



Elevate Your Business Insight: Measured Improvement Realized in Rational Insight

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Let's build a smarter planet.

The premiere software and product delivery event.

Agenda

- Business Challenges in Software and System Delivery

- Rational Insight

- Rational Insight Deployments
 - ▶ IBM Rational Development
 - ▶ IBM Global Business Services

- Demo
 - ▶ Rational Insight
 - ▶ Rational Executive Dashboard

- Q&A



Challenges to effective software delivery today

Complexity Challenges

- More granular service functionality in composite business applications
- Large number of projects and assets including custom, outsourced and packaged

Team Challenges

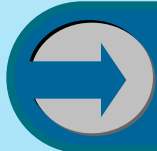
- Geographically dispersed teams that often include business partners
- Effective cross-organizational visibility and synchronization, sharing becomes an imperative

Process Challenges

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

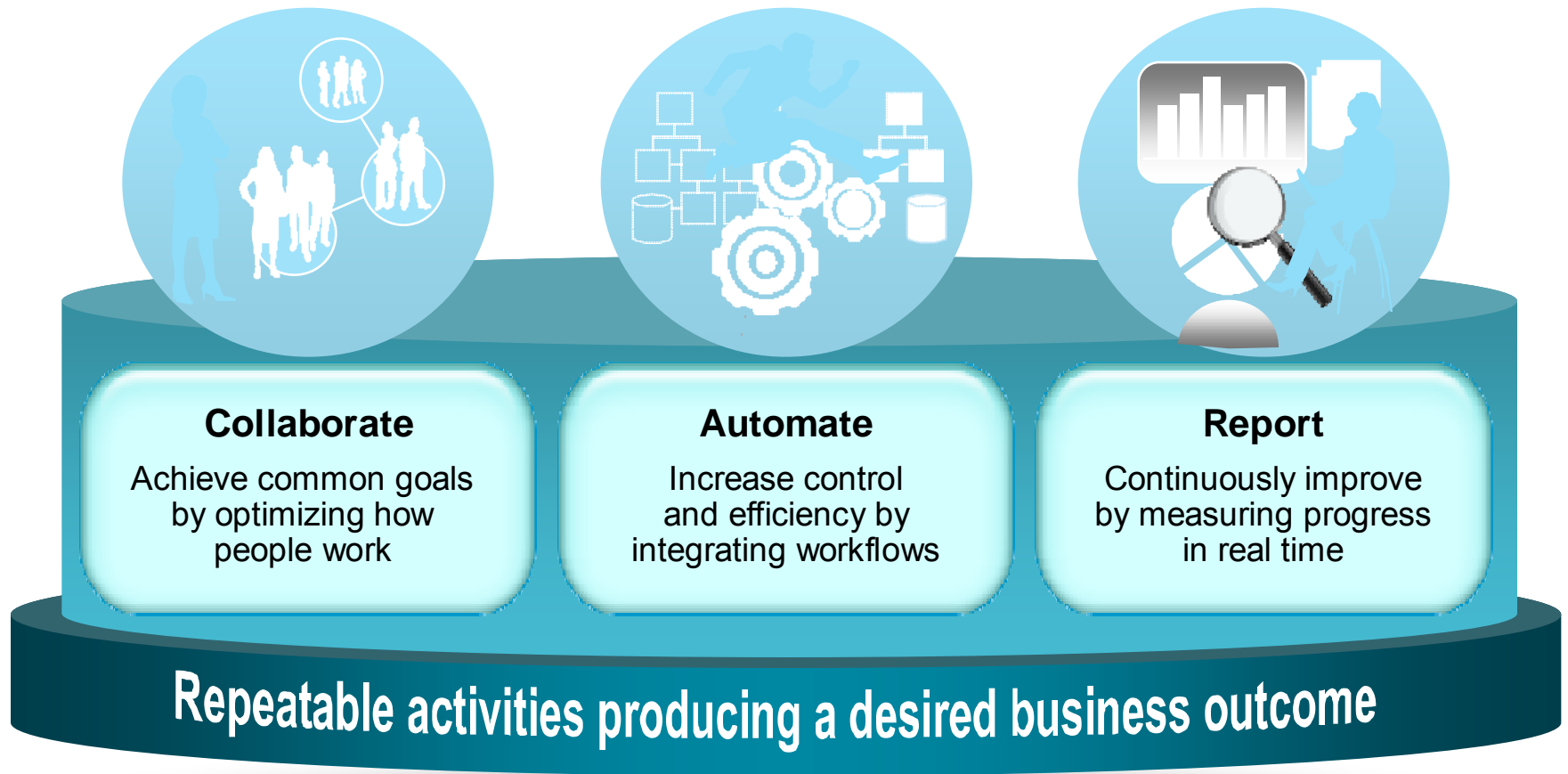
Tools Challenges

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



How do I control this to gain a competitive advantage?

Successful businesses will manage software and systems delivery as a robust business process



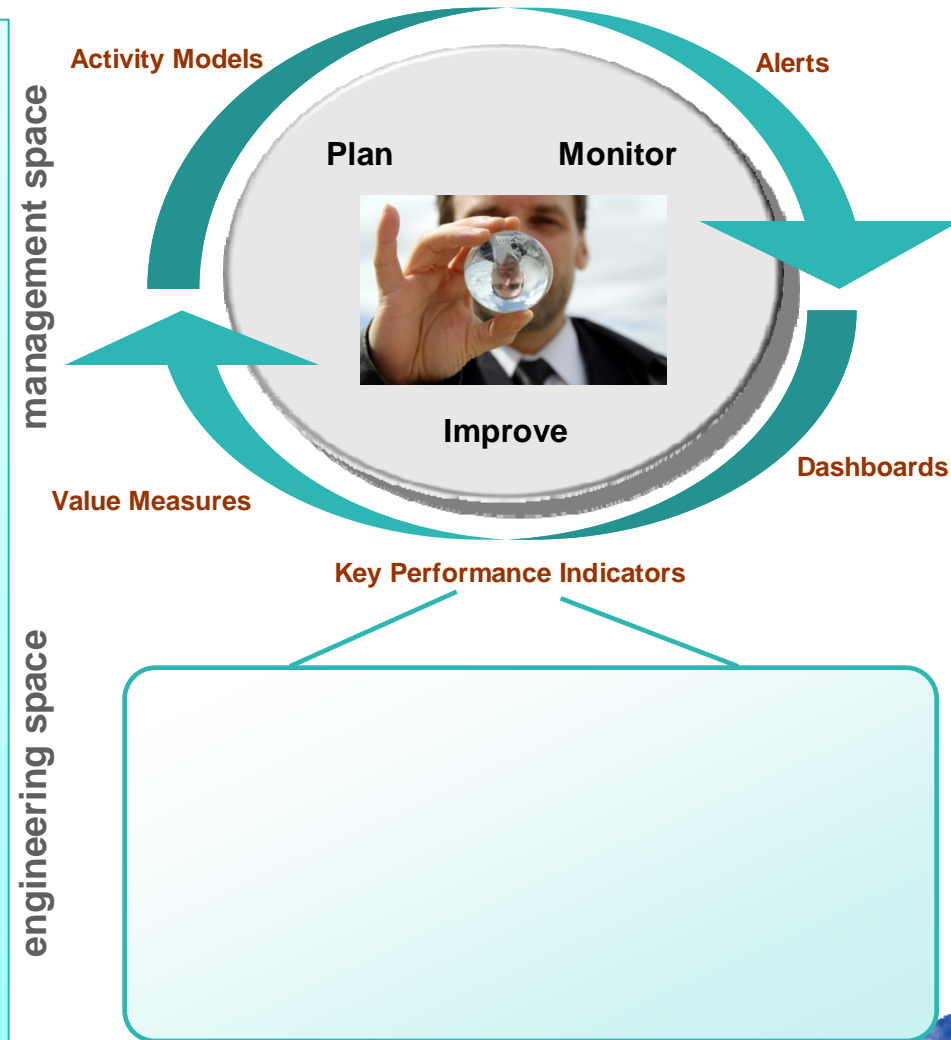
Do You Have the Information You Need to Make the Right Decisions?

