

IBM Rational Software Development Conference 2008

WHERE TEAMS ARE **R-HEROES**



Build better software and systems and improve business processes with Enterprise Lifecycle Management

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Enterprise LifeCycle Management

Top 20 Innovations Changing Our World



*Software is the enabler
behind these significant
innovations*

TOP INNOVATIONS

1. The Internet
2. Cell phone
3. Personal computers
4. Fiber optics
5. E-mail
6. Commercialized GPS
7. Portable computers
8. Memory storage discs
9. Consumer level digital camera
10. Radio frequency ID tags
11. MEMS
12. DNA fingerprinting
13. Air bags
14. ATM
15. Advanced batteries
16. Hybrid car
17. OLEDs
18. Display panels
19. HDTV
20. Space shuttle



The Defining Challenge in Innovation Delivery

Software is becoming the force behind product Innovation

- ✓ Expanded use of software in consumer electronics products
- ✓ Ultra-Large Scale (ULS) Systems, next generation defense systems
- ✓ Medical technology to guide complex medical procedures

Software failures directly impact the bottom line

- ✓ Non-compatible software cost a large aerospace company a \$6.1b profit hit
- ✓ A software bug forced the recall of 75k cars that stalled at high speeds
- ✓ Medical device company recalled 42K defibrillator devices due to poor software



Software related downtimes cost the industry nearly \$300 billion annually. Only 34% of software projects are deemed successful. Software delivery is critical in managing the systems lifecycle.

Sources: Standish CHAOS Report, Comparative Economic Normalization Technology Study, Business Week, CEO Magazine, Computerworld, InfoWeek, Fortune, The New York Times, Time, The Wall Street Journal, Boston Globe.



Key Challenges in the Marketplace

Top CIO Priorities	2007	2006
Aligning IT and business goals	1	1
IT-enabled process improvement	2	4
Business continuity/risk management	3	2
Improving internal user satisfaction	4	5
IT staff development	4	6
Measuring and communicating IT value	6	12
Improving project management discipline	7	7
Controlling IT costs	8	3
Regulatory compliance	9	10
Revenue-generating services/products	10	N/A

Source: CIO Magazine State of the CIO '07



Keys to **Success** in Today's Environment

- While reducing cost of development is important...
 - Optimizing **business processes** is critical

- While meeting regulatory compliance is necessary...
 - Delivering **products and services** that meet the **needs of the customer** is vital

- While managing change to existing systems is a given...
 - **Managing complexity** to react quickly to market demands **with innovation** is mandatory



Enterprise Lifecycle Management (ELM)

Delivering Proven Customer Value

In

Productivity, Innovation, Governance



What is Enterprise Lifecycle Management?

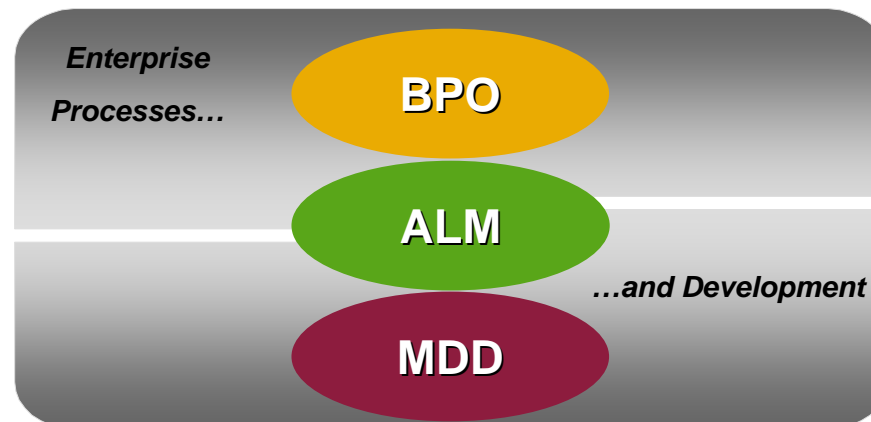
Telelogic's Product Vision

To enable our customers to **align** their enterprise objectives with technology investment by **automating** and **integrating**:

Business Process Optimization (BPO)

