How to Have a Successful GIS Implementation

Ted Peay – Dominion Questar Gas
Ron Brush – New Century Software
Questar is an energy company focused on production, transmission and distribution of natural gas to over 1 million customers in Utah, Wyoming and Southeastern Idaho.
Learning Objectives

- Considerations for replacing your GIS
- Requirements and Software Evaluation
- Goals & Objectives, Factors influencing vendor selection
- Communication
- Improving application interoperability & Lesson’s Learned
GIS Project Information

- GIS Applications
  - Model Maintenance
  - Risk
  - Integrity – New
  - HCA/DOT Class Calculator**
  - Alignment map generator**

- 3 year Project
- New Requirements
- Personnel changes for both companies
  - 3 project managers
  - Functional managers
  - Other team leads and members

** Continue use of existing applications
Change Drivers

- Mobile
- Best Practices
- Aging Software Products
- Regulatory Compliance
Project Goals and Objectives

- Unify and strengthen operability of integrated GIS products i.e. Data editing, Risk, Integrity, Alignment sheets, HCA/DOT Class, etc.
- Meet data management requirements
  - APDM v PODS
- Leverage Mobile
  - Pipeline survey i.e. preliminary,
  - As-constructed, etc.
  - Identified Site survey
Factors that Influenced Vendor Selection

- Balance needs of managing both Transmission and Non-Transmission pipe (<20% SMYS)
- Use a suite of integrated software from a single vendor that can meet our business requirements
- Use a reliable, responsive application vendor
- Manage a low cost of ownership
- Avoid custom components
Requirements & Software Evaluation

Define Scope and Project Scope Statement
- Collect Requirements
- Create WBS (Work Breakdown Structure)

Pilot Project
- PODS Training
- High Level Data Modeling Exercise
- Software Application Training
- Review project scope requirements
- Review Questar workflows and product requirements
- Document requirement gaps
# Communication Plan

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## Communication

### Project Grade Comparison

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### Grade Categories:

- **‘A’** All Indicators Point to Success
- **‘B’** Success With Some Concerns
- **‘C’** Achievable But Unsteady
- **‘D’** Component Failures
- **‘F’** Heading for Failure

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*Questar Gas*
Application Interoperability

- Tempting to focus on only one app
- Easier for a single vendor
  - Output of one matches input of other
  - Documentation and training
- Workflow Usability
  - User Interface design
  - Common user forms
  - Common fields/terminology
- Familiar ArcMap extensions
- Similarly designed Portal apps

No App is an Island
New Century Perspective

Challenges

- Several PM hand-offs
- Running risk implementation project in parallel
- Adoption of different workflows – versioning vs. staging
- Prioritization of new functionality vs. bug fixes
New Century Perspective

- Successes
  - Teamwork
  - Good IT support
  - Existing team knowledge and experience
  - Implementing Staging (new)
  - Offline events (new)
  - Rigorous Process for User Acceptance Testing – users know product inside/out
Lesson’s Learned

- Personnel Changes – Communication!
- Software Testing – Client involvement
- System Benchmarking Tools – Agreed upon strategy and methodology
- Ambiguous Functional Requirements – Review and clarify upfront
- PODS/APDM Experience and Knowledge – Mutual understanding
- Application defects – Timely testing and identification
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Questions?