- **Businesses need a mechanism to:**

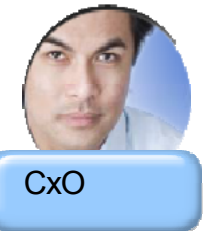
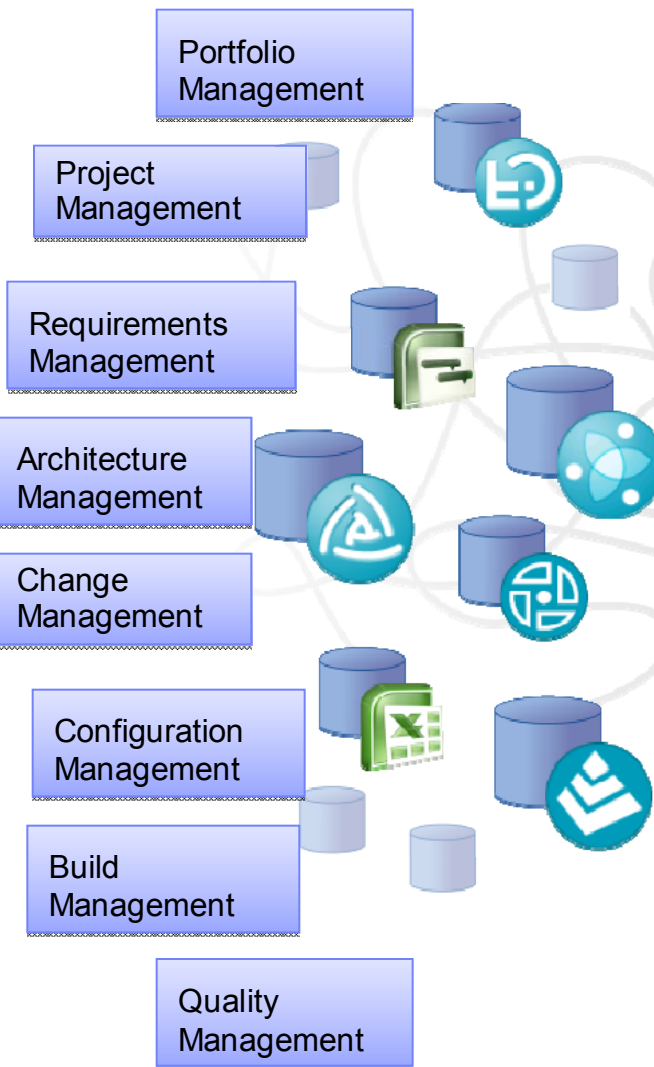
- Reduce escalating cost of information gathering
- Reduce risk by identifying trends before they become issues
- Align SSD activities with strategic and operational objectives

- **But are still struggling with:**

- Combining data from heterogeneous sources
- Managing by exception
- Analyzing actual progress against planned objectives and past performance
- Implementing proven and repeatable processes to achieve expected business results

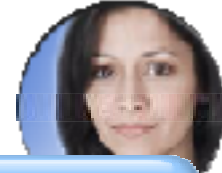


Key Business Problem: Poor Visibility into all aspects of the Software & Systems Delivery lifecycle



CxO

How do I **understand the true relevance and contribution of SSD**, and how to use it as a strategic enabler?



Process Lead

How can I **identify SSD best practice measures and processes** and adopt them?



Project Manager

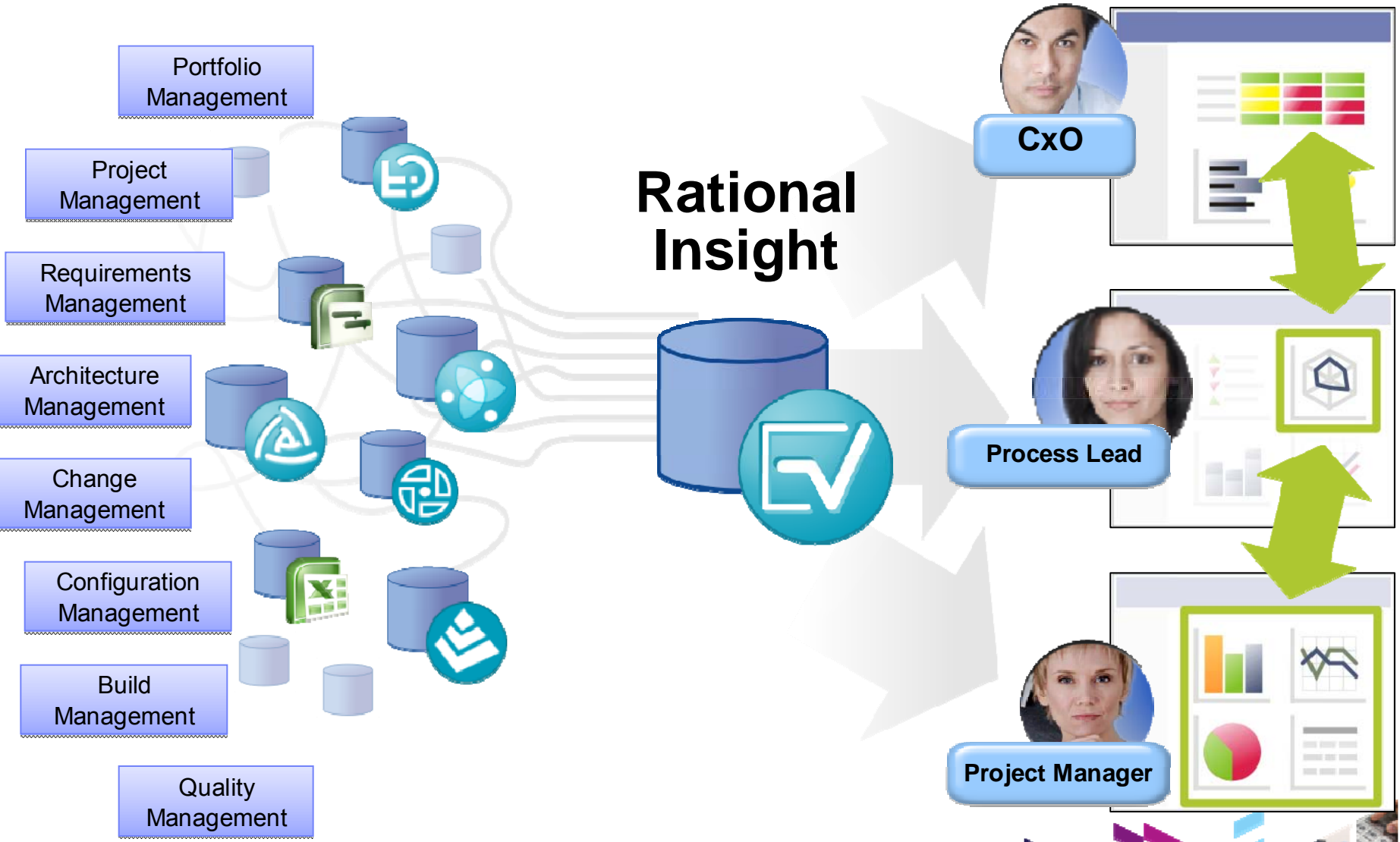
How do I **easily and quickly** measure project status and deliverable quality?

