Delivering digital well designs faster, through dynamic subsurface model integrations

Ryan Weller – Product Owner, Wells Digital Platform &
Keith Christianson – Product Owner, Subsurface Digital Platform

September 2022
**Problem** – Data handling wastes time & decreases model fidelity

- Static and unique exports
- Slow iteration processes
- Hamstrung collaboration

**Solution** – Integrations via a centralized model with a shared planning space

- Faster well planning processes
- Users focus on design and safety
integrated well planning workflows

Subsurface
- Targets & Trajectories
- Mechanical Earth Model (PPFG)
- Formation Tops
- Subsurface Drilling Hazards

Wells

DrillPlan

data review and decision making
integrated well planning workflows

Formation Tops

Well Tops/Markers  Surfaces  Grids

MEM / PPFG

OSDU

Geomechanics Insights

DrillPlan

Trajectories & Targets
direct connect (non-OSDU)

Subsurface Hazards
UCR 1H-2023
integrations cut data share effort by >75%
the fastest Chevron well planning ever

4 well pad example

- 1 upload of targets & trajectories
- 1 sub-regional MEM
- 1 formation top model
- 1 study of hazards

Centralized subsurface model

DrillPlan

- Apply
- Collaborate
- Auto-update
- Finalize

DrillOps

© 2022 Chevron
closed-loop workflow
workflow development cycle

Brainstorm

Development

Validation

Alignment

Elaborate

Deployment
Integration partnership and dependencies

Integration vision and requirements ➔ Align roadmaps

SLB development ➔ Demos & feedback

OSDU Data Platform ➔ DELFI Lib/Consume
OSDU maturation

BU PTS deployment

BU DrillPlan deployment ➔ Subsurface collaboration

SME validation ➔ User training ➔ BU workflows

Value from integrated workflows
integration vision
accelerating the data foundation and expanding possibilities

Today

connect
liberate & integrate
expand & couple integrations
augment & optimize
automate
OneTeam well planning

central data model  
partnered development  
enabling our people  
the future, faster

the future is liberated, the future is integrated