



Measure Your Results by Applying Measured Capability Improvement Framework and Rational Insight

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Rational. software

PPM06





- Stop guessing, start measuring
- Introducing IBM Rational Insight
- Demo
- Parting thoughts

















Challenges to the effective delivery of software A history of cost overruns, schedule slips and quality issues



"34% of software projects are deemed successful costing \$300B annually"



"49% of budgets suffer overruns and 62% fail to meet their scheduled"



"Only 22% of executives felt that their IT and business strategy were tightly integrated"



"50% of outsourced projects are expected to under perform"



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

Growing focus on business outcomes

"Business leaders and CIOs are under pressure to enable their teams to become catalysts for change. However, change is outpacing their ability to deliver.

They are reorienting their teams to focus on ROI and quantified business outcomes and to mitigate risk and reduce costs."

- IBM CIO Survey, 2008

















Software Measurement Status - Today

Fortune 500 companies with productivity measures: 30%

Fortune 500 companies with quality measures: 45%

Fortune 500 companies with complete measures: 15%

Fortune 500 companies with missing measures: 85%

Number of software measurement personnel 5,500

Number of software projects measured: 160,000

Number of software projects <u>not</u> measured 50,000,000

- Capers Jones (2009)











Does It Help to Measure?

Companies that measure: Companies that don't:

On-time projects: 75% On-time projects: 45%

Late projects: 20% Late projects: 40%

Cancelled projects: 5% Cancelled projects: 15%

Defect removal: > 95% Defect removal: Unknown

Cost estimates: Accurate Cost estimates: Optimistic

User satisfaction: High User satisfaction: Low

Software status: High Software status: Low

Staff morale: High Staff morale: Low

- Capers Jones (2009)













What is the business impact of lacking measurements?



- Increased delivery risk
 - You cannot improve what you cannot measure
- Increased development costs
 - Effecting the overall company 'bottom line'
- Poor and unpredictable quality
 - Effecting the business reputation
- Customer dissatisfaction
 - Effecting future and current business

Stop guessing, start measuring















What is the business impact of lacking measurements?

Business Level Metrics

- Usage: Provide specific information that has impact on the business mission
- Audience: CxO
- Example: Cost, Revenue, Time-to-ROI, Key Performance Indicator (KPI) specific to Lines of Business

Operational Level Metrics

- Usage: Measure and manage improvements to IT development performance
- Audience: VP of development, Development Management, Operations Management
- Example: Productivity measurements, Quality measurements, Time-to-Value measurements

Practice Level Metrics

- Usage: 1) Demonstrate the level of practice adoption, 2) Track and monitor progress
- ▶ Audience: Project manager, team lead and team members
- Example: Iteration velocity, project backlog, defect density, growth chart, Schedule Performance Indicator (SPI), Cost Performance Indicator (CPI)