- Data can be inaccurate
- Data can be incomplete
- Reports can be inconsistent
- Difficult to map Software and Systems Delivery activities with business objectives



Rational Insight

Collaborate across disparate development artifacts



Development Intelligence

Business intelligence (BI) refers to skills, technologies, applications and practices used to help a business acquire a better understanding of its commercial context. Business intelligence may also refer to the collected information itself. BI technologies provide historical, current, and predictive views of business operations.

IBM Rational helps organizations automate, integrate and govern the business process of software and systems delivery (SSD).

Rational Insight applies Business Intelligence techniques to the business of software and systems delivery. – **Development Intelligence**



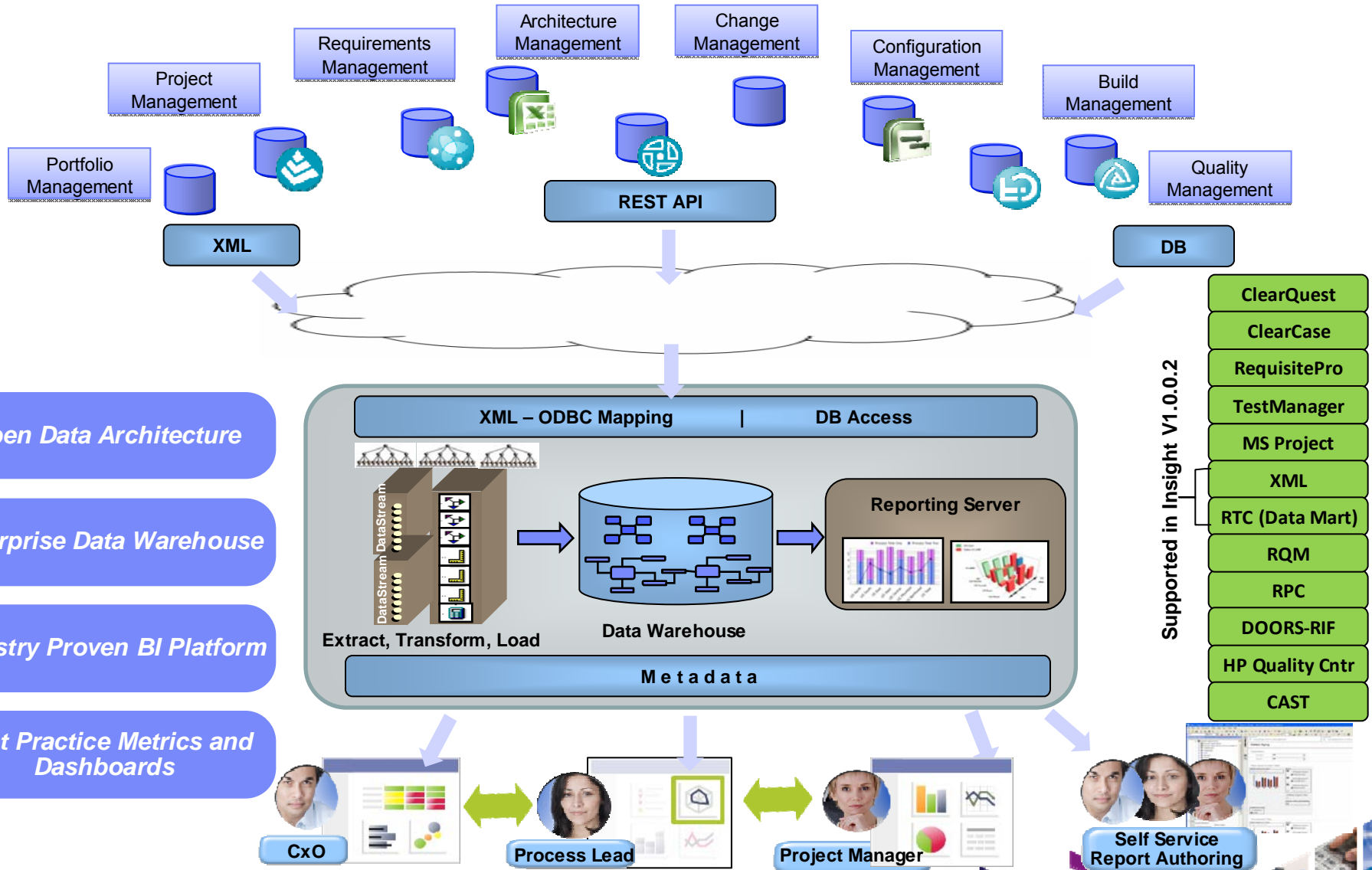
“Until now we were gathering metrics by manual methods. Rational Insight simplifies the presentation... Overall great tool to have for optimizing project efforts and giving management a birds eye view of the project performance at all stages.”



