

IBM Software Universe

Smarter Businesses, Smarter Industries.

8th March 2011, Pan Pacific, Dhaka.

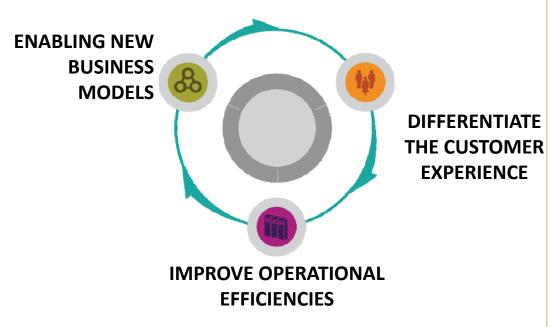


Effective Software Delivery for Telecom

Senthilkumar Samidurai Enterprise Architecture Lead, Rational Software IBM India/ SA

Smarter Telecom addresses three key issues





- IBM Telecom Frameworks: Bridging the gap between business & IT
- Data Management for Telecom
- Networks: Fault and Performance Management
- **DIFFERENTIATE** Effective Software Delivery for Telecom
 - Access the information you need anytime, anywhere
 - Optimizing Business Processes using Filenet BPM
 - Customer Churn & Insight for Telecommunications
 - Dynamic Business Process
 Management for CSPs

Today's Business Challenges



Economic Issues

- Core product (Voice) is being commoditized
- Cost / complexity of new services

Widening Field of Competitors

- New market entrants from other industries
- Convergence Is spawning "Telemedia" Industry



Defend Market Share and Grow New Revenues

- Quickly / cost effectively roll out new products
- Move to lower-cost IP networks while maintaining service quality, brand image and profitability

Subscriber Expectations

- Demand for multimedia, services and content
- Quick to abandon underperforming services

CEO Business Model Question

What are my differentiating capabilities and new growth platforms?

The communications service provider operating model can be described by its major components which can in turn be selected to drive strategic differentiation and growth:

Develop New Markets and **Products**

New Product **Marketing**

Acquire and Manage Customers

Management and Care

Sales

Billing and

Provide Network Services

Provisioning

Service Assurance Network

Resource

Manage **Enterprise**

Business Management





Having made major investments in next-generation network and IT systems, now create new revenue streams by rapidly delivering innovative new products, offering an enhanced user experience



Points of pain seen across the Communications Industry



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



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



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



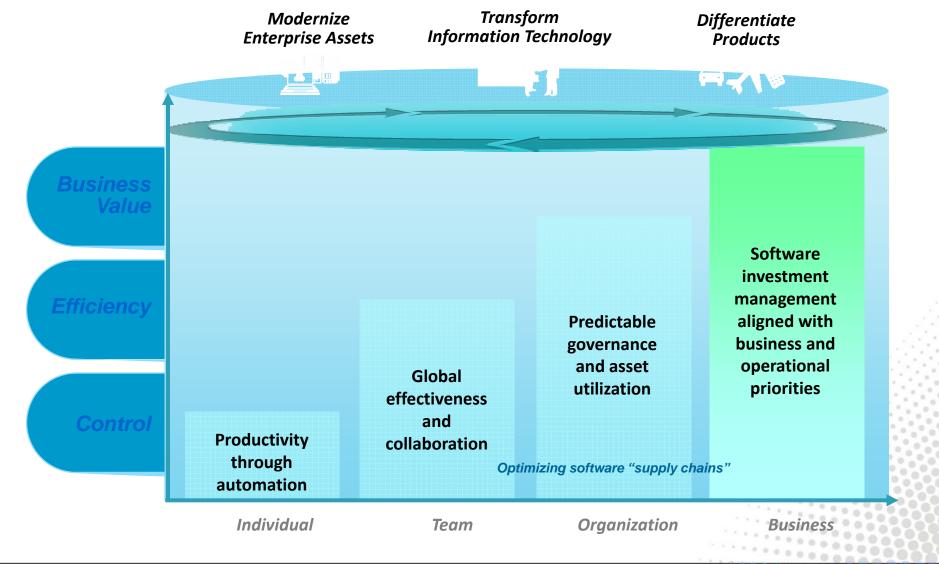
"49% of budgets suffer overruns and62% fail to meet their scheduled"

Growing focus on business outcomes

Product Ideation → Product Concept → Product Launch → Profitable Operations takes too long, costs too much and lacks sufficient quality