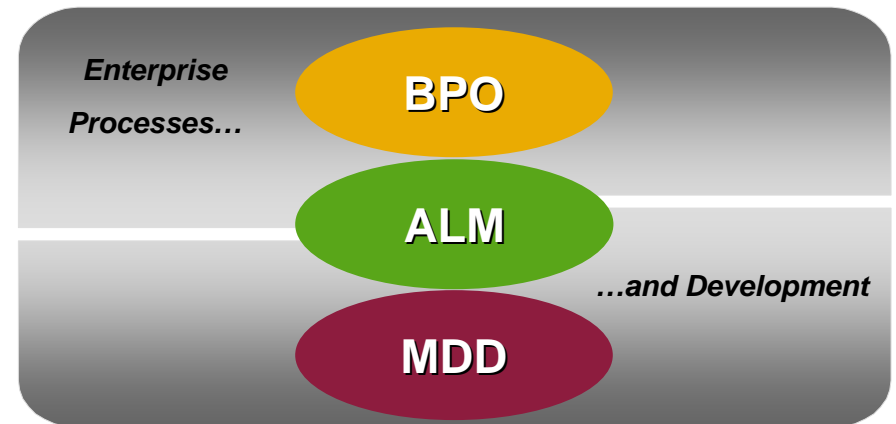
Application Lifecycle Management (ALM)

Model-Driven Development (MDD)



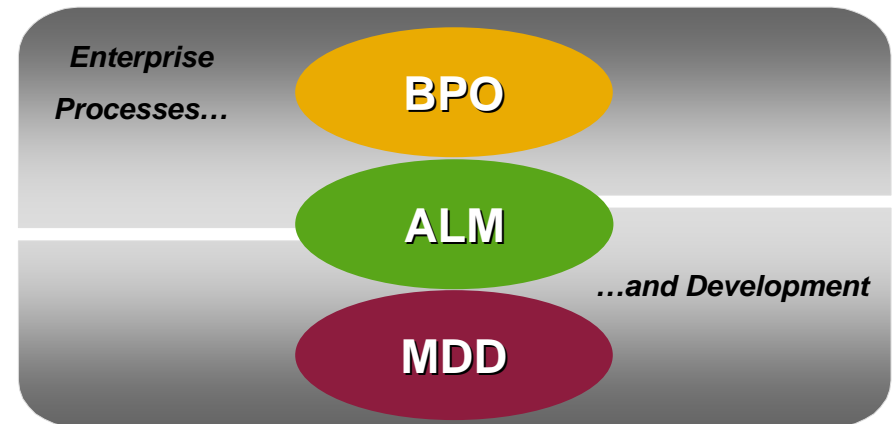
What are the **Benefits** of ELM?

- Productivity & Efficiency
 - ▶ Survive
- Governance & Compliance
 - ▶ Sustain
- Innovation & Agility
 - ▶ Succeed



What is **Unique** About ELM?

- Market Leading Products and Partner Ecosystem
- Process Support for Enterprise Adoption
- Breadth and Coverage of Solutions
- Integrates Business Processes with Systems and Software Delivery