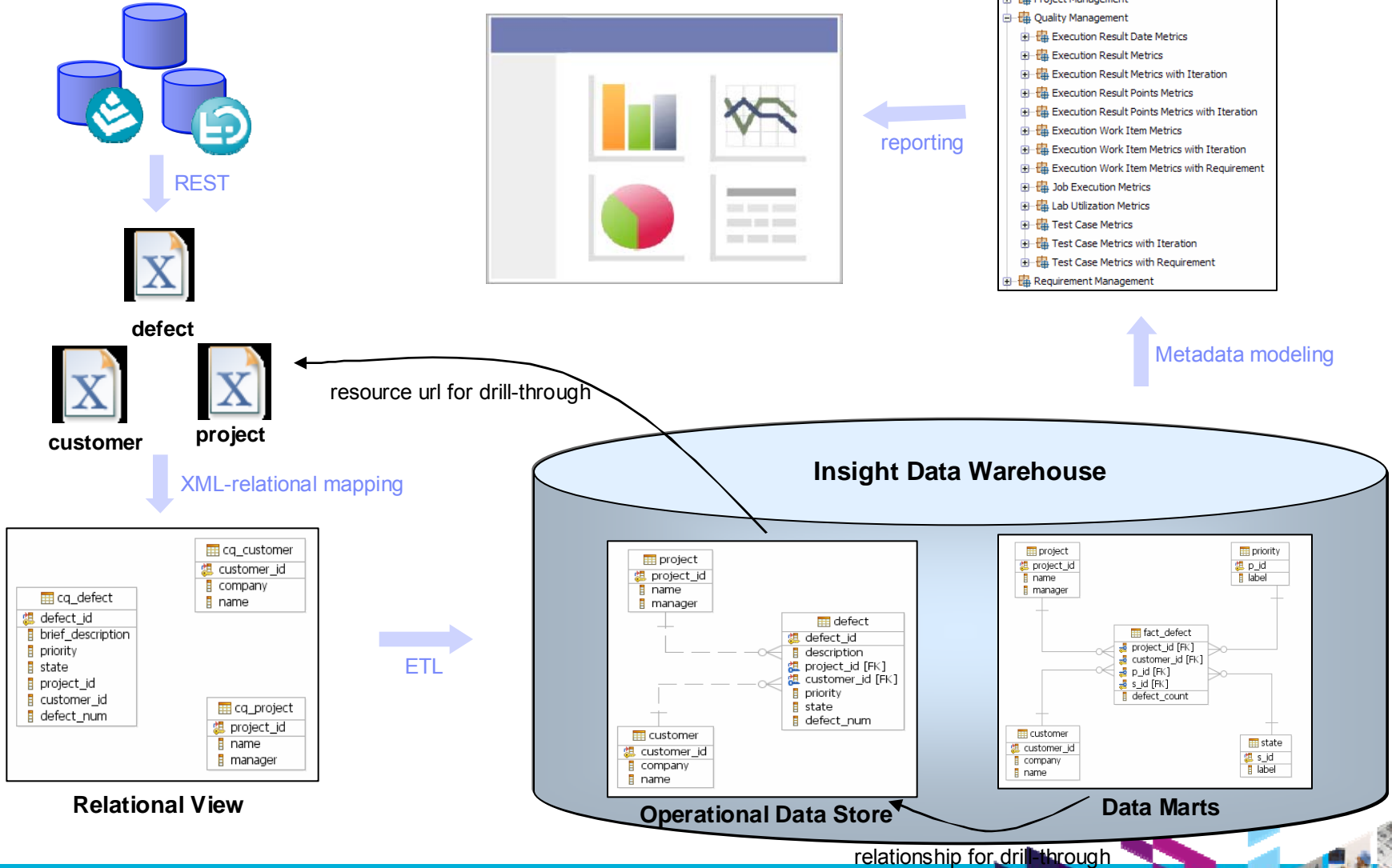
“Through the automation and dashboard capabilities in Insight, our team is saving over 40 hours a month on our reporting activities. We also can offer new capabilities such as “on-demand” dashboards which would have been very labor intensive to do without Insight”



