFORM



*Open Services for Lifecycle Collaboration
and
Integration Services*



Application frameworks and toolkits

The JazzHub

- Rational Team Concert in the Cloud
- Enabling the academic community to develop directly on Jazz.net



Achieve break through benefits with IBM

IBM solutions bring advantages over other approaches

- Years of experience with client implementations built into our solutions and approach
- Open, standards-based platform to enabled cross-vendor integration
- Able to improve linkage between business priorities and objectives to outcomes
- Consulting and services to accelerate value and implement best practices, if needed



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Measured Improvement in Software Economics

Walker Royce
Chief Software Economist
IBM Software, Rational



Software Delivery is an Economic Discipline



Level 5: Completely irreducible uncertainty

Level 4: Partially reducible uncertainty

Level 3: Fully reducible uncertainty

Level 2: Risk without uncertainty

Level 1: Complete certainty

Engineering →
Engineering →
Engineering →
Engineering →

Software →
Software →
Software →
Software →



Religion
Philosophy
History
Economics
Biology
Chemistry
Physics
Mathematics

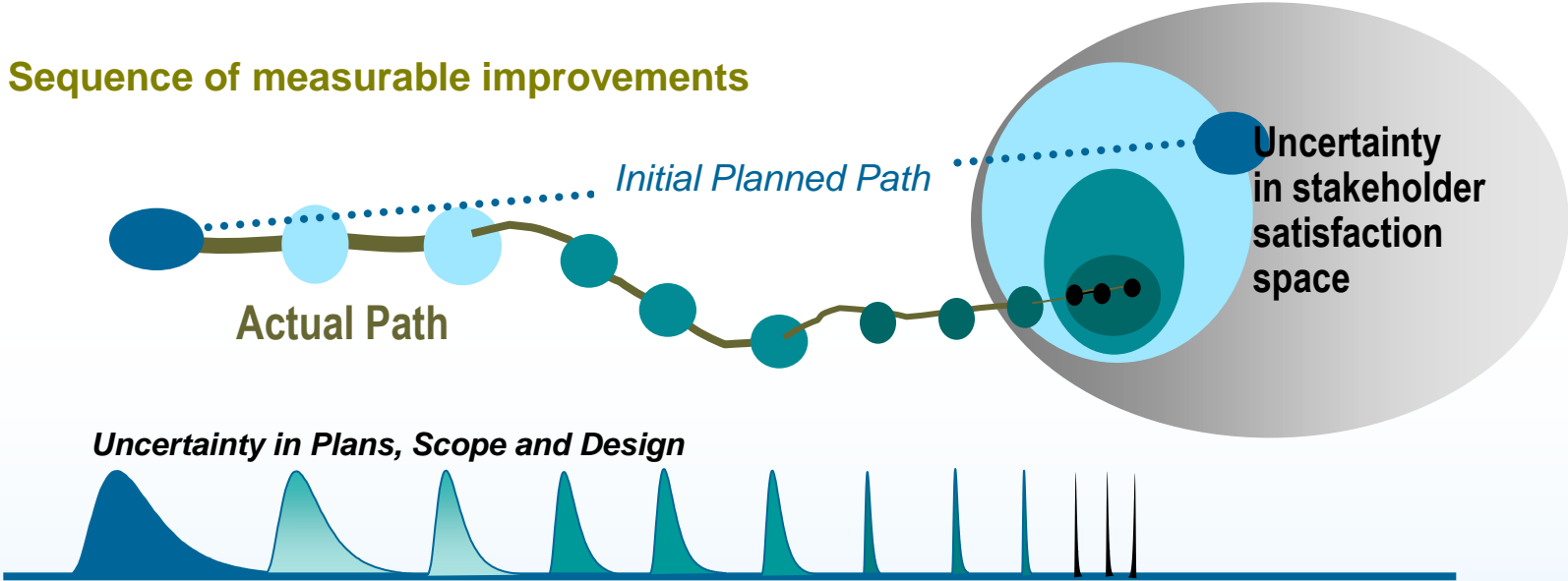
Lo, Andrew, and Mark Mueller. MIT Sloan School of Management,
Moody's/NYU 6th Annual Credit Risk Conference, New York, March 2010.