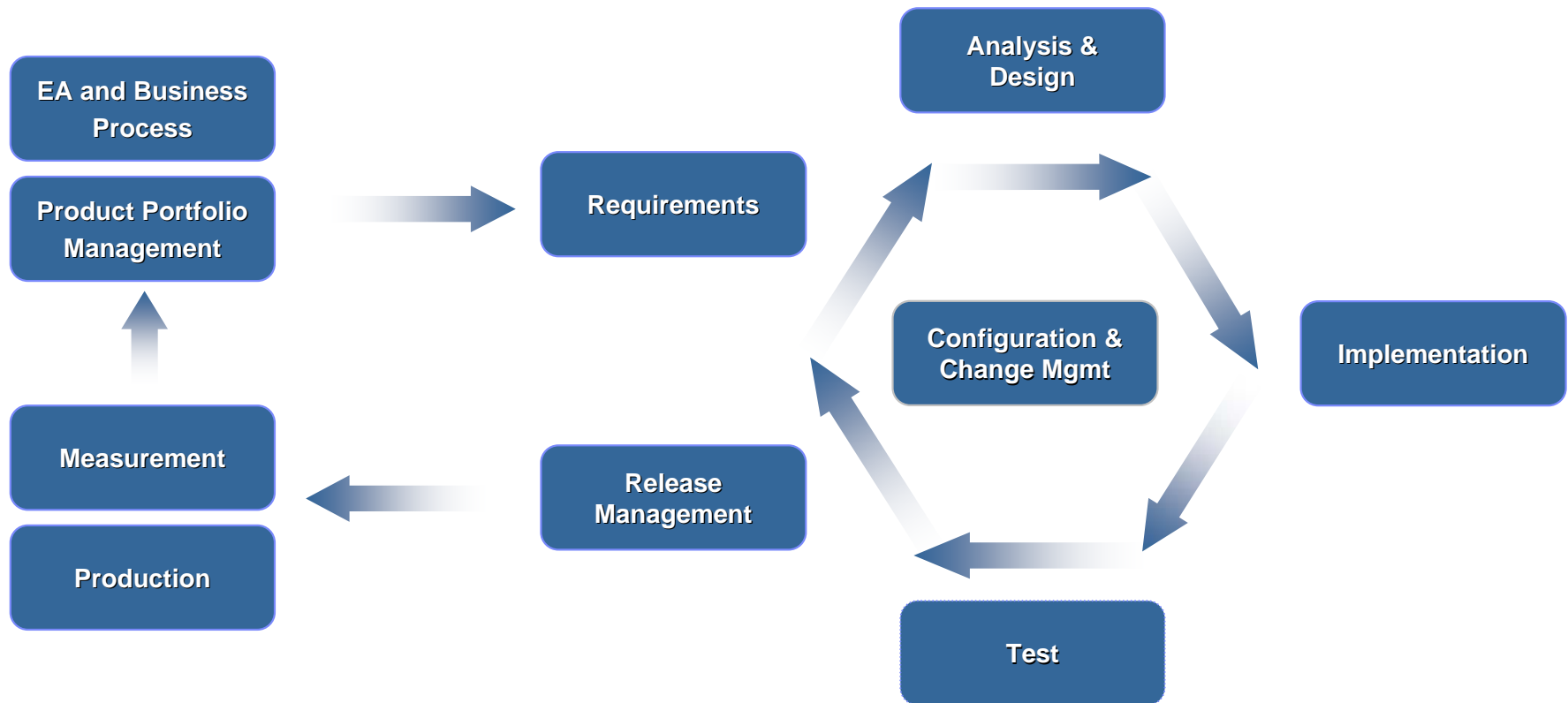


Enterprise Lifecycle Management In Action

“Connecting Business with Systems and Software Delivery”