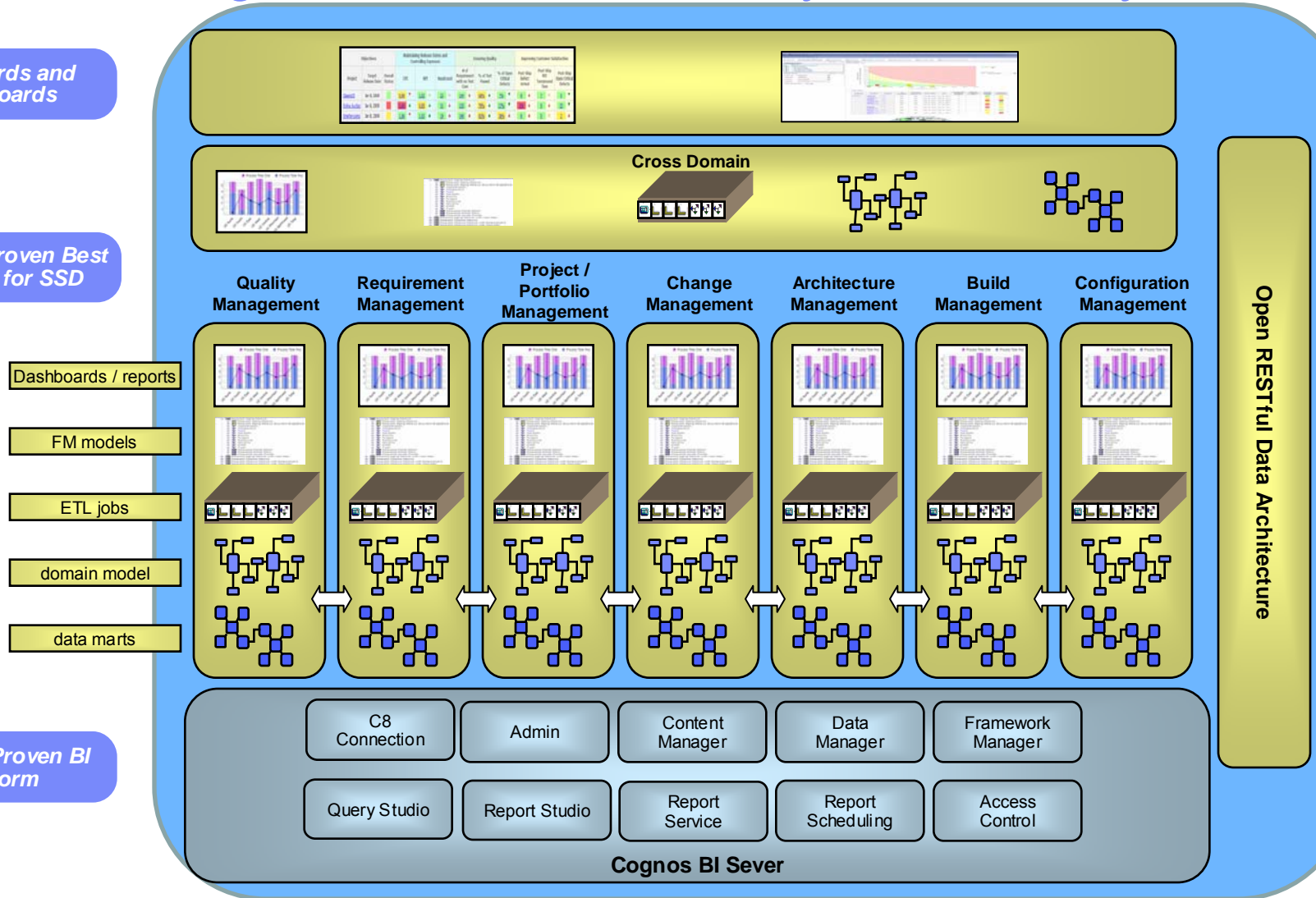
Rational Insight Architecture



Rational Insight Data Architecture

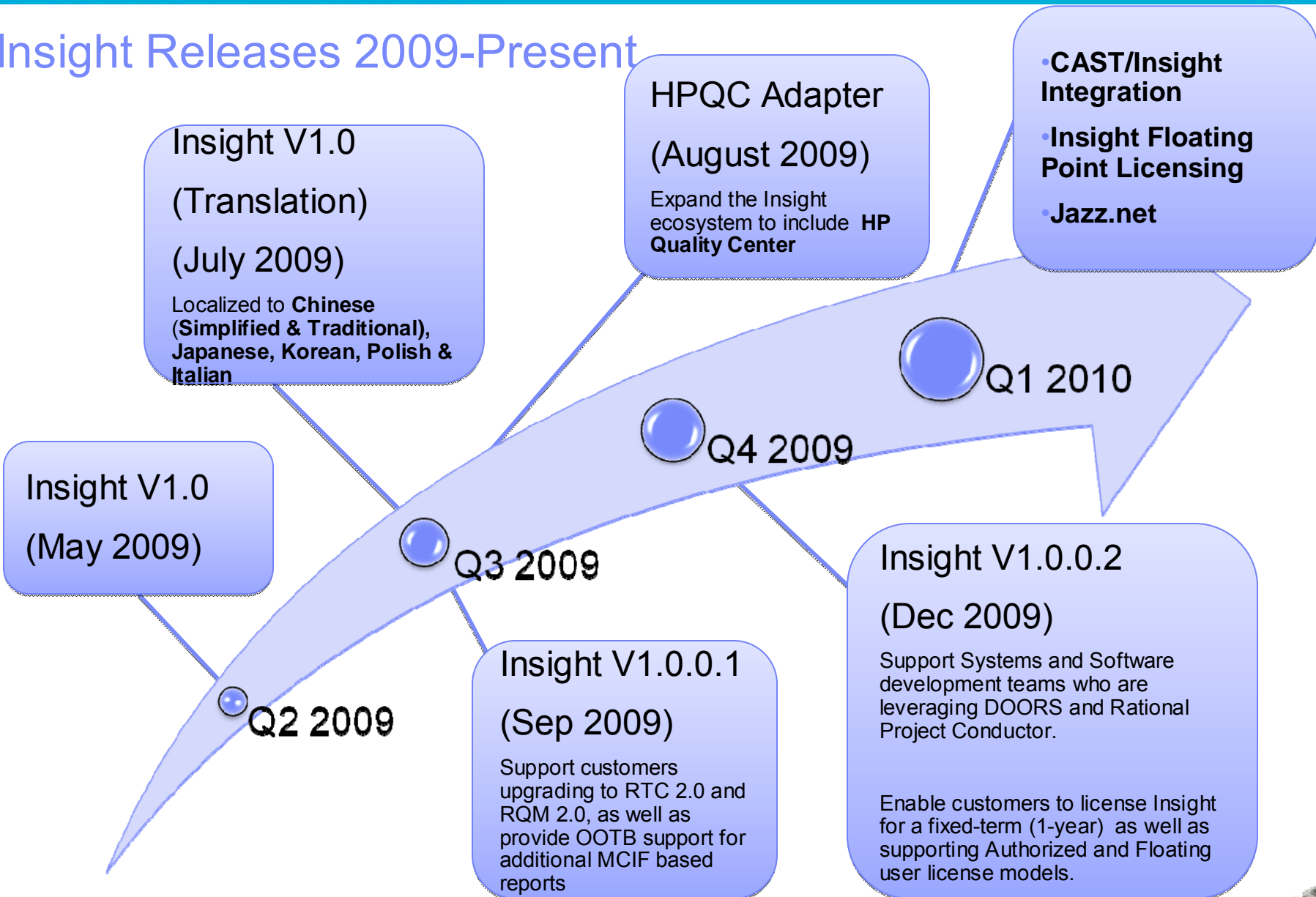


Business Intelligence in Software and System Delivery

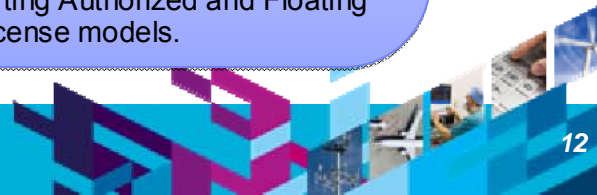


Rational Insight

Insight Releases 2009-Present



* All future release dates and content subject to change...



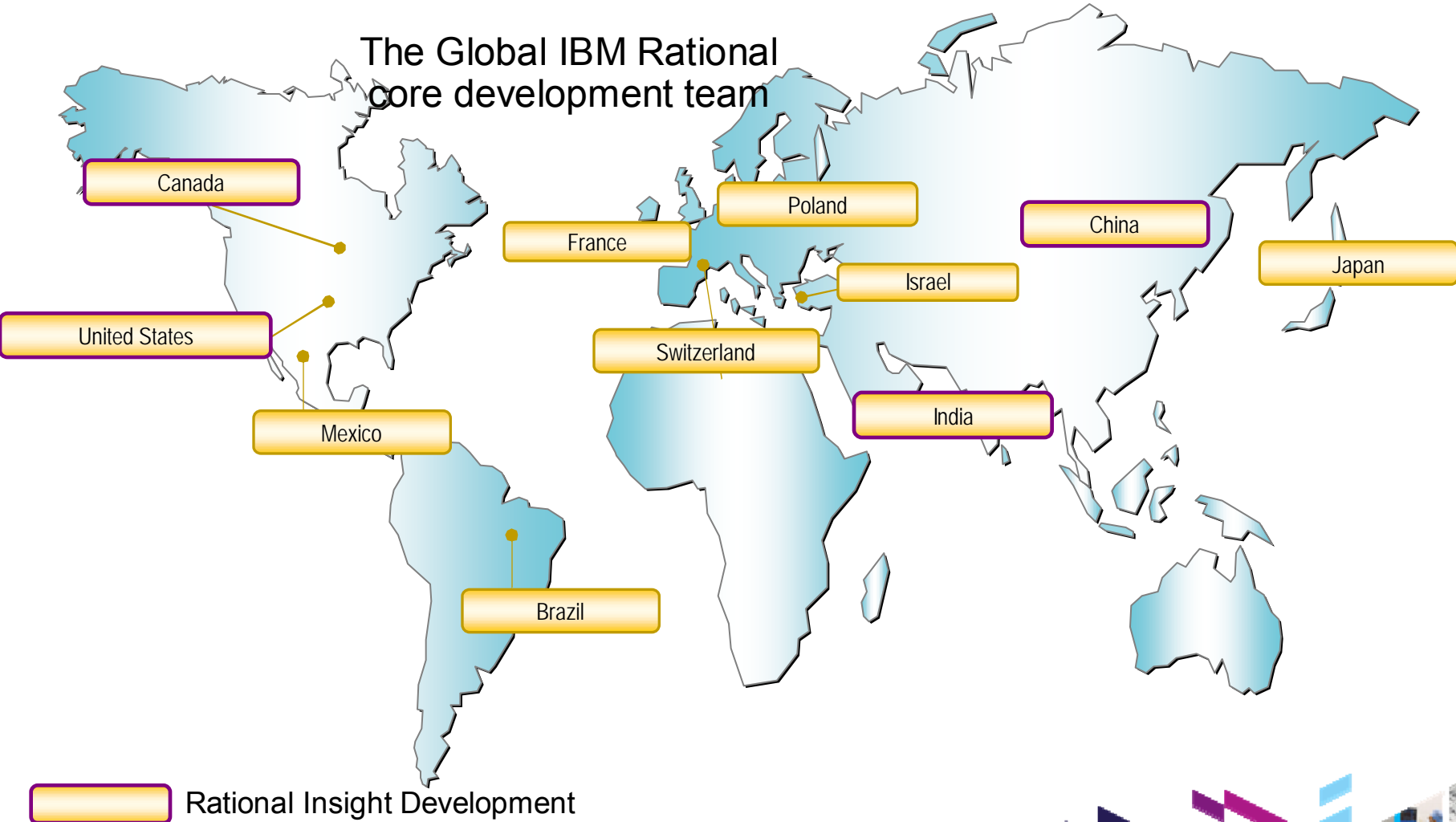
Rational Insight Deployments

- IBM Rational Development
- IBM Global Business Services



How does IBM Rational address measurement challenges?

