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human energy®

Delivering digital well designs faster, through dynamic subsurface model integrations

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Keith Christianson – Product Owner, Subsurface Digital Platform

September 2022

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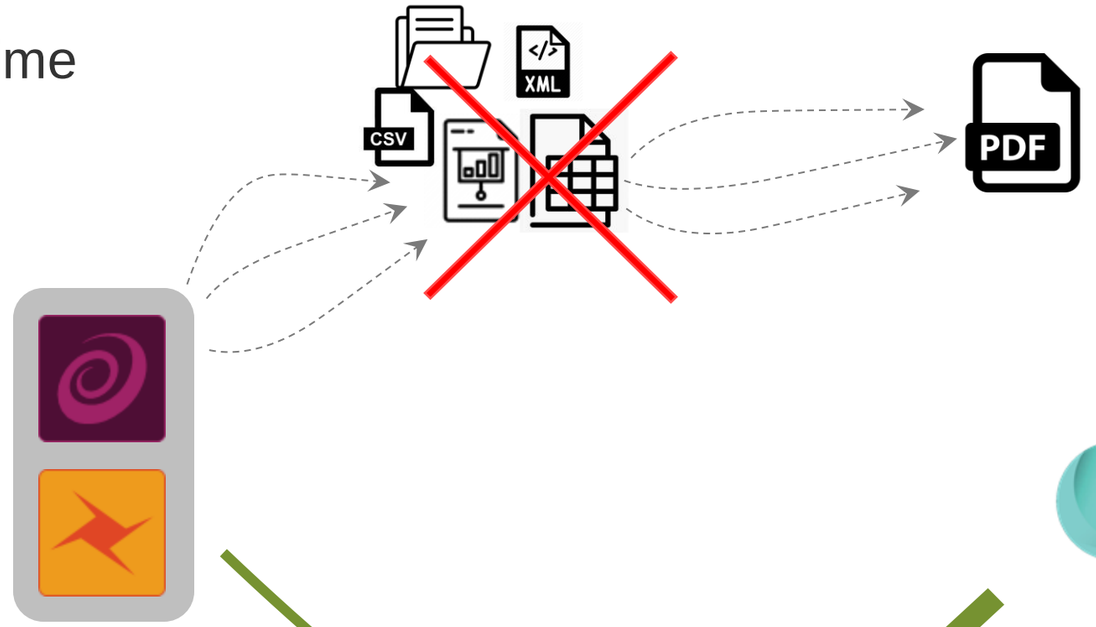
integrated well planning workflows

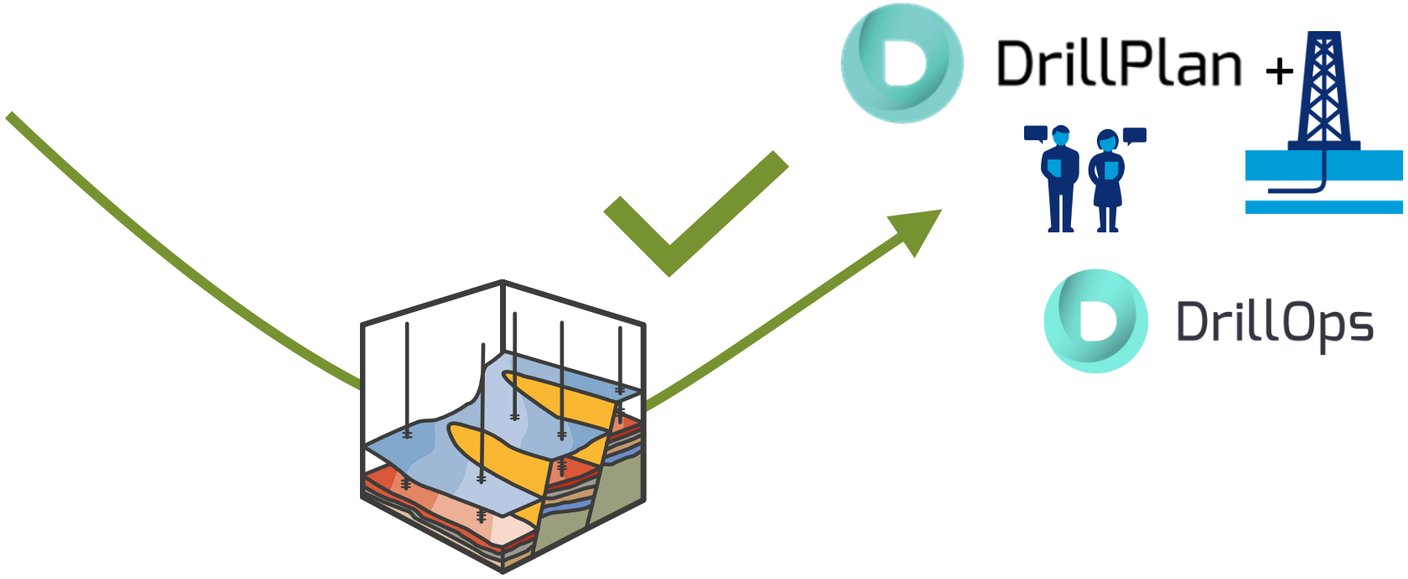
Problem – Data handling wastes time & decreases model fidelity

