



Lessons Learned from Xcel Energy QIM/MOC Implementation

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About the Speakers

Thomas Justin

- Managing Consultant, IBM
- 38 years in industry, 22 years of SAP
- **Fun Fact:** Masters Degree in Aerospace Engineering

Manju Venkateshan

- Managing Consultant, IBM
- 22 years in industry, 21 years of SAP
- **Fun Fact:** Implementation on a project with IBM and traveled to 6 countries

Edward Malarkey

- Sr. QIM/MOC Functional Lead, Xcel Energy
- 38 years at Xcel, 22 years in Nuclear
- **Fun Fact:** Started with Xcel as a Blacksmith Welder

Ashwinichandra Saodekar

- SAP Project Executive, IBM/Xcel Energy
- 17 years in IT, 14 years of Utilities
- **Fun Fact:** Grew up in a house with library of about 10K books

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Key Outcomes/Objectives

1. QIM/MOC implementation and post implementation experience
2. Benefits realized
3. Lessons learned

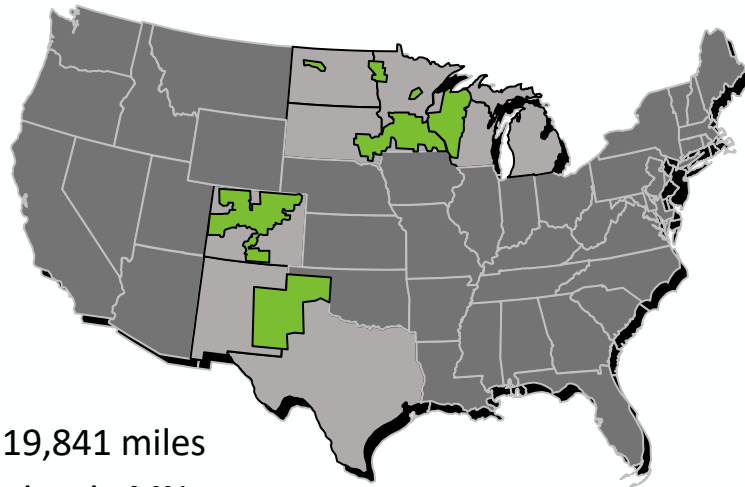
Agenda

- Company Profile - Xcel Energy
- Solution Background
- The Business drivers
- The Implementation
- Benefits and lessons learned

Company Profile – Xcel Energy

Xcel Energy is an electric and natural gas company, with annual revenues of \$11.4 billion. Based in Minneapolis, MN, we have regulated operations in eight Midwestern and Western states and provide a comprehensive portfolio of energy-related products through four operating companies.

- **Employees:** 11,865
- **Natural gas operations**
- Customers: 2.0 million
- Transmission: 2,209 miles
- Distribution: 35,112 miles
- **Electricity operations**
- Customers: 3.6 million
- Transmission and Distribution: 219,841 miles
- Nuclear Generation: 3 units at 2 sites in MN
- Industry leading carbon reductions: 35% in 2017, carbon free 2050



Solution Background

1. Roll-out
2. Sustainment History
3. Key Business Process Enhancements

What is Quality Issue Management (QIM)

Quality Issue Management

QIM is a Web Based User Interface solution that allow a client to track Issues and Activities for resolution. Xcel Energy use this system for their Corrective Action Program (CAP)

QIM Capabilities

- Integration with Asset Management, Work Management, and Supply Chain Processes
- Integrated analytics beyond applications and system borders (SAP & non-SAP)