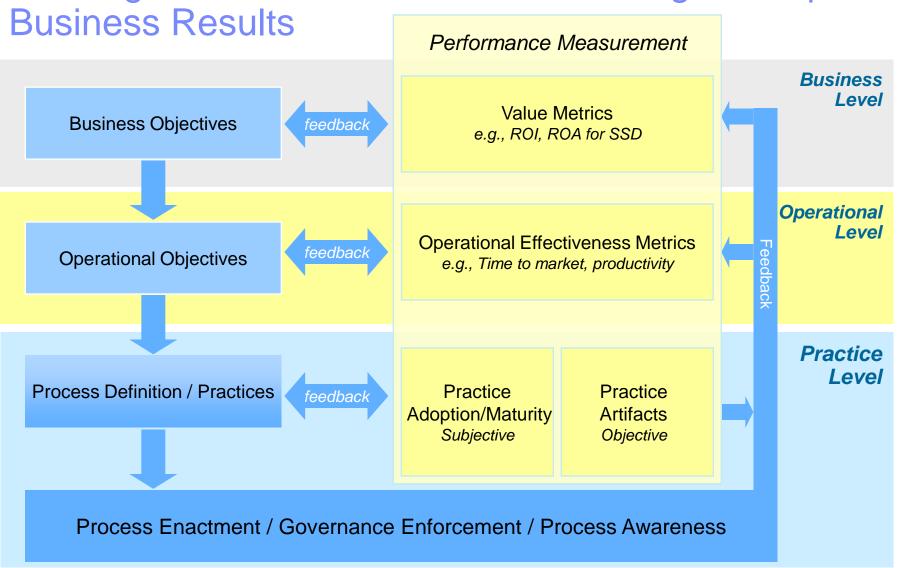








Leverage a Control Framework to Manage to Expected















Measured Capability Improvement Framework (MCIF) to Software Excellence

- A phased approach that helps teams
 - Adopt an incremental, measured approach to transformation
 - Focus on the core practices that matter most
 - Accelerate adoption through out-ofthe-box assets
 - Articulate capability improvements in terms of business value
 - Support any method
 - Optimized for Agile practices



Empower teams to measure, manage and incrementally improve their software delivery capability.













Leverage Assets to Incrementally Define the Control Framework

ENHANCED

NEW

Performance Measurement Value Metrics **Business Objectives** feedback e.g., ROI, ROA for SSD Phase 1: Phase 4: Rational Exec Business Insight Value Workshop **Operational Effectiveness Metrics** feedback **Operational Objectives** e.g., Time to market, productivity Phase 2: Health Assessment Phase 3-4: Self-Check Phase 3: Rational **Process Definition Practice Practice Method Composer** Adoption/Maturity **Artifacts**

Business

Level

erational Level

Practice Level

Phase 3:

Rapid Deployment Package

Process Enactment / Governance Enforcement / Process Awareness













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Measure and manage software delivery performance

Deliver performance and predictability with integrated lifecycle intelligence

- Measure process and project outcomes
 - Real-time intelligence based on IT industry best-practice metrics, dashboards and models
- Inform decisions and drill into issues
 - Alerts and automated analysis focuses owner to take action on root causes, before mitigation costs balloon 1000%
- Take real-time action on relevant data
 - Proven BI-backbone automates collection and analysis to improve lifecycle productivity 10-15%



"Organisations exercising world-class performance management practices enjoy a 2.4 times market returns of typical companies"

BusinessWeek Study: The Payoff of Pervasive Performance Management









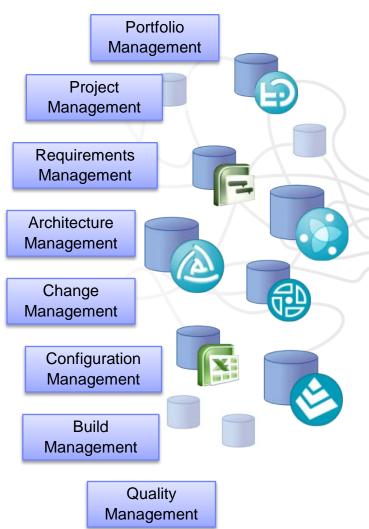








Collaborate across disparate development artifacts
In the context of business objectives



Rational Insight





CxO

Project Manager















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Confidently deliver incremental improvement

Drive necessary change at lower cost with a proven, repeatable approach

- Reach goals and maximize value with improvement roadmap
 - Identify customer business challenge and align to operational objectives
 - Apply proven best practice to achieve objectives
- Drive continuous and measurable improvement
 - End-to-end lifecycle framework drives 15-25% productivity improvement of selected priorities
- Check results and iterate as needed
 - Progress checkpoints and data analysis determines results and improvements still needed



"IBM's advice was not 'product centric' but rather focused on the business outcomes for Qantas and how we could go about achieving those."



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Measured Capability Improvement Framework

Brad Tate, Manager Enterprise Solutions

Qantas















Additional MCIF and Rational Insight Resources

- MCIF on IBM.COM http://www.ibm.com/software/rational/mcif
- Insight on IBM.COM <u>http://www-01.ibm.com/software/rational/products/insight</u>
- Executive Dashboard on Jazz.net
 https://jazz.net/projects/executive-dashboard/
- Self-Check article on developerWorks
 http://www.ibm.com/developerworks/rational/library/edge/08/may08
 /kroll_krebs/index.html
- RMC 7.5 Practices on developerWorks
 http://www.ibm.com/developerworks/rational/practices/

































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