Economic Governance: Measurement and Steering



Sequence of measurable improvements



Pivotal Culture Shifts



Integrate

Plans/management

Plan for integration to precede unit testing

Avoid false precision in plans and requirements

Collaborate

Progress measures

Quantify progress trends from the integrated code and test base

Don't attack the easy things first

Optimize

Quality measures

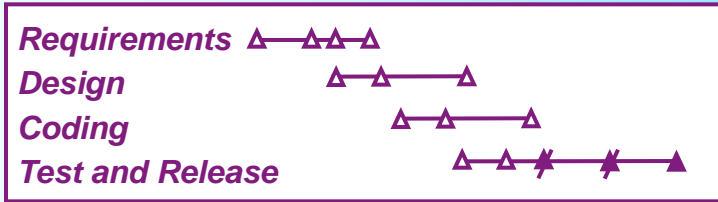
Quantify cost-of-change trends to demonstrate true agility

Don't rely on subjective and speculative measures

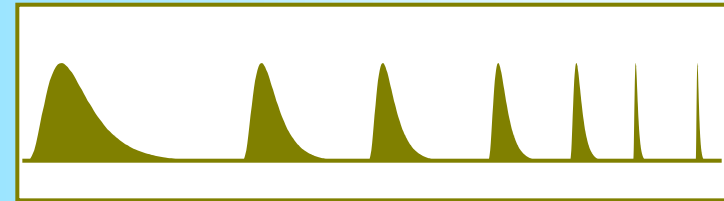
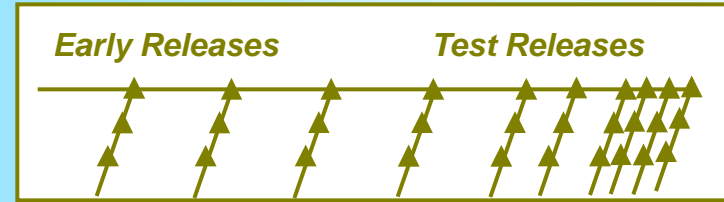
Measured Improvement: Progress Econometrics



Conventional Engineering Governance



Modern Economic Governance



Planning Progress

Technical Progress

Economic Progress



Measured Improvement: Quality Econometrics

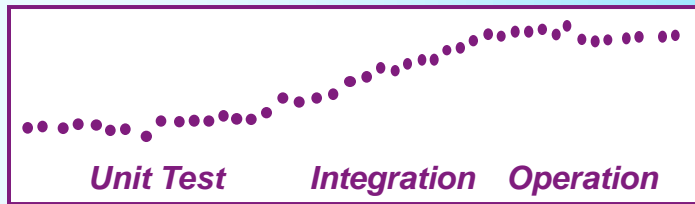
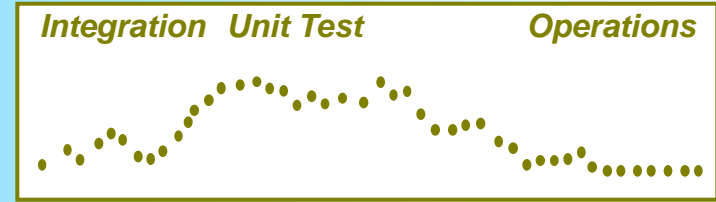


Conventional Engineering Governance

Modern Economic Governance



Maturity
Defect
Trend



Modularity
Change Volume
Trend



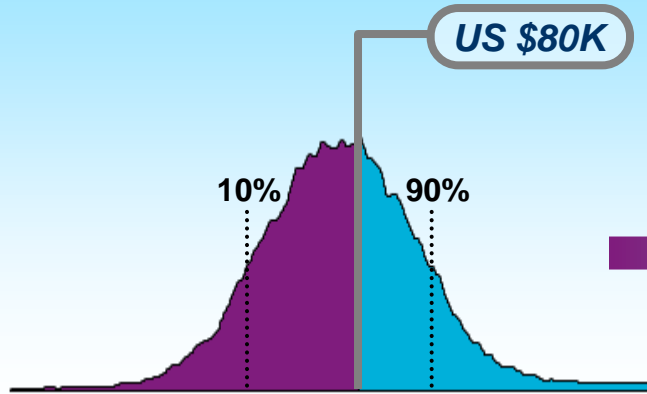
Adaptability
Cost of Change
Trend



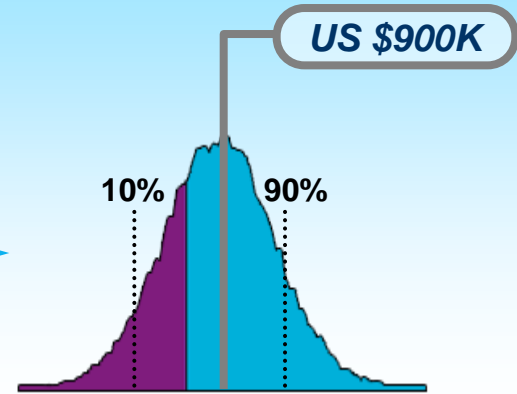
Measured Improvement: Quality Econometrics



