# Process Improvement in a Multimodel Environment: Past, Present, and Future

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## M. Lynn Penn

#### Director Quality Systems & Process Management

- Chair Executive Process Steering Committee
- Maintain the IS&S Standard Operating Process
- Maintain IS&S compliance to industry standards
- Maintain Organizational Performance Database
- Maintain Program Database
- Maintain Corrective Action Database
- Manage ISO and CMMI Maintenance Programs
  - ISO Internal Audits & Surveillance
  - CMMI SCAMPI B&C

#### Credentials

- CMMI Candidate SCAMPI Lead Appraiser
- CMMI Instructor
- ISO Lead Auditor
- Six Sigma Certified Black Belt
- SEI Affiliate



# Information Systems & Global Services

- ▶ 52,000 employees
- Multiple domestic and international geographic regions (40+ sites)
- Ten Companies
- Process Foundation
  - Adhere to Corporate Policy Statements
  - Maintain a level of understanding and interpretation that is common across all ten companies
  - Stress Process Requirements at the Central Level
  - Empower Process Implementation at the Company Level

## **Timeline**



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# Strategy

- Establishment of Process Architecture
  - Goal Instantiate compliance to industry standards via a single organizational standard process
- ▶ Pursuit of high maturity → Growth & Sustainment
  - Required Development Process expansion to Program Process Standard
    - minimum mandatory set of processes
    - updated for industry standards where certifications desired
  - Measurement infrastructure (PSM; DMAIC implicit)
  - New process methods such as architecture-based design
  - New Corporate Initiative: Lean
    - Enabled by CMM
    - Accelerated new CMMI PA implementation (lo & hi mat.)
    - Addressed business processes outside of CMMI
    - Applied to appraisals
- Integration is critical

### Results and Benefits

#### Benefits of Chosen Strategy

- 30% cycle time reduction while lowering software costs by 20%
- Robust—easy to build in new models, practices
- All models working together to achieve performance
  - Distinct contribution of any individual model difficult to extract

#### Success Factors

- Built the vision while at "low maturity"
- Senior management sponsorship
- Key personnel with needed systems and strategic outlooks as well as breadth of experience
- Ran initiative as a program—plan/monitor/measure/improve