Business Domain

Delivery Domain

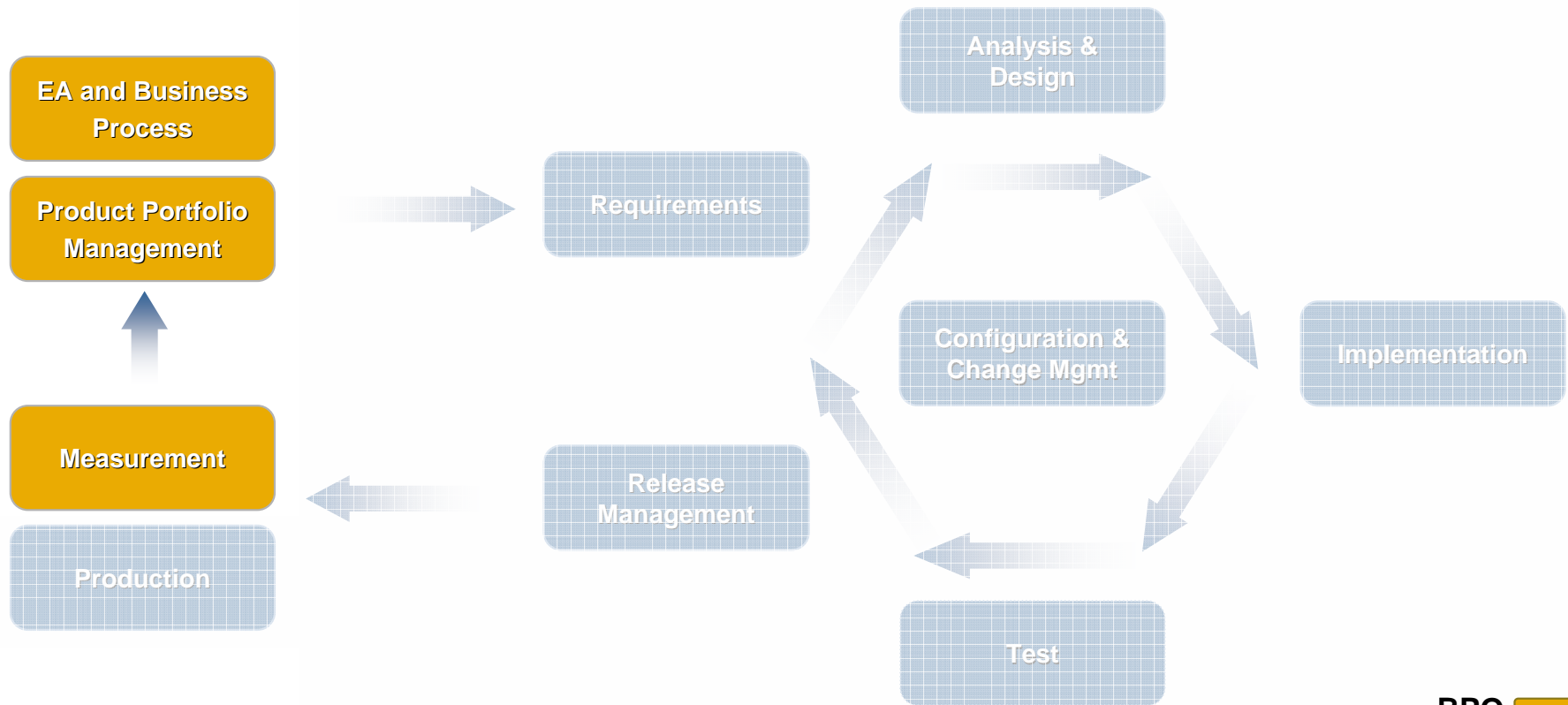


Enterprise Lifecycle Management in Action

“Business Process Optimization”

Business Domain

Delivery Domain



BPO



Business Process Optimization (BPO)

Maximize the performance of your organization

- Develop Enterprise Architecture integrating four domains: Business Process, Information, Systems, and Technology
 - ***Align your technology investments with your business objectives***
- Manage your portfolio of products
 - ***Maximize value, improve decision making and support your enterprise strategy***



XO Communications

Applying EA Practices For SOA Adoption Success



Is a leading provider of 21st century communications services for businesses and communications services providers, including 50 percent of the Fortune 500 and leading cable companies, carriers, content providers, and mobile operators.

Business Challenge


- How can we position IT as a strategic asset for XO?
- How can we fulfill XO's business objectives of reducing risk and identifying reuse?
- Difficulty in facilitating an **architecture-centric** approach to projects

Customer Success

- Reduced Costs by leveraging what was already established
- Reduced Risk by planning changes without actually interfering with real time Business Activity
- Removed the "Shock Factor" by approaching the SOA project in Proven Increments.