- 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



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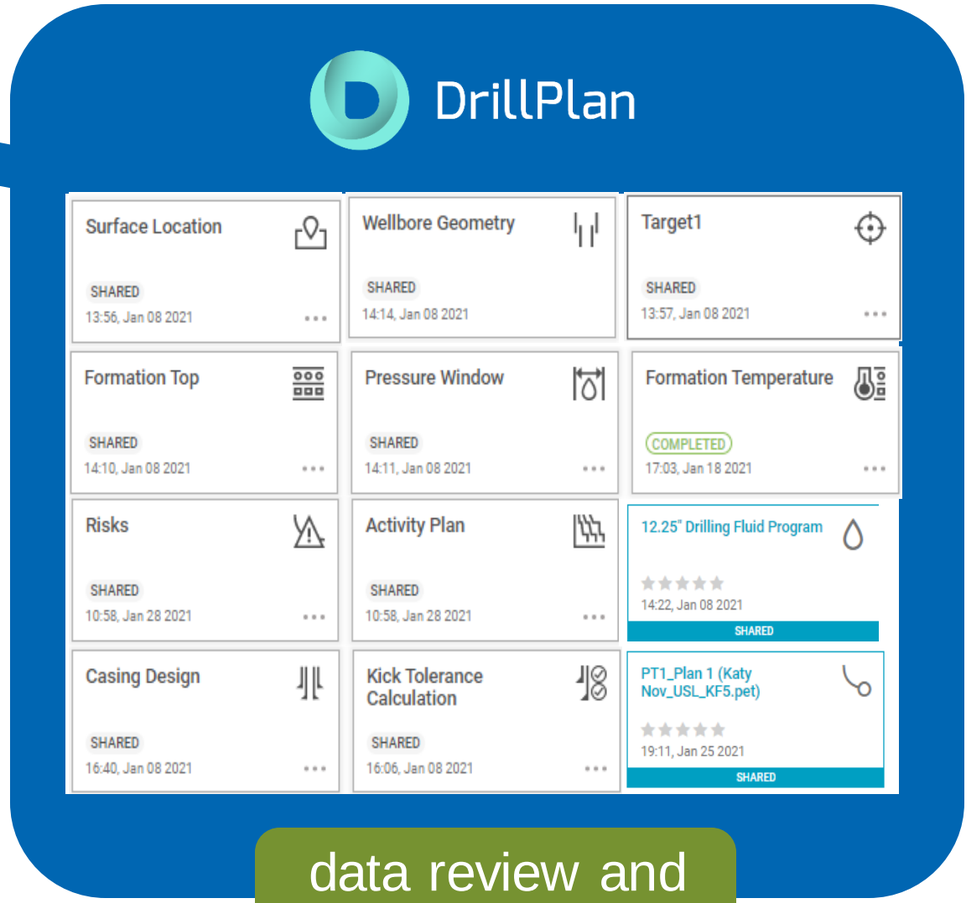
integrated well planning workflows

