DrillPlan Enables Chevron Well Construction Digital Transformation in MCBU

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Chevron’s Midcontinent Business Unit

Executing our Permian plan

- Permian COOP Development Cost: $ per BOE
- Efficient development
- Lower carbon: ~15kg CO₂eq/BOE
- Advantaged royalty position

- Chevron acreage: ~2.2 million
- Unconventional crude oil: 303,000 barrels daily average production from Chevron and Noble in 2020
- Unconventional natural gas: 983 million cubic feet daily average production from Chevron and Noble in 2020

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Current State to DrillPlan

Current State: disjointed and expensive

DrillPlan: integrated and simplified

Manual processes

Chevron digital solutions

Third party digital solutions

OQE

OWA

EAR

Barriers

Csg Design

Adv Csg Design

Trajectory

Cmt Design

Mud/Hydraulics

Time/Cost

BHA Design

Torque/Drag

Automated design and validation

Orchestrated planning

Process and activity planning

Smart drilling program

Integrated learning

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Continued development of DrillPlan engineering functionality
- Continued development of pending subsurface integrations
- Debrief deployments
Role of DrillPlan Champion
Individual Performance Plan Agreements

Engage the Team
Provide feedback and input on Business Unit requirements & functionality required to ensure the solution meets the needs of the enterprise.

Champion the Change
Support & champion new ways of working by identifying opportunities to standardize process / workflow across the enterprise.

Point of Contact
Build awareness and understanding within your Business Unit and engage appropriate SMEs within your Business Unit to provide input to the team.

Deployment Coordination
Serve as key resource during deployment: cascading communications to your Business Unit, support delivery of training, and other activities.

Share Best Practices
Share best practices, lessons learned, and success stories on behalf of your Business Unit.
DrillPlan Deployment and Adoption Timeline

**D-Minus**
- Meet, greet & commit

**D-Plus Period - 8 Weeks**
- **Weekly SLB Working Sessions** *(Configure DrillPlan for your BU)*
  - Weekly progression of type well and workflow prep by Champion with Support from Project Team
- **Weekly Deployment Touchpoints** *(Monitor Progress & Develop Adoption Plan)*

**D-Plus**
- **Adoption Commitment**
  - Finalize plan

**Implement Adoption**
- **Continuous Enhancements**
  - SLB delivers continuous enhancements, OC growth

**BU User Training**
- 3-day training for Engineers
- ½ day training for Subsurface Partners

**Demo Days**
- Champions Meeting
- Mgmt + LT Status Check
  - Review Adoption Plan & Seek Commitment

**Next BU D-Minus Planning**

**Next BU D-Plus**

**Previous BU completing D-Plus and Adoption**

**Continuous PTS deployments**

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Deployment Approach

Deployment will focus on key activities in three areas to fully prepare a BU to adopt and utilize DrillPlan to complete the well planning process.

**Technology**
Data Ingestion, User Profiling / Access

Engage BU to complete data ingestion activities & user profiling, all BU data is visible in the solution and users have access to DrillPlan

**Process / Workflow**
BU Specific Workflows, Reporting, Catalogs

Engage BU to understand BU-specific workflows, reporting, and other customizations so that users understand how to complete their workflows in DrillPlan

**People**
Communications, Engagement, Training

Ensure an appropriate focus on Behavior Change Management activities so that BU stakeholders / users feel aware and fully ready to utilize DrillPlan

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**What does it mean to deploy?**

Deployment means that users have completed training and **DrillPlan is available for use**. This was the initial focus for the organization – make the software available to all users and encourage early adopters to get in the system and start understanding how DrillPlan will work for them.

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**What does it mean to adopt?**

Adoption means that **wells are being planned in DrillPlan**, dedicated Bubble Support will be planned during this time to ensure users are supported during the transition. This is the long-term focus for the organization, getting the whole organization out of legacy systems and planning in DrillPlan.
The Agile Process

Key Enablers
- Partnership and Relationships
  - CVX – SLB – MSFT
  - Central teams to Business
  - Subject Matter Experts to Practitioners
- Voice of the Business
  - Persona based input
  - Asset class approach
- Behaviors
  - Growth Mindset
  - Value Focused
  - Teaming
- Governance
  - Top-down leadership support

Architecture
- Tenant & Partition Decisions
- Security, Performance, Data Enablement

Business Change Mgmt
- Communications
- Deployment Planning
- Training

Detailed Engineering
- Workflows
- Discrete Engineering Disciplines
- Gap / Enhancement / User Experience / Bugs

Systems Integration
- Extensibility
- 3rd party Microservices
- Future in-house development

Data Integration & Mgmt
- Subsurface
- Offset Wells
- Directional Surveys
- Catalog Management

Test Current Capabilities
Define User Needs
Build the Backlog
Relentlessly Prioritize
Develop, Test, Deploy
SME Validation
Train & Release
Unlocking value from data
The OSDU™ Data Platform & Chevron’s Triple Crown Partnership

Industry Ecosystem
230+ member companies building an open-source data platform together

Sustainable Innovation
Enables lower cost innovation for our industry by building on open platforms

Get more in the cloud
Combines significant reductions in the cost of storing energy data with an order of magnitude improvement in performance

Leading technology delivery
Leverages our industry leading Triple Crown Partnership to commercialize and scale

Energy Data Platform

- Business Workflows
- Geoscience & Engineering Workflows
- Analytics & Data Science Workflows
BU Impact – New Reality
DrillPlan’s Role in the Future of the Upstream Platform

Collaboration

Data Analytics

Real Time Assurance

Reduced Cycle Times