Raytheon

Customer Success Is Our Mission

CMMI® – The Current State

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Technology and Acquisition Changes Are Driving CMMI

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- System complexity is ever increasing
  - Moore's law at the system scale
- Balance between Government and Industry associated with systems development is shifting without due diligence
- Network centric, spiral development, extension of system applications, are driving higher levels of integration
- High percentage of prime contractor costs are in Supply Chain

Integrating disciplines (Engineering, Supply Chain, Program Management) is needed for successful program execution and predictability

CMMI Facilitates Development and Delivery of Complex DoD Systems

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Complex Systems/

System-of-Systems

Support CMMI Provides for Multi-Company Systems

- More Disciplined Systems Engineering Process
  - Requirements Development
  - Integration/Test
- Emphasis on Measurements for Decision Making in all Processes
- Common Vocabulary for describing Product Development Processes
- Increased Emphasis on Supply Chain as a Critical Discipline for Success

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Raytheon's Approach to CMMI

- Company-wide commitment at the top level of leadership
- Deploying uniformly to all sites
  - Leader/Follower sites
- Tying into IPDS and Raytheon Six Sigma
  - Sharing of best practices
  - Cultural Change
- Corporate-wide funding for key training and appraisal
  - Enterprise Steering team
  - Expert Consulting team
- Extending to hardware and other disciplines

Our mechanisms for process and technology enterprise integration

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Integrated Product Development System (IPDS) provides an integrated set of best practices for the entire product development life cycle through a program tailoring process.

Raytheon Six Sigma guides us to use CMMI and IPDS as tools to deliver value to customers and integrate industry best practices.

Capability Model Maturity Integration (CMMI) provides the process requirements and appraisal methods for creating, measuring, managing, and improving specific processes.

Our technology will flourish with process discipline

Raytheon's Process Journey – Improving Productivity

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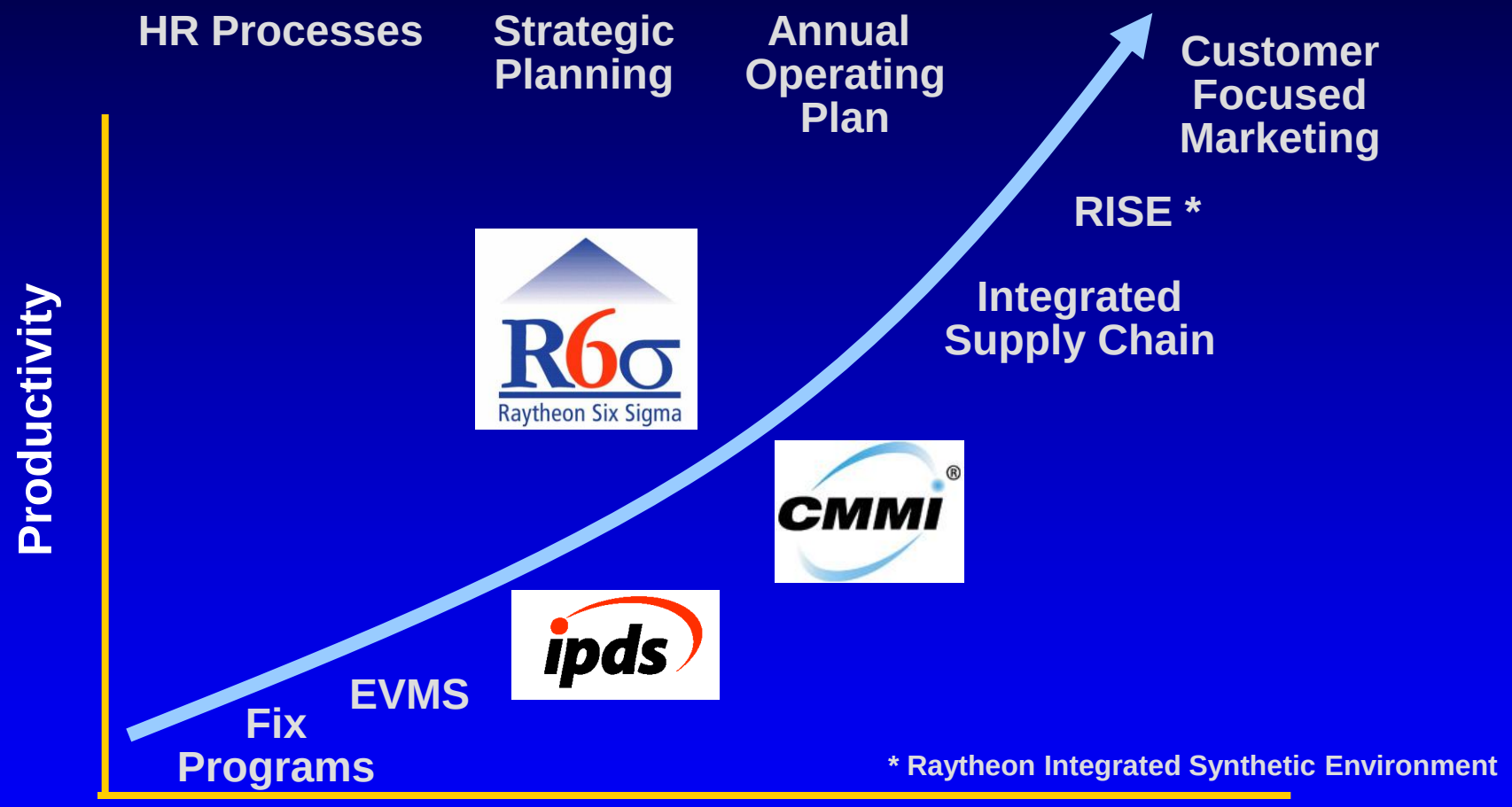