Subsurface

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

Wells



data review and decision making

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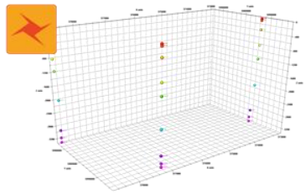
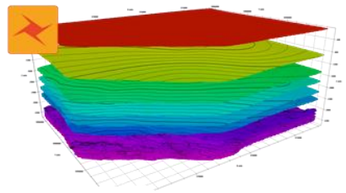
integrated well planning workflows

Formation Tops

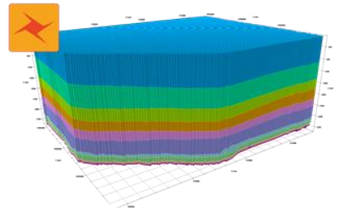
Well Tops/Markers



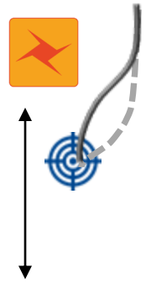
Surfaces



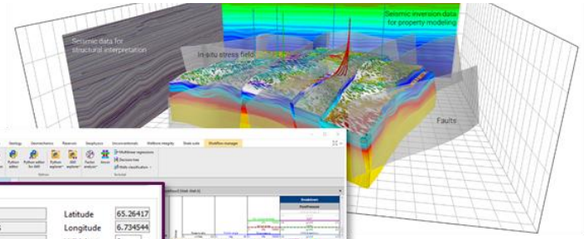
Grids

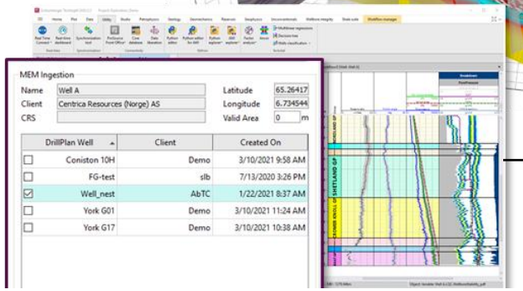


Trajectories & Targets
direct connect (non-OSDU)



MEM / PPFG



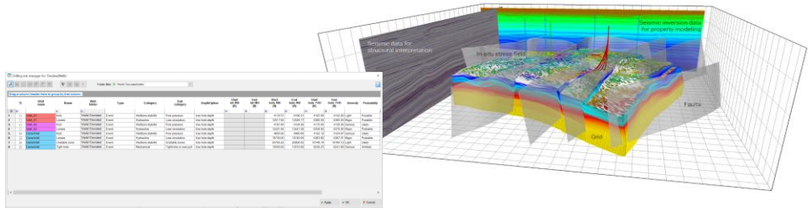


OSDU

Geomechanics Insights

DrillPlan

Subsurface Hazards



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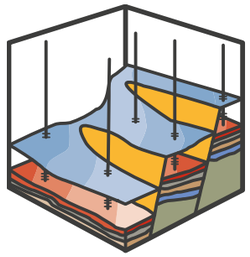
UCR 1H-2023

integrations cut data share effort by >75%
the fastest Chevron well planning ever

4 well pad example

Petrotechnical Suite

- 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

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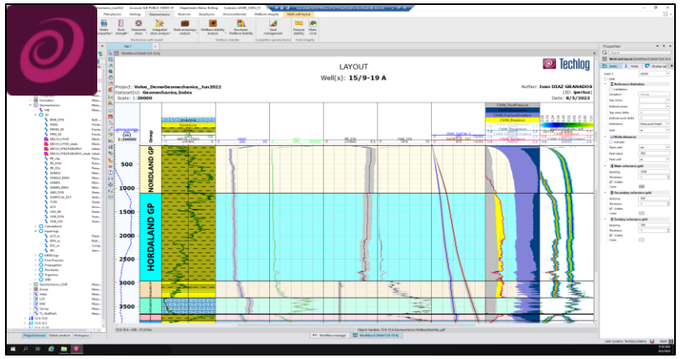
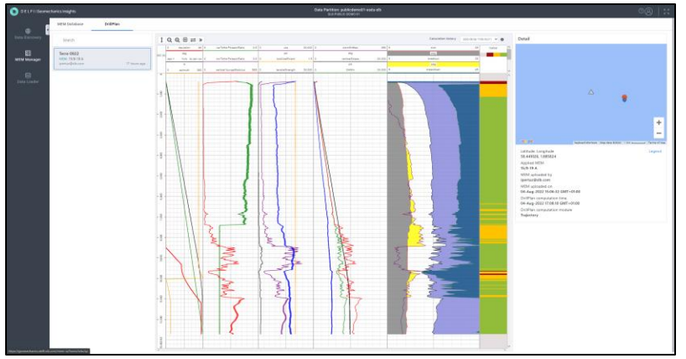
closed-loop workflow