The Global IBM Rational core development team



Objectives of the Rational Executive Dashboard

- Greater consistency in reporting and measurement
 - ▶ Top-down view of projects across Rational brand, based on bottom-up data (drill-down into details)
 - ▶ Assess current health of each project across dimensions that span the organization
 - ▶ Replace subjective measurement and reporting with objective on-line scorecards, dashboards, and KPIs

- Improve ability to make decisions faster and more accurately
 - ▶ Less time spent on non-value-add tasks, and higher percentage of overall time spent on value-tasks
 - ▶ Enable decisions by data mining for predictions/projects and suggesting corrective actions
 - ▶ Design in expert comment and qualitative input (equally respect the subjective and objective data)

- Improve Rational product design, usability and customer stories by drinking our own champagne
 - ▶ Integrate measured improvement principles and metrics
 - ▶ Demonstrate incremental improvements each month
 - ▶ Share the knowledge we gain with our customers and field



Bringing it together in a Discriminating System
To Measure, Assess and Remove Information Blind Spots

Improving



**Where You
Should Be!**

Assessing

Where You Are

- Productivity Rates
- Quality Levels

Why You Are

- Process Assess
- Product Health

Quantitative and Qualitative Data

Software Lifecycle Artifacts

- Change & Configuration Management
- Rational Definition & Management
- Quality Management
- Build & Release Management
- Architecture Management
- Security & Compliance

3rd Party Data Artifacts

- Project Data
- Headcount & Financials
- Sales & Pipeline
- Customer Support
- Manual Data

Executive Dashboard – Sample Reports

Reports based on metrics

Metrics computed using Insight data warehouse artifacts



Viewer
Back to default entry

Improve Health

- ⌵ Show Prompts
- ⌵ Show Comments
- ⌵ Show Related Best Practices

⌵ Top ⬆ Page up ⬇ Page down ⌵ Bottom

Segment	Product	Release	Overall Release Health	Business Health (Release)	Perceived Quality (Release)	Development Health (Release)	Development Quality (Release)	Comment
Solutions	CALM for Systems	1.0	🟢 ⬇	🟡 ⬇	🟢 ⬇	🟡 ⬇	🟡 ⬇	
	Integrated Product Change Management	1.0	🟢 ▲	🟡 ⬇	🟢 ▲	🟡 ⬇	🟡 ⬇	
		2.0	🟡 ▲	🔴 ⬇	🟢 ▲	🟡 ⬇	🟡 ⬇	
	Model Driven System Development	1.0	🟢 ▲	🟡 ⬇	🟢 ▲	🟡 ⬇	🟡 ⬇	
		1.1	🟢 ▲	🟡 ⬇	🟢 ▲	🟡 ⬇	🟡 ⬇	
		1.2	🔴 ⬇	🔴 ⬇	🔴 ⬇	🟡 ⬇	🟡 ⬇	
	Product Lifecycle Engineering	1.0	🟡 ▲	🟡 ▲	🔴 ⬇	🟡 ⬇	🟡 ⬇	
	Requirements Engineering	1.0	🟢 ▲	🟢 ⬇	🟢 ▲	🟡 ⬇	🟡 ⬇	
		1.1	🟡 ▲	🔴 ⬇	🟢 ▲	🟡 ⬇	🟡 ⬇	
	SDS for Private Cloud	1.0	🟡 ⬇	🟡 ⬇	🟡 ⬇	🟡 ⬇	🟡 ⬇	
SDS for Shared Private Cloud	1.0	🟡 ▼	🟡 ⬇	🟡 ⬇	🟡 ⬇	🟡 ⬇		

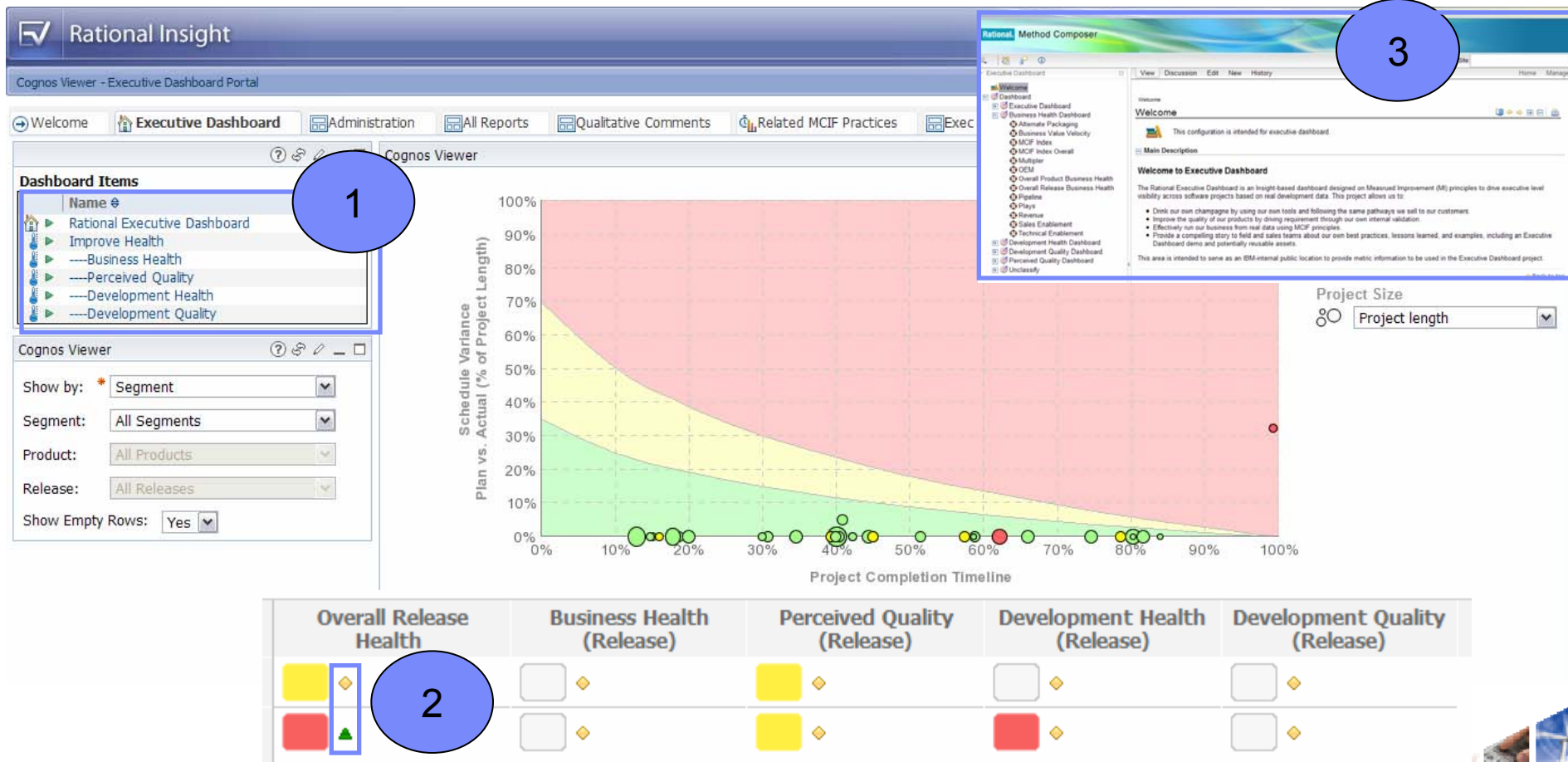
Metrics have:

- Color (Red, yellow green)
- Score (0-100%)
- Value (varies by metric)
- Trend data (history)



Measured Improvement Realized in Executive Dashboard

1. ASSESS: Where are we now? (Against standard business/operational objectives)
2. STEER: Where are we going? (Based on trending data)
3. ACT: How do we adjust course? (Suggested practices)



Rational Insight Deployments

- IBM Rational Development
- IBM Global Business Services



Who are we...

