“Combining innovative workflows and emerging technologies in the digital oilfield”

IT Infrastructure for the Digital Oilfield
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Enterprise adoption depends on having the right mix of these key ingredients

- Innovative Workflows
- Flexible Architecture
- Organizational Capability
- Governance

Bottom-line results
Innovation where the work is and close knit collaboration are critical success factors

Value = f (people) * h (asset, R&D, information technology)
A flexible architecture is required to efficiently move solutions from one asset to another.

Applications must send and receive in standard formats.
Using web services to access distributed information.
Stored in systems of records with standard data structures.
With deliberate data quality procedures.
Using trusted master data.
Everyone needs to be thinking ahead as consumer products and advances in other sectors (i.e., financials) enter into the sector

- **MOBILITY**: Consumer devices are coming – adopt necessary infrastructure tools and platforms
- **APPLICATIONS**: Plug and play, built with web components, intuitive and safe to use
- **INTEGRATION**: Based on web services, industry standard semantics – such as PRODML, WITSML, RESQML
- **DATA**: Focus on data quality, rationalizing systems of records, master data management
- **MIDDLEWARE**: Workflow engines become more commonplace, routine pieces within workflows become more transactional
- **VIRTUALIZATION**: Ability put compute resources wherever becomes more accepted
- **STORAGE**: New players, techniques entering the market to deal with the volume
Everyone in the organization has to pull in the same direction to realize enterprise adoption

**Leadership**
- Understand the value and the opportunity
- Buy into the long term view, think beyond your unit
- Make it an integral part of your strategy
- Bake it into plans and performance measurements
- Recognize the successes, build on the learning’s

**Petro-Technical Professionals**
- Seek out the possibilities with information technologies
- Focus on those workflows with big bottom line impact
- Understand the big picture, what other assets can benefit
- Find your IT partner and work toward common solutions
- Be willing to learn by doing, iterations are king

**Information Technology Professionals**
- Bring passion and creativity
- Think through the enterprise implications, make them visible
- Advocate for the standards, build them into design
- Think through the entire lifecycle, build for sustainability
- Don’t chase unnecessary risks
You won’t get far unless you work out the enterprise governance

**Functional Alignment**
- High Impact Workflows
- Value within the Asset Portfolio
- Lifecycle Management Plans

**Portfolio Management**
- Roadmap
- Deployment Timing
- Organizational Capability
- Business Unit Readiness

**Roles and Responsibilities**
- Partner Engagements
- Sourcing, Intellectual Property
- Development, Deployment, Support Roles
- Funding Model
Questions and Answers