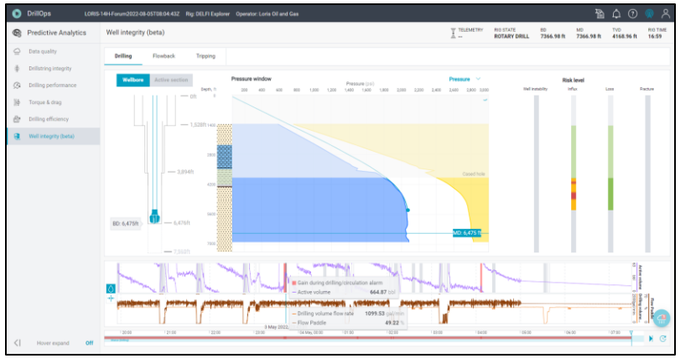


DELFI | Petrotechnical Suite

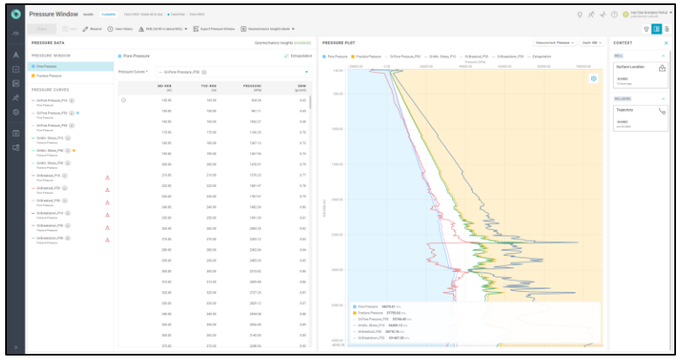


Geomechanics Insights

OSDU™



DrillOps



DrillPlan

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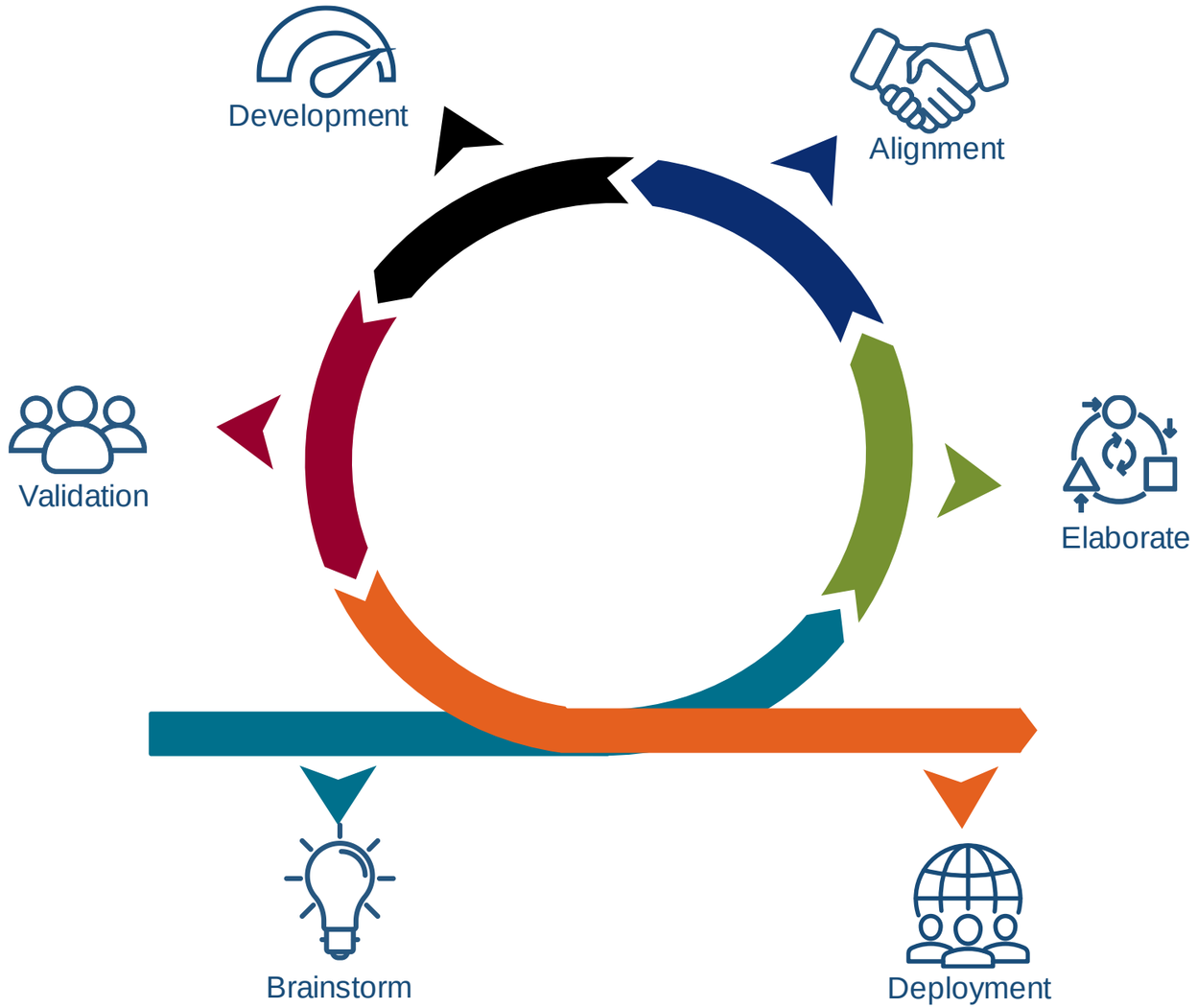
workflow development cycle