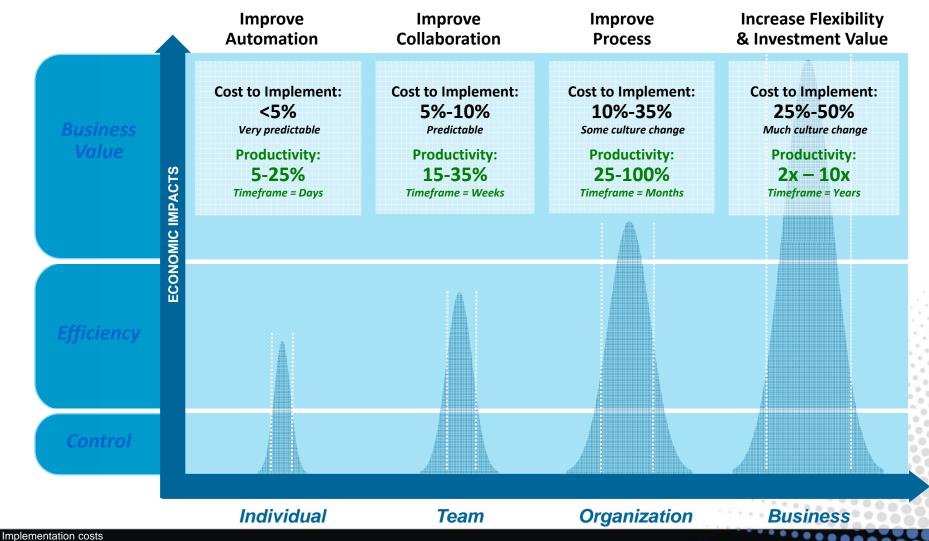
A maturing approach to managing software delivery





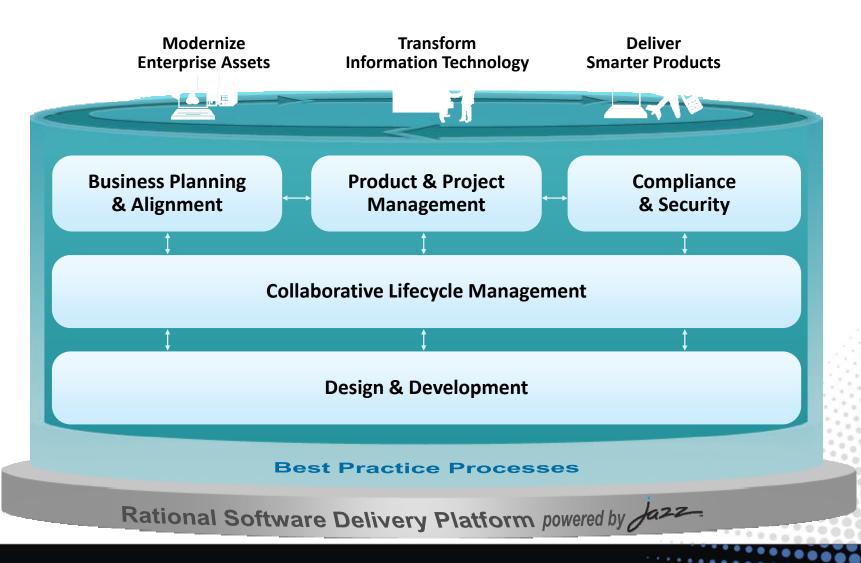
Invest across the spectrum of improvement to manage risks and optimize business outcomes





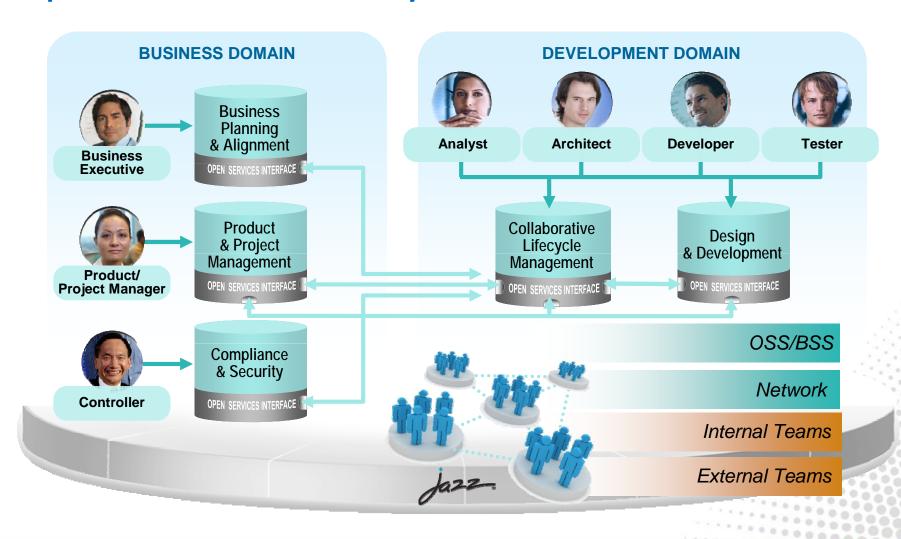
Enabled by the Rational Software Delivery Platform & Ecosystem