Innovation will flourish on the bedrock of discipline

Improvement is Evident to Our Shareholders and Customers

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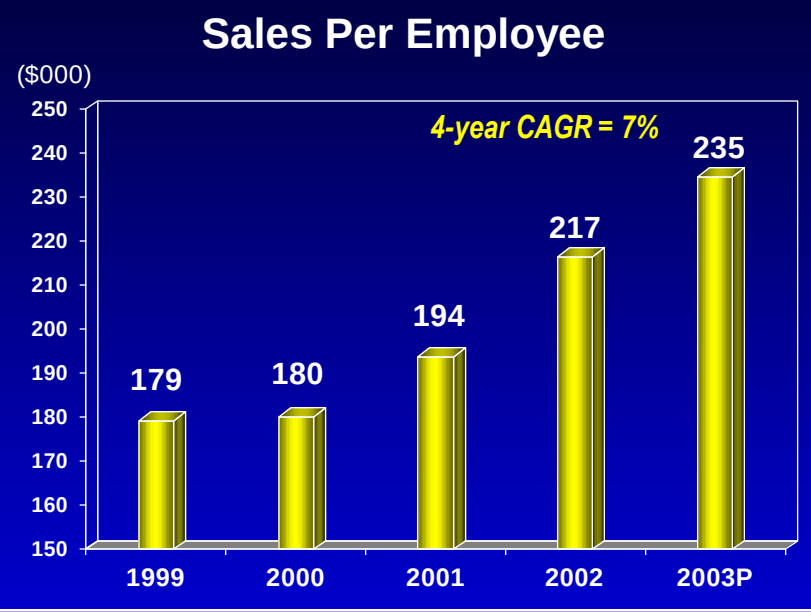
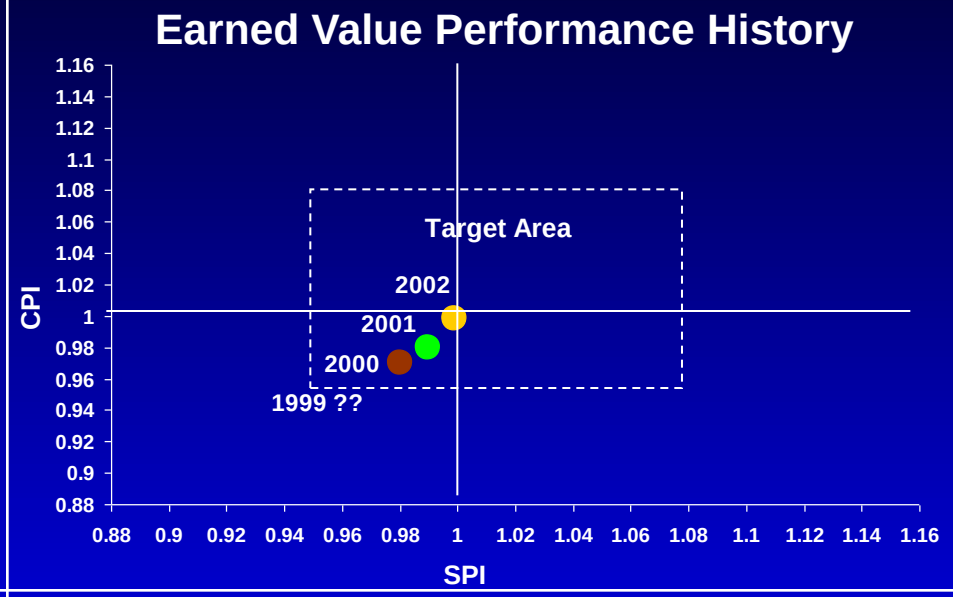
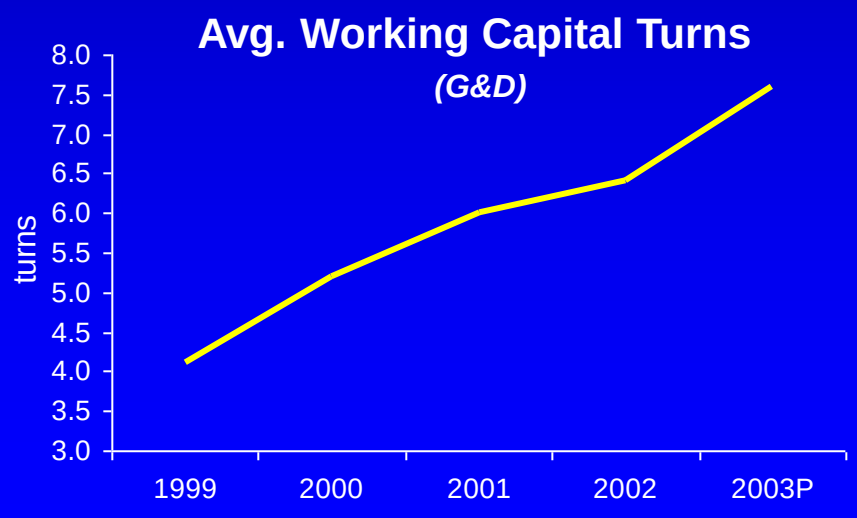