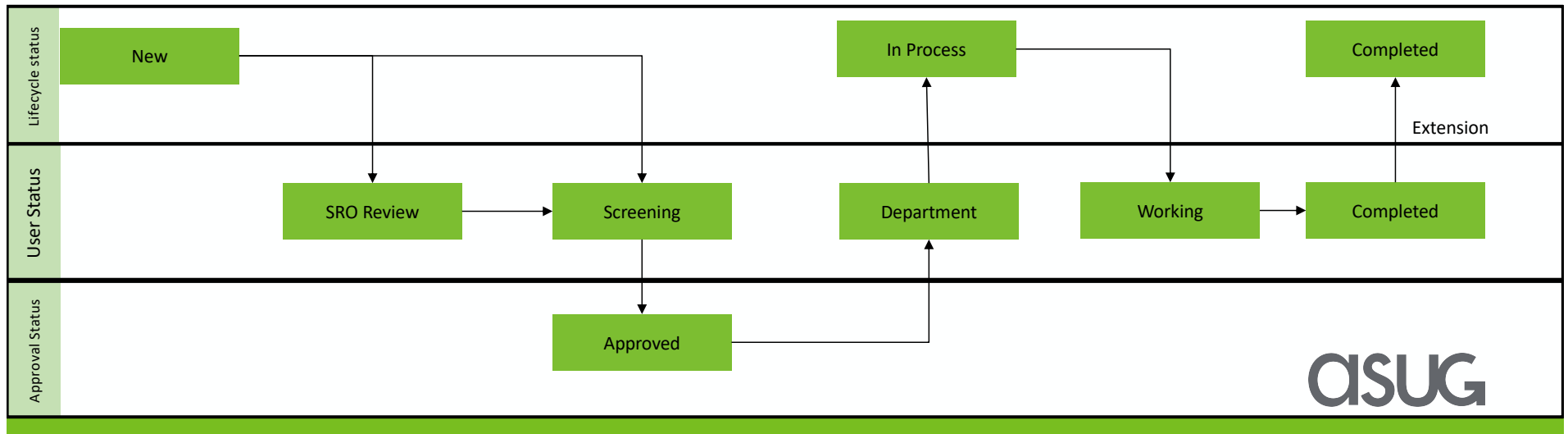
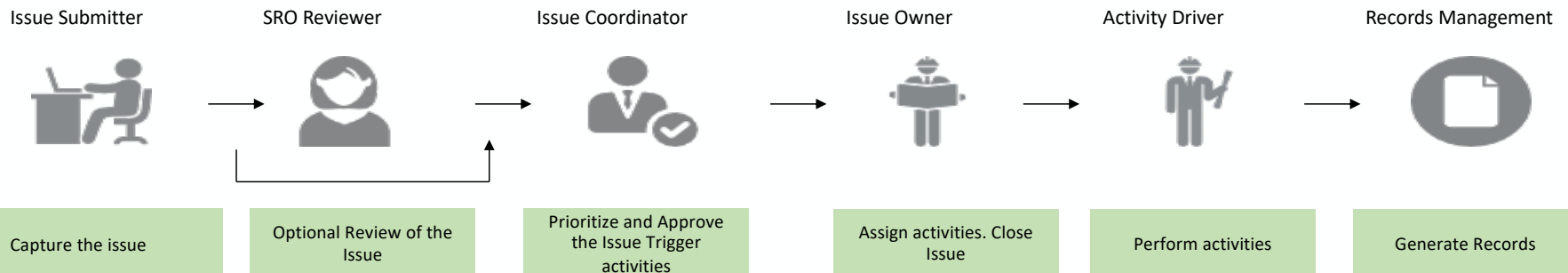
QIM Benefits

- Global and integrated solution supporting all kinds of quality issues and activities for better analysis and high visibility of information
- Single system with easy access and simple user interface which meets regulatory requirements
- Standardized and efficient processes using business rules for automatic determination of responsible persons, mandatory activities, etc.

Why QIM?

- QIM – Quality Issue Management
 - Program Management
 - Corrective Action Program (CAP)
 - Integrate with SAP ECC, SAP BW, DMS
 - Accomplished using workflows and process automation
 - Ensure quality reporting, data integrity and regulatory compliance

QIM Workflow



QIM Implementation

- Achieving our objectives
 - Corrective Action Program (CAP) Management
 - QIM automated workflow notifications
 - Document Management System (DMS)
 - Accurate record generation
 - Reporting

What is Management Of Change (MOC)?

Management of Change

MOC is a Web Based User Interface solution that allow a client to track Change Requests and Activities for resolution. Xcel Energy use this system for 16 different business processes : Engineering Change Request, Procedure Change Request, Procurement Change Request, Training Change Request...

MOC Capabilities

- Integration with Asset Management, Work Management, and Supply Chain Processes
- Integrated analytics beyond applications and system borders (SAP & non-SAP)
- Capability to trigger Change Requests out of other processes or applications