 Increase Value of IT

 Increase Agility

 Reduce Risk

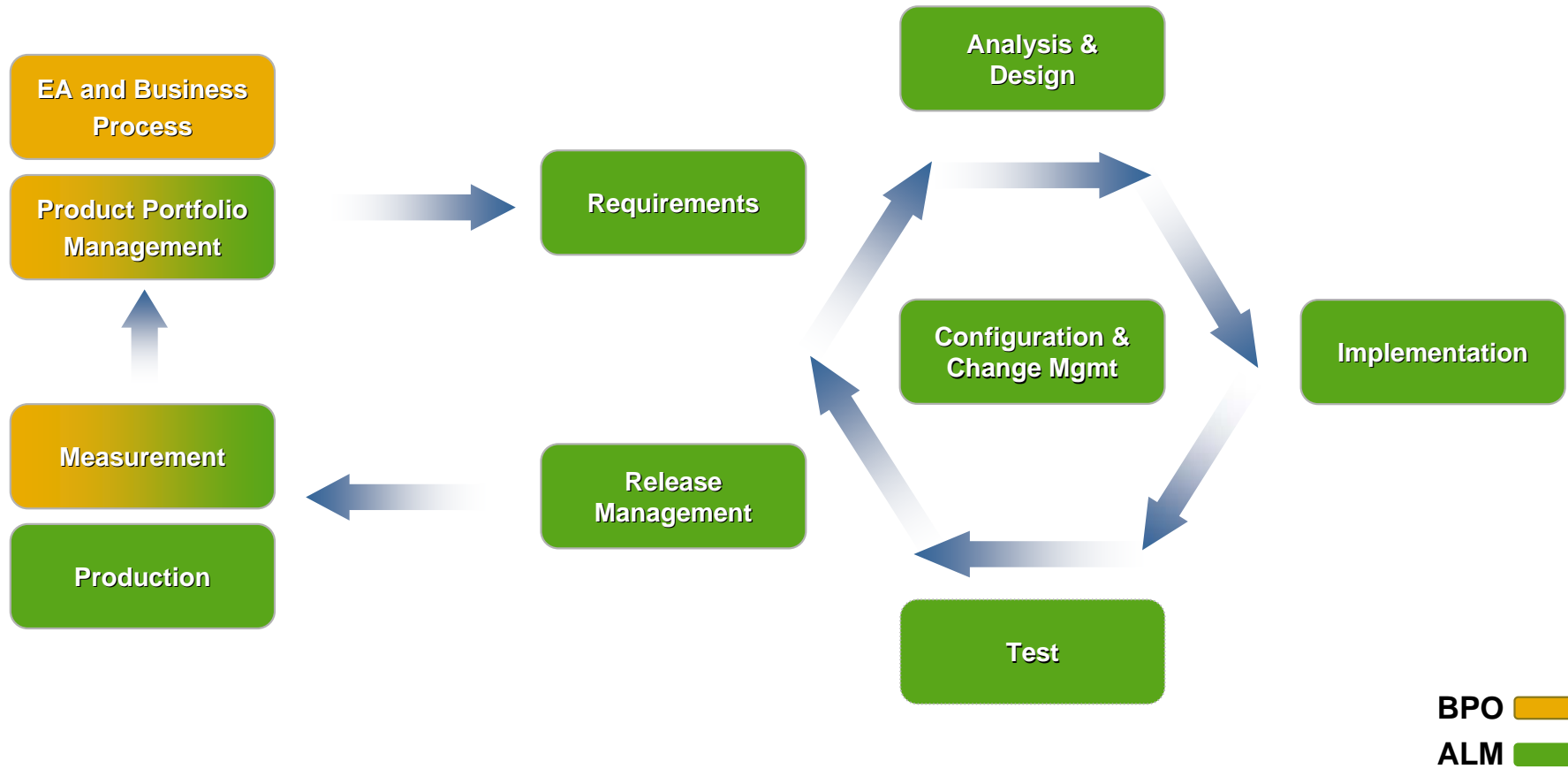


Enterprise Lifecycle Management in Action

“Connecting BPO and ALM”

Business Domain

Delivery Domain



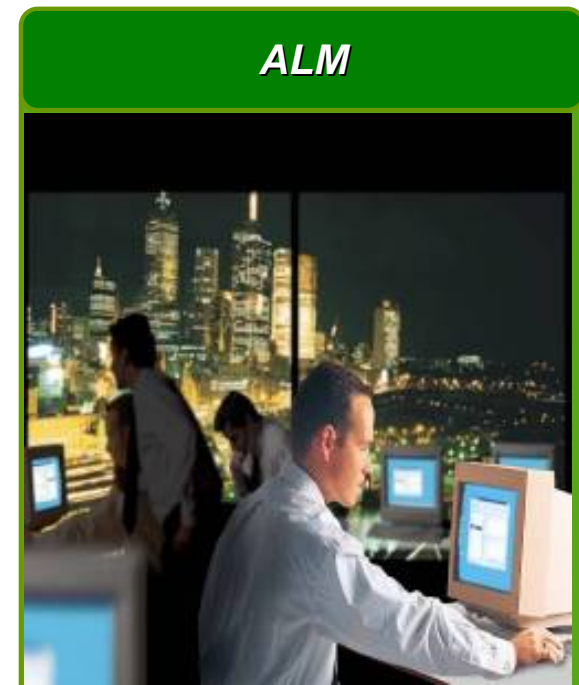
Application Lifecycle Management (ALM)

Improve your entire development lifecycle

- Ensure the voice of the customer remains persistent throughout development process
 - ▶ ***Deliver innovative products and services that generate max value***

- Round-trip traceability across the entire development lifecycle
 - ▶ ***Understand impact of change and demonstrate compliance***

- Improve collaboration across globally distributed teams
 - ▶ ***Increase productivity***



Advanced Info Service Public Company Limited (AIS)

Managing Rapid Service Growth and Complexity with Telelogic DOORS and Synergy



Advanced Info Service Public Company Limited (AIS), a subsidiary of Shin Corporation Public Company Limited, is the largest wireless service provider in Thailand.

Business Challenge

- Maintain its leadership position
- Increase time to market for new products and services
- Prevent missed requirements
- Lacked a properly managed systems development lifecycle

Customer Success

- Increased employees and services over the last four years by more than 100 percent
- A single repository for all project and product information that is both traceable and accessible
- The team is now able to function as a cohesive unit within the development lifecycle