Orchestrated in a workflow to dramatically improve the process of software delivery





IBM is a leader in the industry's foremost standards body, the TeleManagement Forum (TMF)

The TeleManagement Forum (TM Forum) provides leadership, strategic guidance, and practical solutions to improve the management and operation of information and communications services. Its standards are being adopted by the UN body, the International Telecommunications Union (ITU). The TMF work products include the eTOM (enhanced Telecom Operations Map), SID (Shared Information Model), and TAM (Telecom Application Map)

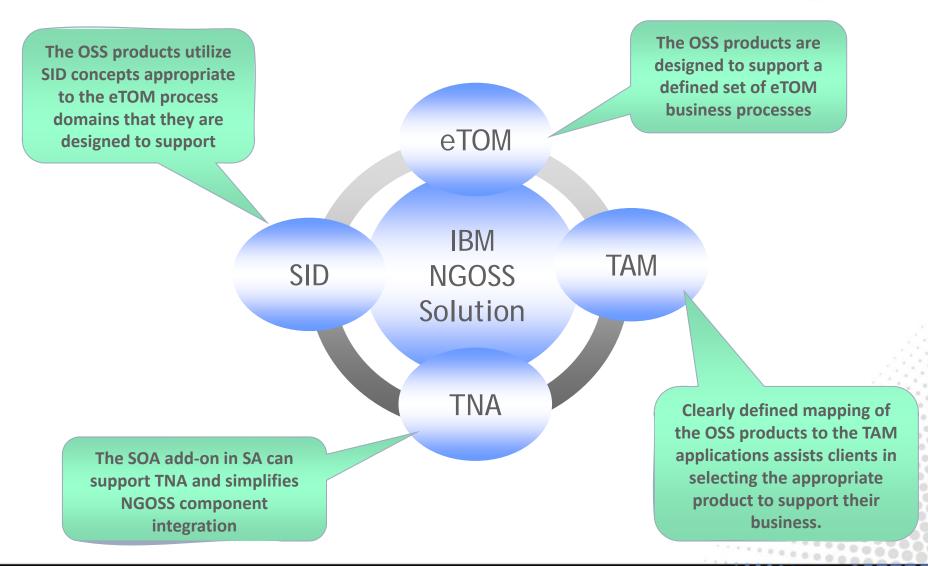
IBM plays a leading role in the TMF at all levels:

- Elected to TMF Board of Directors
- Elected to TMF Advisory Council
- Leadership, membership, and authors in variety of working groups, including service quality management, eTOM, TMF Benchmarking, TAM, SID
- Spearheaded new Business Metrics Framework, recently launched at TMW Orlando
- Participation in multiple Catalyst projects multi-company demonstrations of TMF concepts
- Strong presence at major TeleManagement World Events in Nice and Orlando



NGOSS Solution from IBM





IBM Unified Service Creation Environment



Product mapping for SPDE 3.0 Service Innovation and Service Creation

| Service Concept & Definition | Service Design | Service Development | Service Testing | Service Deployment |
|---------------------------------------|---|---|---|--|
| Rational Focal Point | Rational System Architect | Rational Application Developer | Rational Performance Tester | Rational Build Forge |
| Rational Requirements Composer | Rational Software Architect | WebSphere Integration Developer | Rational Functional Tester | Tivoli Composite Application Manager |
| IBM Mashup Center | | Rational Rhapsody | Rational Service Tester for SOA Quality | |
| WebSphere Business Modeler | InfoSphere Data Architect | Lotus Expeditor Toolkit | Rational AppScan | Tivoli Netcool / Maximo |
| eTOM support | NGOSS (eTOM, SID, TAM), IMS, SIP, Parlay X and GSMA OneAPI modeling | IMS, SIP, Parlay X, GSMA OneAPI, Voice XML, JAIN, J2xE, Net, smartphones | Rational PurifyPlus SIP, Parlay X, GSMA OneAPI testing | IMS and legacy service management |
| Smarter Product D Lifecycle Manage | modeling Delivery ement Rationa Pro | l Method Composer with <i>RU</i> ject Conductor, Rational Clea | | Quality Manager, Ra |
| Customer Extensions | Open technology | & community innovation (ϵ | e.g. Jazz, Eclipse) | Vendor Tooling extensions |