Net Present Value using
Conventional Governance



Net Present Value using
Economic Governance



Improving Software Economics



VOLUME OF CODE

- Quality/Performance
- Integration first
- Manage scope
- Asset-based reuse

PROCESS

- Steering
- Good practices
- Maturity
- Domain knowledge

Resources = Complexity *Agility* * Collaboration * Automation

TEAMWORK

- Synchronization
- Skills
- Experience
- Motivation

TOOLING

- Process enactment
- Measurement
- Instrumentation
- Manage complexity

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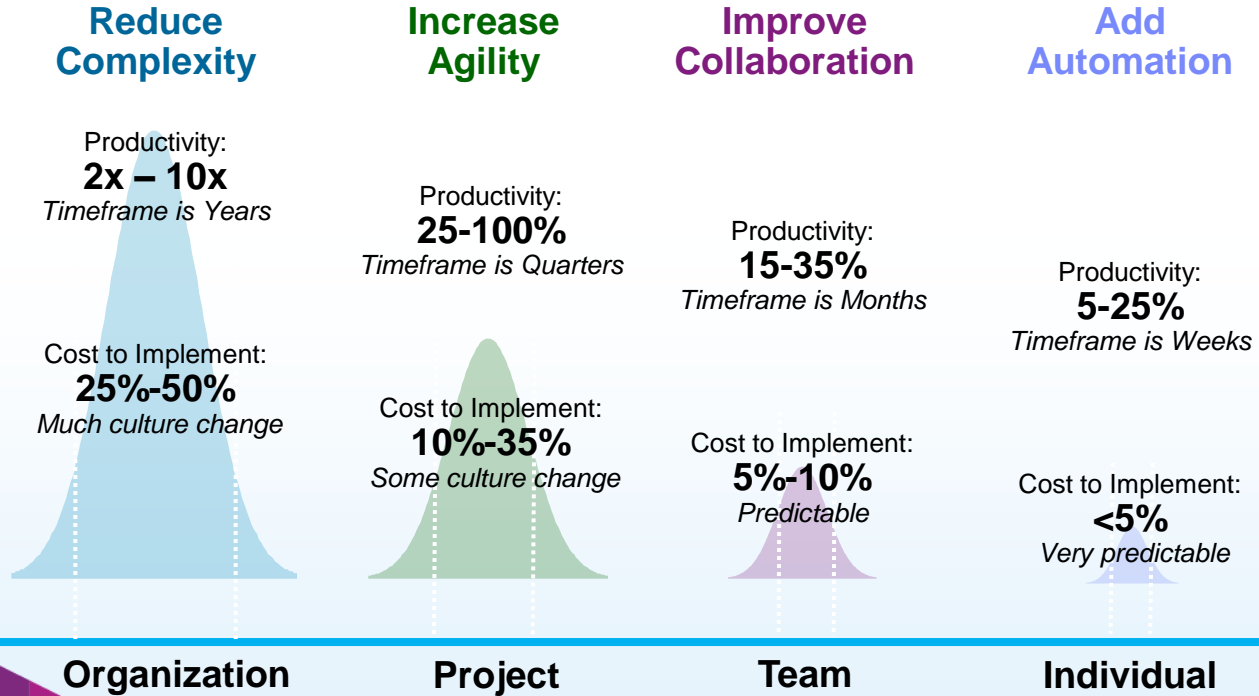


Software. Everywhere.

Productivity Improvement Leverage



Economic Impacts



The Moral of This Story



Better software economics is a result of:

1. Measured improvement for improved predictability

- The foundation of economic governance
- Measurement helps you manage uncertainty

2. Agility for improved operational efficiency

- Best measured by cost of change trends
- Best achieved by accelerating integration testing

***If you play better defense
you can play more offense!***

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ryware.



In collaboration with





Something that
will make a
difference?



What we are seeing in the market – the challenge

Organisation Challenges

- Legacy constraining business
- Difficult to change due to complexity
- Little or no appetite to invest
- Huge business dependency for BAU
- Skills shortage
- Cost to change
- Business risk of old technology
- Time to market, compromised
- Intellectual Property embedded
- Escalating IT costs vs. Business expectations of reduced costs
- Etc...

Same old stuff, nothing new...



The Business won't tolerate it – cost cutting alone is no longer enough.

Coming out of recession harder and faster than the competition is a must.

...but the combination of this stuff is "new"



Less spend on "Keeping the lights on," more to Innovate to compete.

Technology innovation is now within the domain of the business – and they demand it now. It is the responsibility of IT to engineer the headroom for change.



Computer says "no" is no longer acceptable.

The appetite to stomach wholesale change or major investment is not an option, but neither is doing nothing. It's just supposed to happen.



For the CIO and IT Departments, **"how long have you got to fix this, before someone does it to you?"**

Gartner ranks "Legacy Modernization" No.4, after BI, Enterprise apps and server consolidation.