Improved time-to-market



Manage growth and complexity



Prove compliance to requirements

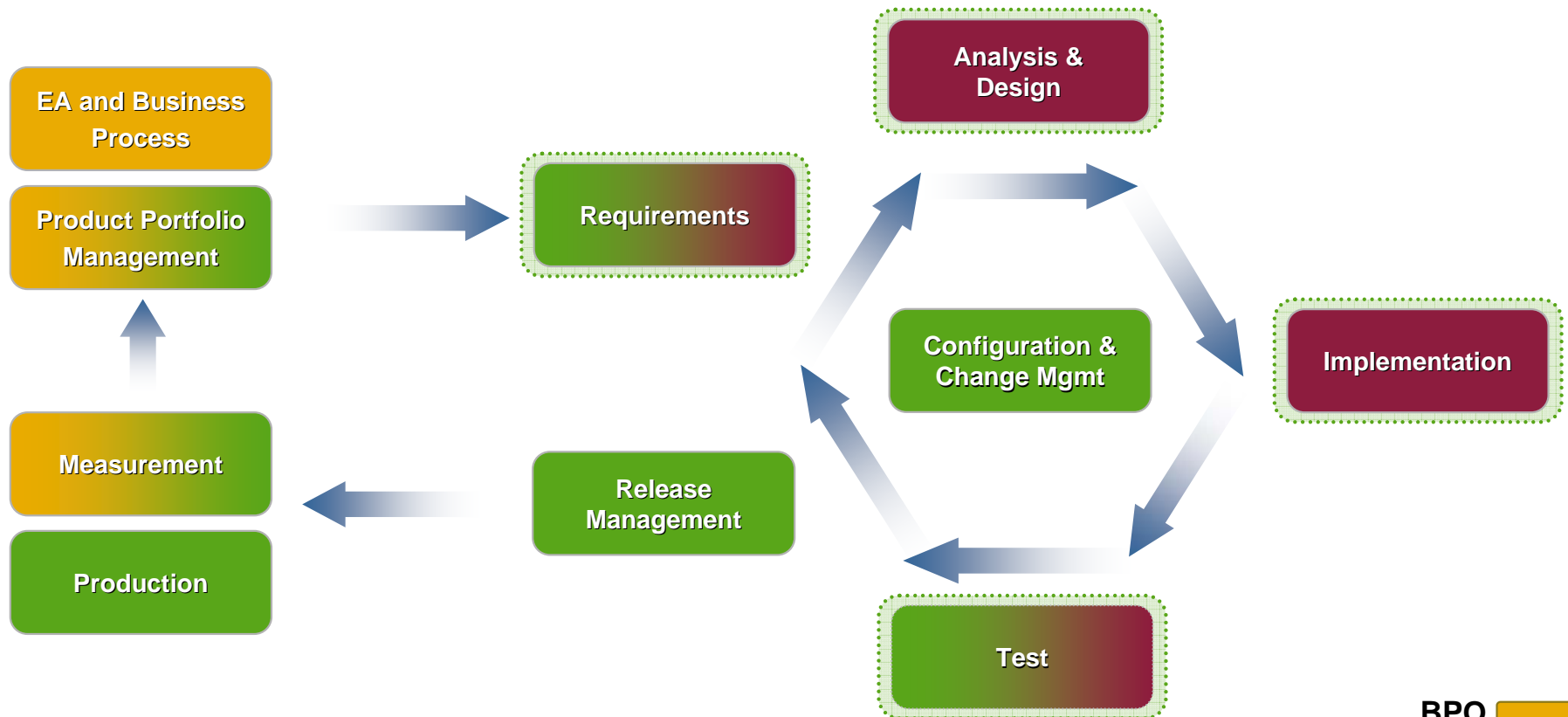


Enterprise Lifecycle Management in Action

“Connecting BPO, ALM, and MDD”

Business Domain

Delivery Domain



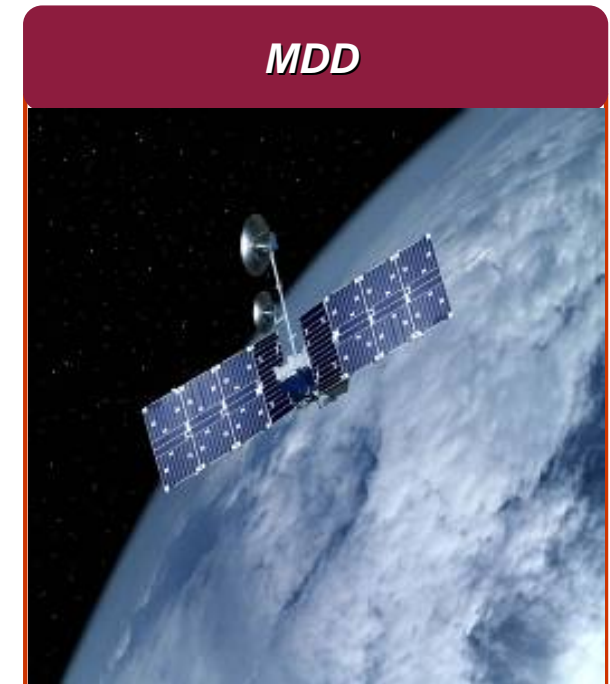
BPO 
 ALM 
 MDD 



Model Driven Development (MDD)