Selected Success Stories

Communications Industry Summary

| Strategic Initiative | Software Development Discipline | |
|--------------------------------|---|--|
| Time to market | Change and Release Management | |
| Customer Satisfaction | Process and Automated Software Quality | |
| Reduce IT Costs | Process, Requirements & Change Management | |
| Optimize BSS Development | Process & Portfolio Management | |
| Compliance | Governance and Risk Management | |

Customer Solution Value

Telecom

Bell Aliant

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Improved time to market by 50 percent Achieved estimated savings of US\$2 million per year

Increased customer satisfaction levels, enabling the company to win a key contracts and process improvements

Decrease development cost and time-tomarket. Provide enhanced risk management for 3rd party development

Reduced time and effort to submit, track and make changes to customer service applications by 60 percent

Development increased by 25%, able to meet government regulations within 15 days

Globe Telecom



Gaining tactical agility with smarter promotions

The Need:

Globe Telecom, the number two provider of mobile communications services in the Philippines, realized that it needed to reach a new level of agility in the creation and management of promotional service offerings, if the company was to thrive in its intensely competitive market.

The Solution:

IBM and Nokia Siemens Networks designed and built a SOA-based service creation and delivery platform that enables Globe to rapidly and cost-effectively create service offerings from reusable service components. Hundreds of simultaneous targeted promotions, enabled by the integration of customer intelligence, behavior segmentation, profit simulation and promotion execution drive revenue improvement and are delivered through an integrated and automated solution.

What Makes it Smarter:

- Leveraging information gathered from handsets, Globe is able to identify the optimal service promotion for each customer—and the best time to deliver it.
- ■Expected one-year payback period and more than 95% reduction in time and cost of developing new promotions
- ■600% increase in promotion effectiveness

"We can react very quickly to promotional opportunities when they arise. Just as important, we can detect in near real time whether the mechanics of our promotion are working—and if they're not, we can change them almost instantly."

 Mario Domingo, Head of Product Design and Creation, Globe Telecom

Solution components:

- IBM® Service Provider Delivery Environment (SPDE) Framework
- IBM WebSphere®
- IBM Tivoli®
- IBM Rational®





Change and Release Management TTI Telecom

Reducing cost and accelerating development with IBM Rational® ClearCase® software

- Improved efficiencies in build and release management
- Accelerated global development in a 24 × 7 environment
- Improved time to market by 50 percent
- Achieved estimated savings of US\$2 million per year



"IBM Rational ClearCase helps us optimize two of our most important resources—time and employee productivity."

Arieh Shalem, director of corporate quality management, TTI Telecom



Change and release management Verizon Business



Improving software development governance, quality and customer satisfaction with the IBM Rational[®] Software Delivery Platform

- Established a proven, repeatable development methodology based on the IBM Rational Unified Process® methodology
- Used components of the IBM Rational Software Delivery Platform to create automated functional and regression tests
- Reduced costs by more than US\$75,000 on a single project
- Increased customer satisfaction levels, enabling the company to win a key contract extension

"By providing our development teams with a common platform from which to analyze, design, develop and test, IBM Rational solutions have created opportunities to improve the quality of our software as well as our organization."

Douglas Cook, senior quality assurance specialist, Verizon Business

Anhui Mobile



Accelerating software development and configuration management with IBM Rational solutions

Business challenge:

To stay competitive, Anhui Mobile must strengthen its core business by continually developing new features and services to meet customer demand.

Solution:

Anhui Mobile standardizes on IBM® Rational® Synergy and IBM Rational Change applications for change and configuration management to achieve greater efficiency and quality.

Benefits

- Centralized software development for better efficiency
- Version control to ensure accuracy
- Baseline management for better visibility
- Better report statistics
- Improved team communication and collaboration

"We chose Rational Synergy and Rational Change because they give Anhui Mobile a powerful software development platform with the robust functionality we need."

Anhui Mobile Communication Company Limited