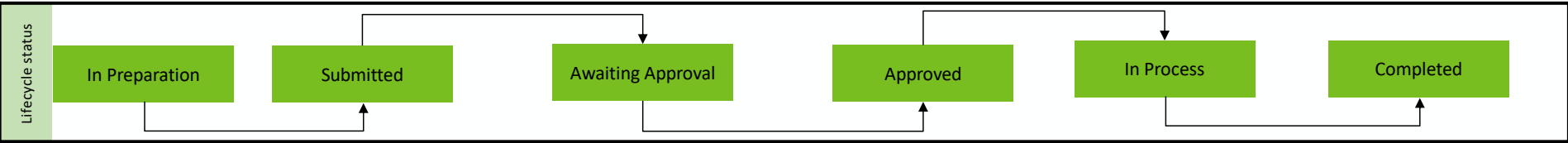
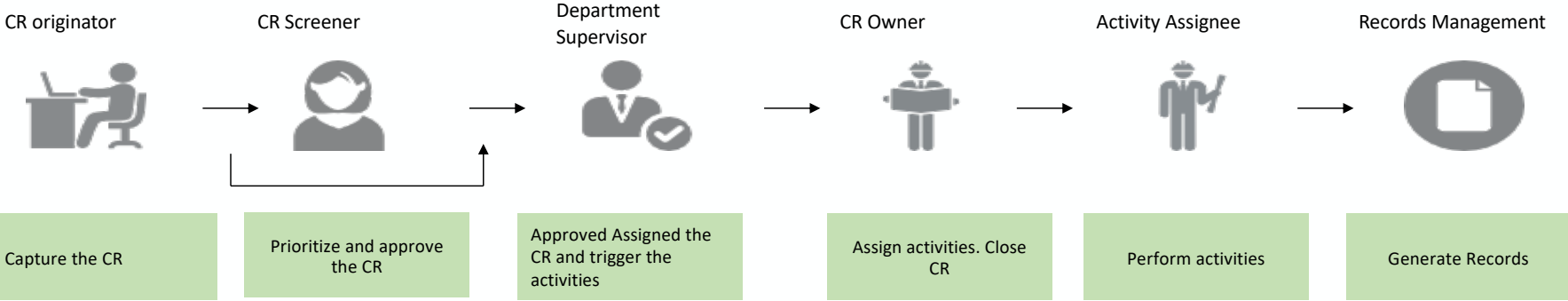
MOC Benefits

- Continuously improve processes and equipment without introducing risks
- Consistent risk assessment and approval processing

Why MOC?

- MOC – Management of Change
 - Program Management
 - Procedural Change Requests (PCRs)
 - Engineering Change Requests (ECRs)
 - Integrate with SAP ECC, SAP BW, DMS
 - Accomplished using workflows and process automation
 - Ensure quality reporting, data integrity and regulatory compliance

MOC Workflow



MOC Implementation

- Achieving our objectives
 - Procedure Change Requests (PCRs)
 - Engineering Change Requests (ECRs)
 - MOC automated workflow notifications
 - Document Management System (DMS)
 - Accurate record generation
 - Reporting

Overall Implementation Strategy

- Plan
 - Define and gather requirements
 - Technical design and analysis
 - Application build and development
 - Data migration
 - Integration testing
 - Implementation release
- Team
 - IT Project Team (Project Management (QIM/MOC), Functional, Technical, BW, DRMS)
 - Business Team (Business SMEs, Super Users)
 - Technical Legacy SMEs
- Execution
 - QIM/MOC implementation
 - Collect user feedback for post-implementation activities

Post Implementation

Based on user's feedback

- Streamlined the processes
 - Improved workflows for efficiency
 - Fine tuned activity templates and determination rules
- Enhanced reporting capability
 - Extended BW capability/BOBJ presentation
- Fine tuned record generation process
 - Standardize use of record forms
 - Streamlined PDF generation
- Efficient and powerful data analysis
 - Improved analysis through newly developed tools

Benefits Realized

- Effective and efficient management of CAP
- Integration with other SAP and non-SAP systems
- Timely record generation
- Timely and accurate reporting
- Ease of use with QIM and MOC
- Enhanced process monitoring
- Avoid possible Nuclear Regulatory Commission (NRC) findings
- Automated extract of data for Institute of Nuclear Power Operation (INPO) inspections
- Tools and processes streamlined

Lessons Learned

- Involve SMEs from legacy system and business processes during all phases of design, build, and implementation
- Design, develop and validate more comprehensive UAT scenarios/scripts with business SMEs and legacy system experts
- Develop and implement solid data strategy for migrating QIM/MOC data
- Enhance end user training

Useful Resources

- SAP QIM
 - https://help.sap.com/doc/saphelp_qim100/1.0/en-US/26/d50f49b6a54a37839e4326987edeb1/frameset.htm
- SAP MOC
 - https://help.sap.com/viewer/product/SAP_MANAGEMENT_OF_CHANGE/1.0/en-US
- SAP BRF+
 - <https://help.sap.com/viewer/90c77b45fd0f42febd69eea239037688/1.0%20SP04/en-US>
- SAP DMS
 - https://help.sap.com/erp_hcm_ias_2012_03/helpdata/en/7a/973035624811d1949000a0c92f024a/frameset.htm

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Presentation Materials

Access the slides from 2019 ASUG Annual Conference here:

<http://info.asug.com/2019-ac-slides>

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Q&A

For questions after this session, contact us at

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