Manage development complexity

- Visually design systems and software
 - ***Improve agility and reuse***
- Automatically generate applications, documentation and tests
 - ***Improve productivity and quality***
- Optimize productivity through iterative development
 - ***Lower project risk***



Valtech India Systems

Improve Productivity and Lower Development Costs with Telelogic Rhapsody



Valtech India Systems, the global development arm of Valtech, leading embedded systems software developer.

Business Challenge

- Need a new object-oriented process for global development in response to an avionics customer's request
- Inability to reuse requirements on multiple projects with similar components
- Reduce the cost of offshore development for customer

Customer Success

- 40% increase in productivity
- 75% reduction in defects
- Lower development costs for the customer
- Achieved six-week Agile time-boxed development process while maintaining CMM level five
- Established a concurrent engineering environment



Achieved Agile processes and CMM level 5



Reuse of architectures and components

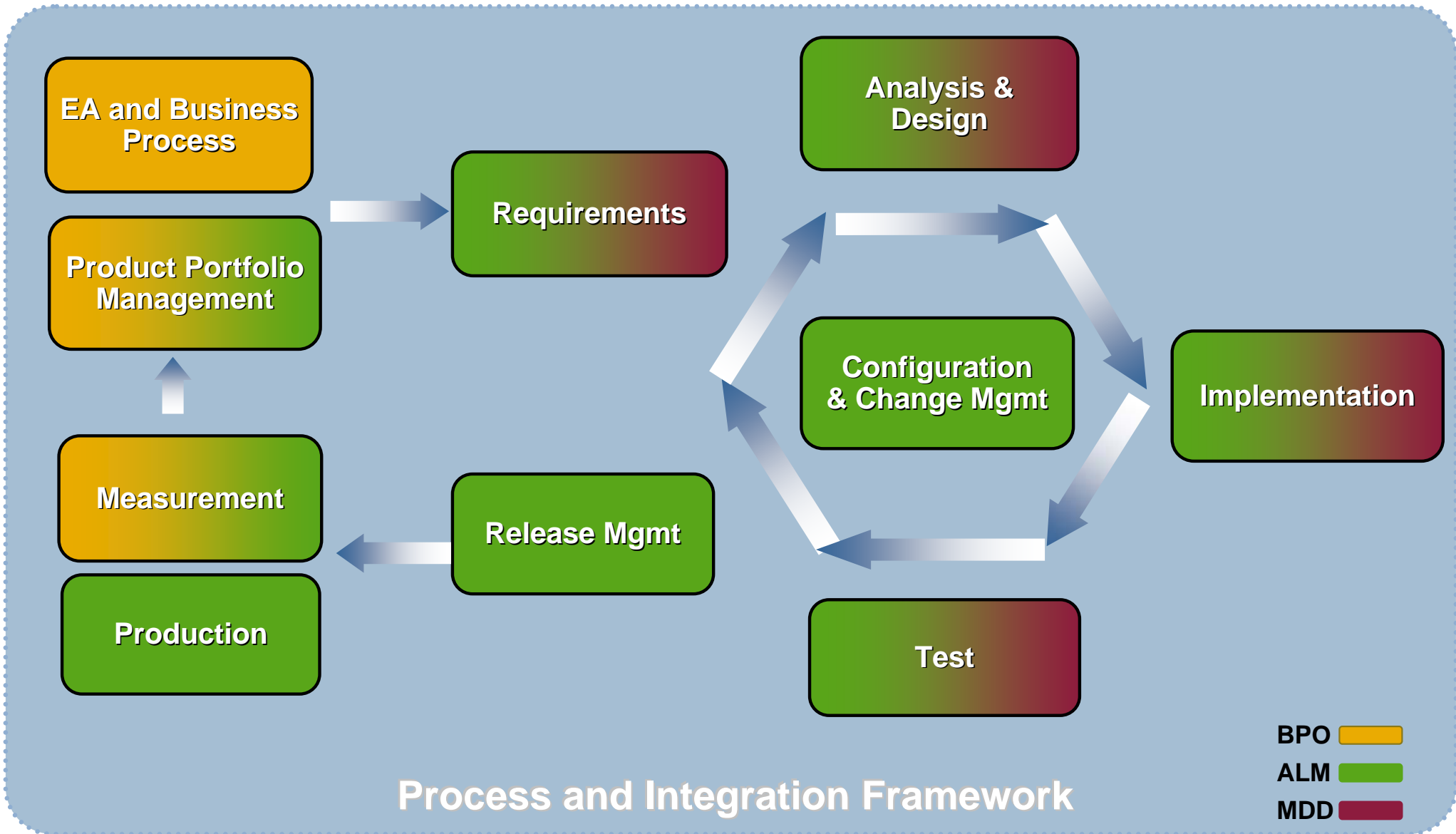


Improved communication



Enterprise Lifecycle Management in Action

Comprehensive Solution



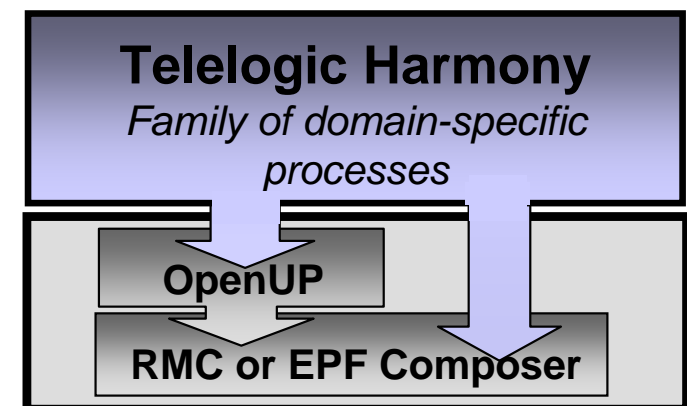
Telelogic Harmony

Process Support for Enterprise Adoption

- Exemplary processes for development of IT and embedded software and systems
 - **Communicate *best practices* across the organization**

- Guidance on using Telelogic tools to automate your process
 - **Provide *sustainable training*... Connect people, process, and tools**

- Available as Eclipse Process Framework plug-ins
 - **Easy to *adapt processes* for individual organization**



ELM – Continuous Investment

- Investment in **Standards**
 - ▶ Ongoing contributions to critical standards bodies including: OMG, INCOSE, AUTOSAR, and more.

- Investment in **Ecosystem**
 - ▶ Open source, Eclipse
 - ▶ Co-development with partners

- Investment in **Products**
 - ▶ New corporate integration architecture



What do Our Customers Think?

- Customer Reactions at the ELM Leadership Council
 - ▶ “I have users that don’t know what to do or when to do it. We have CMMI, Six Sigma, people get confused. **This bridges the gap, absolutely!**”