IBM Global Business Services, Application Services, support the IBM portfolio

- 
- Manage a \$750M+ portfolio with diverse industry and technical skills
 - Deliver large complex projects by providing end-to-end management, business consulting, application development and maintenance, and infrastructure
 - Support a global portfolio of > 2300 applications with 6.2 million function points
 - Over 7500 team members worldwide



Our Vision for using Rational Insight

Executive Level Dashboard for improved Business Analytics

Executive Dashboards

- Active projects & deployment statistics
- Community metrics and trends
- Financial and resource analytics

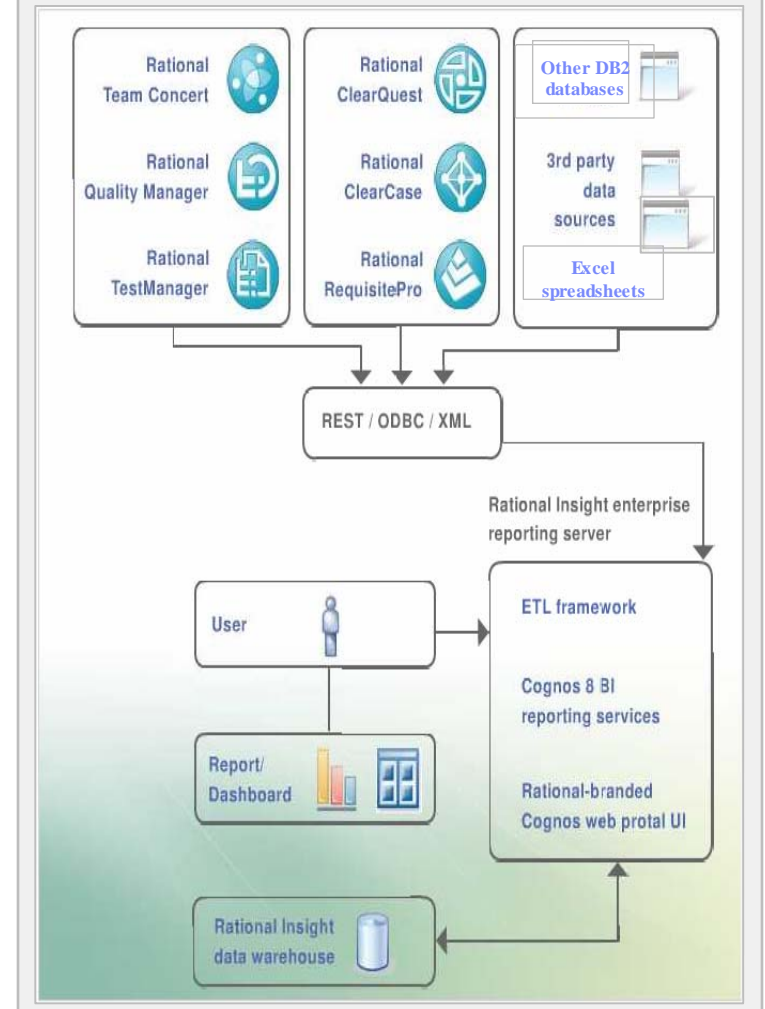
Project Dashboards

Overall project health, requirements scope, delivery and test status

Drill-down

Project Dashboards will be enabled via drill-down from executive dashboard

Environment Context Diagram



Existing Executive Reports Manually Created

Monthly Operational Reviews (MORs) included metrics on

- Project Pipeline
- Project Status
- Project Deployments
- Project Finances
- Service Level Agreements (SLAs)
- Analytics on Strategic Initiatives

Project Profile by Deployment Date																	Total Active		
By Deploy Date	J	F	M	A	M	J	J	A	S	O	N	D	1Q10	2Q10	3Q10	4Q10	Later	TBD	
Small	2	5	3	3	2	2	2	5		2	3	7	11	1	1	1		1	22
Large	1	2		2			1	2	1	7	1	2	1	1	1		1		7
Complex		2	1	2	1		1			1			1	1	2			1	4
Total	3	9	4	7	3	2	4	7	1	10	4	9	13	3	4	1	1	2	33

Data gathered manually from multiple sources

- Transcribed to PowerPoint charts
- Time consuming
- Mostly tabular reports

Delivery Excellence Metrics		FY 2009	1Q 2009	2Q 2009	3Q 2009	4Q 2009
DE Metrics (actual)						
Red project \$ as % of portfo	<=2%	0%	0%	0%	0%	0%
On-Cost SLA - 12-mo, ytd	0.9-1.1	0.991	0.965	0.982	1.019	1.009
On-Schedule SLA - 12-mo,	0.925-1.075	1.000	1.001	1.000	1.000	0.993
Quality SLA - 12 mo, ytd	< 5 sev 1/2 p/1000	1.220	2.338	0.778	0.000	1.399
COSCard (actual)						
Final Review avg	>=3.8	4.32	4.57	4.0	4.24	4.56
% of Final Reviews >= 4.0	>=50%	86.40%	100%	75%	83.3%	100%
% of Final Reviews <3.0	<=10%	4.54%	0%	0%	5.6%	0%
Audit Metrics (actual)						
KCO self-assessments completed		11 of 11	11 of 11	N/A	N/A	0
unresolved issues		0 of 54	0 of 54	N/A	N/A	15 of 18



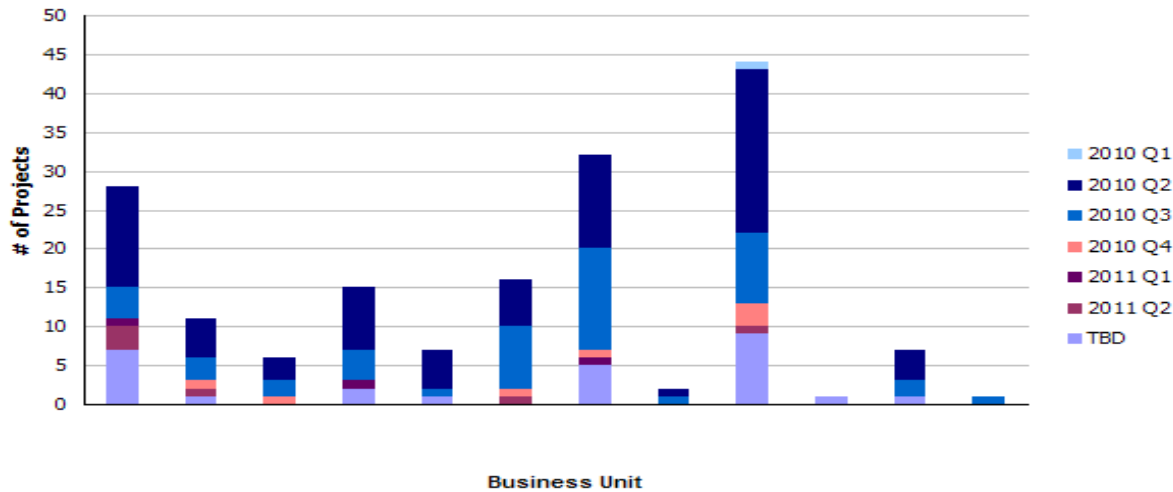
Example Dashboards

Old Project Pipeline by Month from .ppt :