Launched

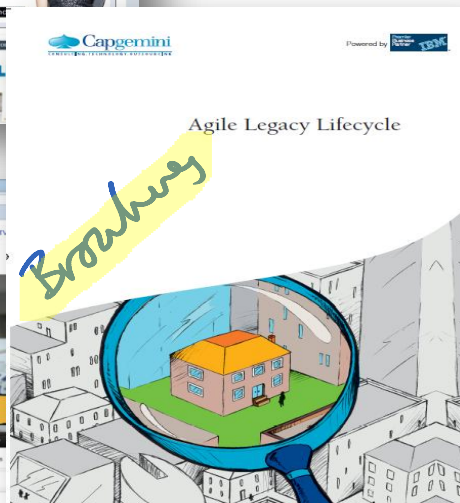
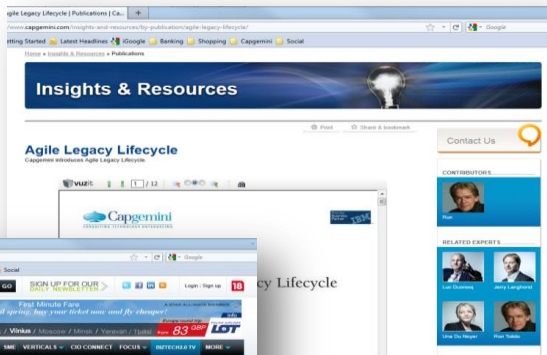
Agile Legacy Lifecycle (AL2)

Press

Videos

Youtube

Brochure





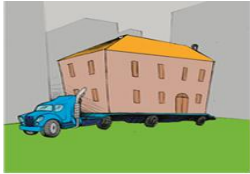
One size does ~~not~~ fit all



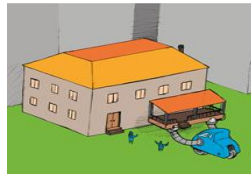
Sustain



Consolidate



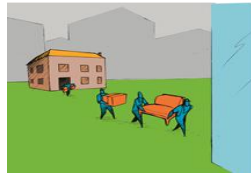
Re-platform



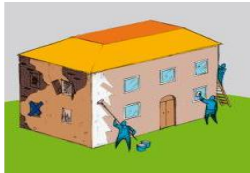
Extend / Enhance



Decommission



Migrate

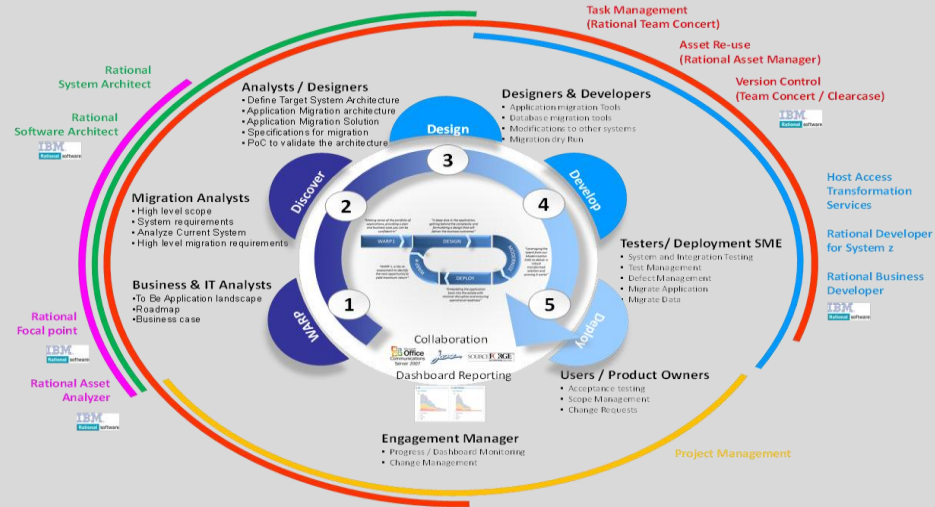


Remediate



Replace

Agile Legacy Lifecycle (AL2)



- **Rationalisation Design** (where you need to get to)
- **Transformation Plan** (how you're going to get there)
- **Business Case** (the outcomes and value for doing it)

Confidence

- ✓ See it work
- ✓ Insight
- ✓ Lifecycle

Insight in to your legacy estate

Proven migration paths

Agile techniques on legacy code bases

Modern services applied to legacy technologies

De-risk / accelerate programmes of work

“See inside Harry’s head”

- Reduce operation expenditure by up to 40%
- Significantly reduce the time to delivery
- Reduce the dependency on legacy systems and resources

Deliver the business ambition

Visit us at the Modernisation breakout area

- Meet the practitioners
- Explore how this could help you
- Understand what you can do with the investment you’ve made today in IBM technology today



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