 - ▶ “I have a lot of users that have DOORS, Synergy, Change, etc. open, **this should help with their workflow**”
 - ▶ “We are really interested in the reviewing capability, we don’t want to expose these users to the tools. **If you had this now we would roll it out today!**”



The Best is Yet to Come...

*There is a
new force
in the
universe*



+



Rational and Telelogic Together the Customer Value Equation

- Primary strength in IT Development
- Market Leading products
- Vertical industry penetration
- Investment power
- Global leadership in Research & Development
- Organizational transformation expertise
- Geographical reach and organizational access

- Primary strength in Systems Development
- Market Leading products:
 - Requirements Management
 - Enterprise Architecture
 - Systems and embedded software Development
- Industry specific solutions including:
 - Aerospace & Defense
 - Automotive
 - Telecomm



Expanded Customer Value from Rational and Telelogic

- **Productivity and Efficiency**
Through integrated industry-leading products delivered by a specialized field force
- **Innovation and Agility**
Through increased collaboration across processes and domains
- **Governance and Compliance**
Through end-to-end visibility and industry framework support



How Are We **Unique**?

- **Integrated Platform** for Systems through Software Delivery
- Process and Best Practices support for **enterprise wide adoption**
- **Specialized** global development, sales, services and support teams and partner ecosystem
- Integrating **Systems domain with IT domain**
- Industry **thought leadership** and community innovation
 - ▶ Open standards
 - ▶ Industry specific standard bodies



Telelogic
An IBM Company



Rational®



The Way Forward

- **Protect customer investment** in existing products: Maintain all current products and no forced migration
- Lay the foundation for **transforming the market** to address unmet and evolving customer needs
- **Continuing with existing customer interface** from Rational and Telelogic organizations





Learn more at:

- [IBM Rational software](#)
- [Telelogic](#)

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