By Deploy Date	J	F	M	A	M	J	J	A	S	O	N	D	1Q11	2Q11	3Q11	4Q11	Later	tbd	Total Active
Small	4	10					1	1	1			1						1	19
Large	1	1		1	2				1				1						7
Complex		1						2	1										4
Total	5	12	0	1	2	0	1	3	3	0	0	1	1					1	30

Annotations: 5 (under J), 23 (under J-J), 2 (under 3Q11-4Q11)

New Project Pipeline views in INSIGHT:



Drill Down to tabular details:

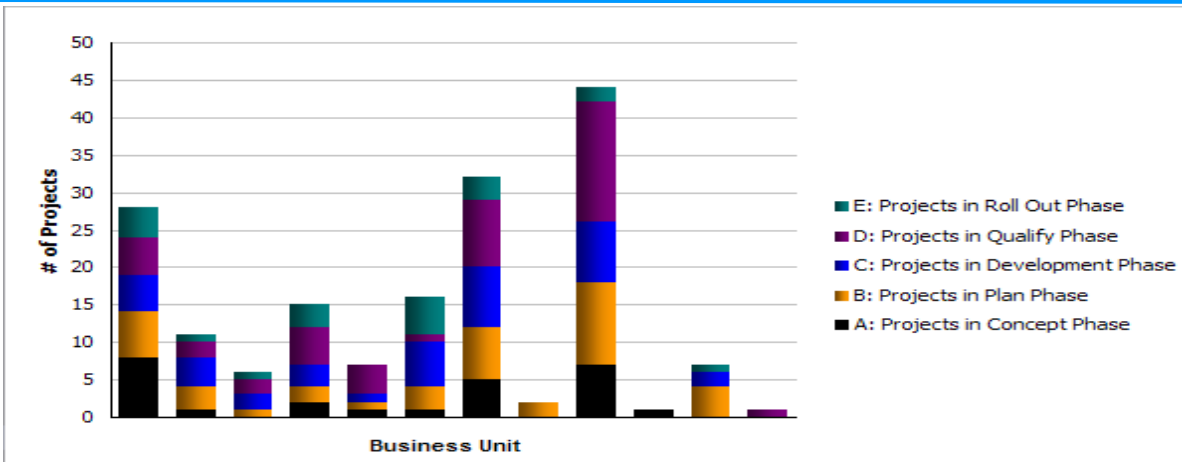
	2010							2011				Business Unit Total
	2010 Q2		2010 Q3		2010 Q4		Total	2011 Q2	Total	TBD	Total	
	May	Jun	Jul	Aug	Nov	Dec		Apr		TBD		
Complex	1	1	1	2	1		6					6
Large	1						1	1	1	1	1	3
Small	3	1	4	3		1	12			6	6	18
TBD										2	2	2
Total(PROJECT_SIZE)	5	2	5	5	1	1	19	1	1	9	9	29

Example Dashboards

Old Project Pipeline by Phase from .ppt :

Project Profile by Phase												
Projects in pre-Concept	Projects in Concept	Projects in Plan	Projects in Development			Projects in Quality			Projects in Roll Out			Total active thru Roll out
			Small	Large	Complex	Small	Large	Complex	Small	Large	Complex	
		6	4	4	3	8	1	0	3	1	0	30

New Project Pipeline views:



Mouse over on column provides details by phase

Drill Down to Table:

AS Delivery Excellence Deployment Pipeline by Phase			
Business Unit	Project Profile by Phase	Project Size	# of Projects
	A: Projects in Concept Phase	Small	2
	A: Projects in Concept Phase	TBD	2
	B: Projects in Plan Phase	Complex	1
	B: Projects in Plan Phase	Large	1
	B: Projects in Plan Phase	Small	1
	C: Projects in Development Phase	Complex	1
	C: Projects in Development Phase	Large	2
	C: Projects in Development Phase	Small	5
	D: Projects in Quality Phase	Complex	2
	D: Projects in Quality Phase	Large	2
	D: Projects in Quality Phase	Small	6
	E: Projects in Roll Out Phase	Large	1
	E: Projects in Roll Out Phase	Small	3
Summary			29

Drill Down to Project Details:

Delivery Excellence					
Project Portfolio Detail					
Project	Current Month Status Color	Rollout Phase Planned End Date	DPE	Planned Project Hours	Community
Project A	Green	Apr 10, 2010	Manager	1,716	Community
Project C	Green	Apr 17, 2010	Manager	1,745	Community
Project D	Green	Jan 29, 2010	Manager	6,855	Community
Project F	Green	Jun 22, 2010	Manager	8,773	Community
Project G	Yellow	Feb 22, 2010	Manager	3,017	Community
Project H	Green	Dec 17, 2010	Manager	2,766	Community
Summary				24,872	

Value and Savings

- Data accuracy
 - Eliminated manual data transcription.

- Time savings
 - Reduced cycle time from data availability to visibility in Insight.
 - Reduced the time required to prepare charts.
 - Reduced cost.
 - Allowed sufficient time for data analysis.

- Broader Data Views
 - Previously, only data from one area was visible.
 - Now, the data for all areas is available in one view.

- Decisions can be made with real time data

- Very well accepted by executives
 - Easier comparison of data
 - Improved decision making based upon more accurate data
 - Formulate action plans using timely data





1. Rational Insight

2. Rational Executive Dashboard



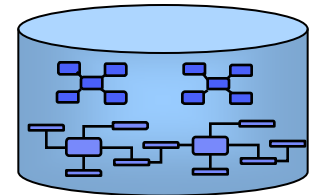
Rational Insight

Open Data Architecture

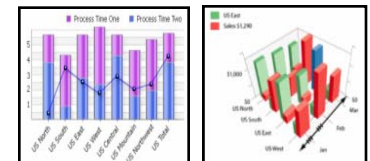
Enterprise Data Warehouse

Industry Proven BI Platform

Best Practice Metrics and Dashboards



Cognos.
software





Key Business Scenarios/User Stories/Use cases

- Raise enterprise visibility and transparency to reduce cost and risk, and make the right decision at the right time

- Measures the effectiveness of processes and practices to improve organizational and business outcomes

- Gain insight into development projects which span organizational and geographic boundaries

On-Demand Dashboards

Improved alignment of business objectives and SSD investments



CxO

Measured Improvement to SSD capability



Process Lead

Objective and accurate Project Level health and status



Project Manager

Questions





Learn more at:

- [IBM Rational software](#)
- [Rational launch announcements](#)
- [Rational Software Delivery Platform](#)
- [Accelerate change & delivery](#)
- [Deliver enduring quality](#)
- [Enable enterprise modernization](#)
- [Ensure Web security & compliance](#)
- [Improve project success](#)
- [Manage architecture](#)
- [Manage evolving requirements](#)
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- [Rational trial downloads](#)
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