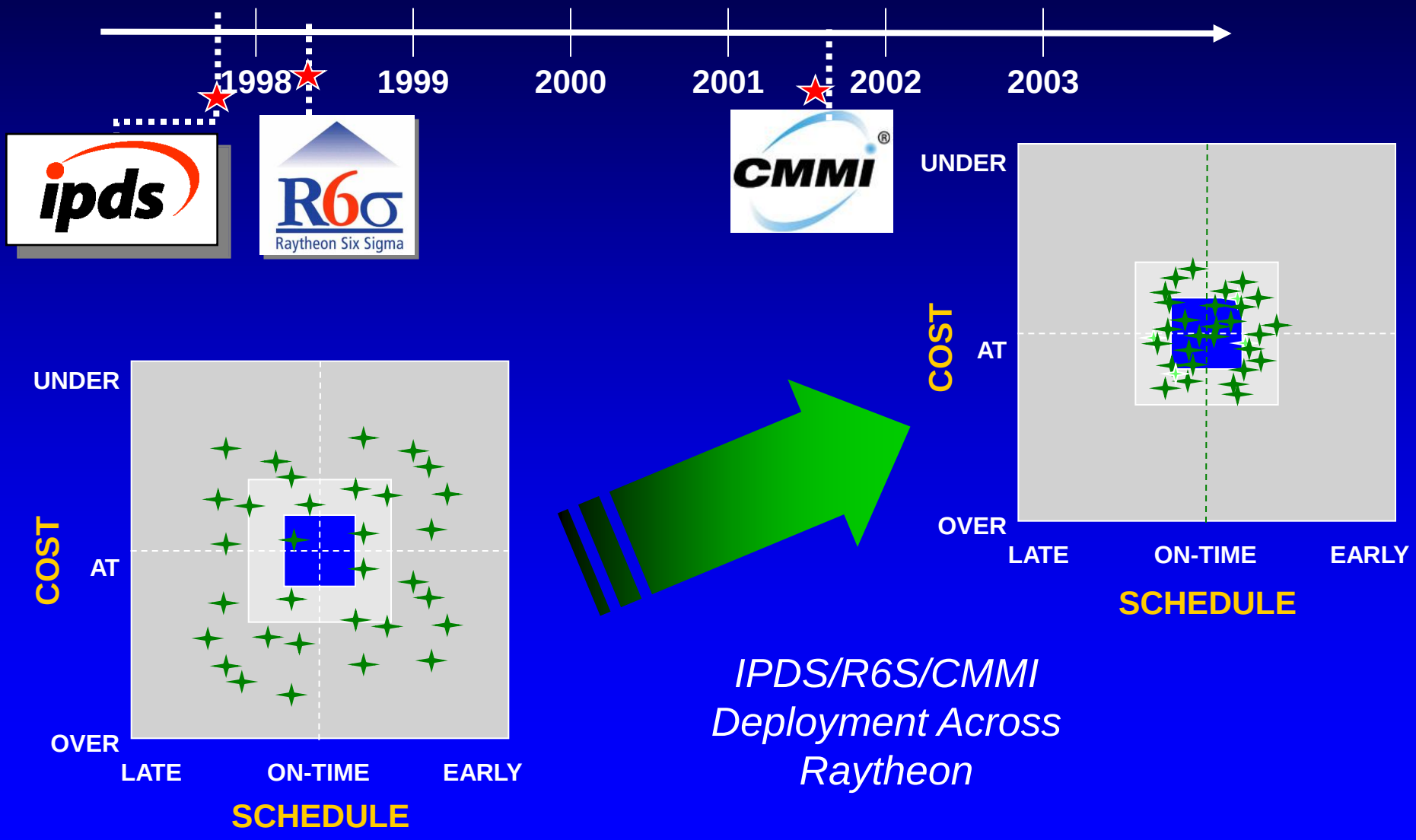




Example Recent Process Improvement Results

- Early defect containment rate increased by 100%. ROI of 6:1. Site now CMMI Level 3
- CMM Level 5 site reduced CPI variability by 32%; SPI variability by 67%
- CMMI Level 3 site reduced rework costs by 42% over several years

IPDS/R6S/CMMI: The Results !



IPDS/R6S/CMMI Deployment Across Raytheon

In Summary

- Advances in technology and systems integration are driving CMMI implementation
- True adoption will improve our program performance in Cost, Schedule, and Risk
- CMMI at Raytheon involves our whole Enterprise with leadership support
- Raytheon has demonstrated productivity successes with the SW-CMM. Similar (greater) successes are expected with CMMI.
- CMMI is our model for process excellence and will be our Customers' model