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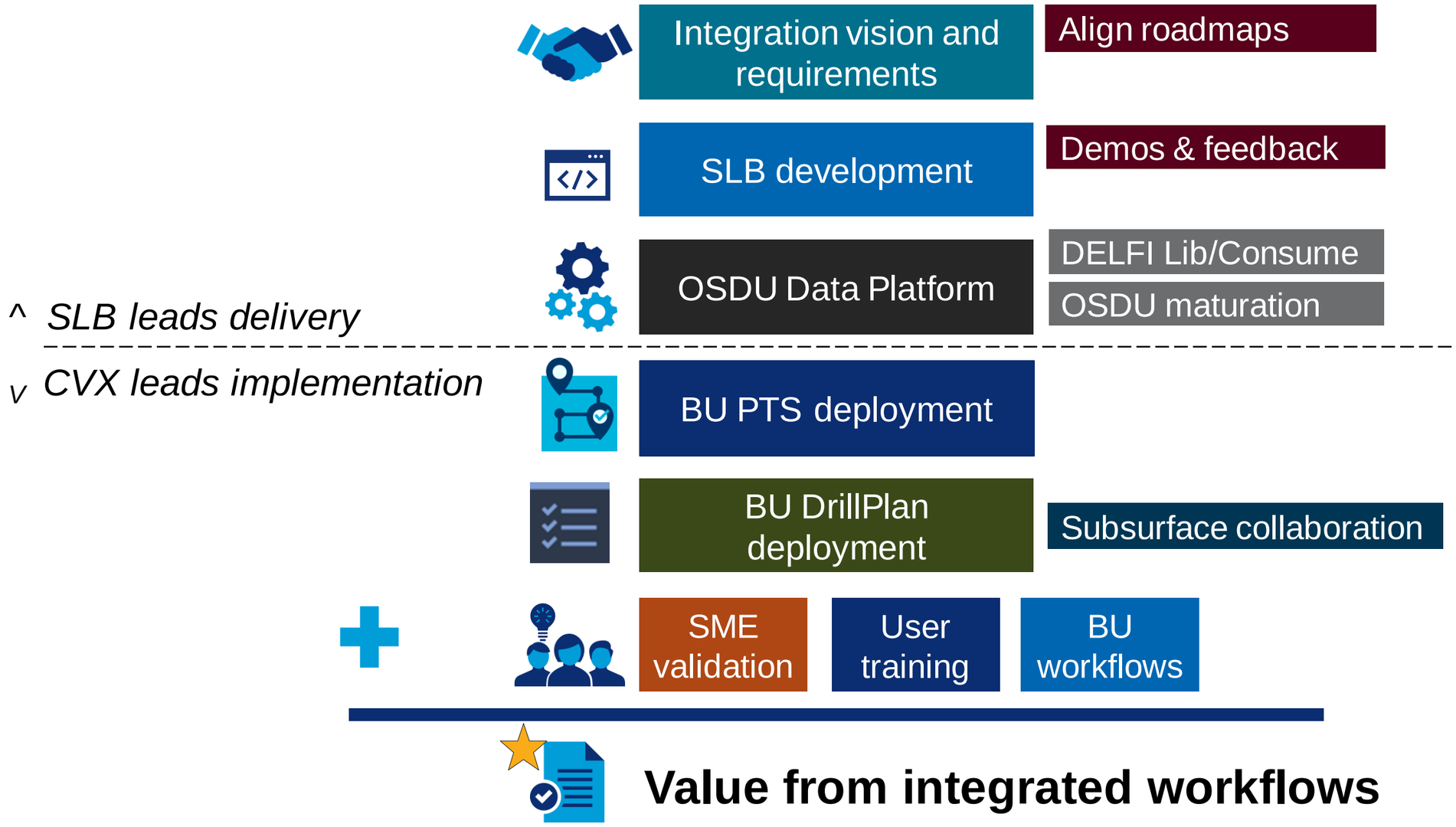
Integration partnership and dependencies



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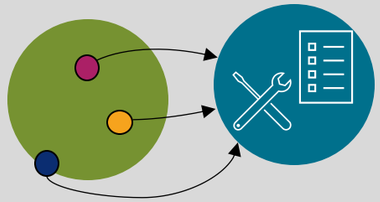
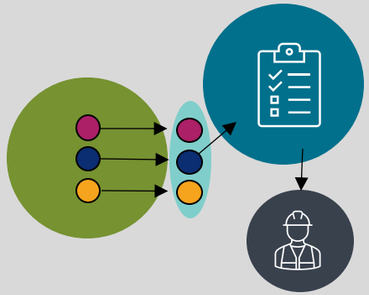
integration vision

accelerating the data foundation and expanding possibilities

Today



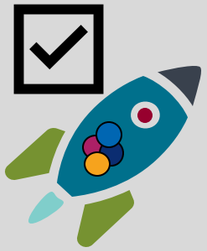
connect



liberate & integrate

expand & couple integrations

augment & optimize



automate

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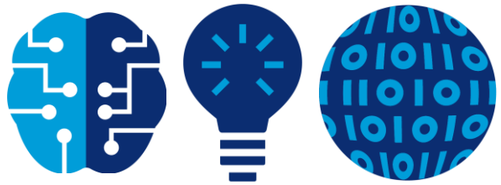
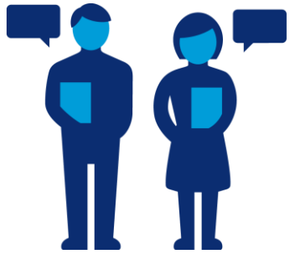
OneTeam well planning

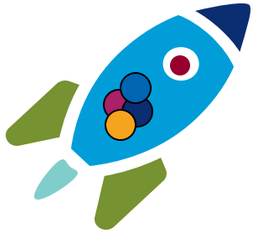


central data model

partnered development



enabling our people



the future, faster

the future is liberated, the future is integrated

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