

TRANSFORMING ENTERPRISE-WIDE DEPLOYMENT OF DELFI COGNITIVE E&P ENVIRONMENT

Jitesh Vij, Ankit Garg, Joseph Plunkett, Bjorn Baekkegaard

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Crescent Group Structure

Established in 1971, company currently operates two subsidiaries:

Crescent Petroleum and Crescent Enterprises based out of Sharjah, UAE



Driving transformational impact across MENA



Oil and Gas

78TCF
7 billion boe
resources

136,000boepd
production



Oil & Gas contribution to local economies

US\$16bn
to Iraq and providing 4 million
homes with electricity

US\$2.6bn
In Sharjah

US\$1bn
In Egypt



Ports and logistics

1st
World's largest privately
owned independent ports
and logistics company

9
countries of operation
across

3
continents



Other important sectors and activities

Power, Aviation,
Healthcare,
Strategic
investments,
Business incubation

Crescent Petroleum today

KURDISTAN REGION OF IRAQ – PEARL PETROLEUM

- 94,000 boepd
- Two world-class fields
- 12+ years of historic production
- Supplies three major power stations

EGYPT – DANA GAS

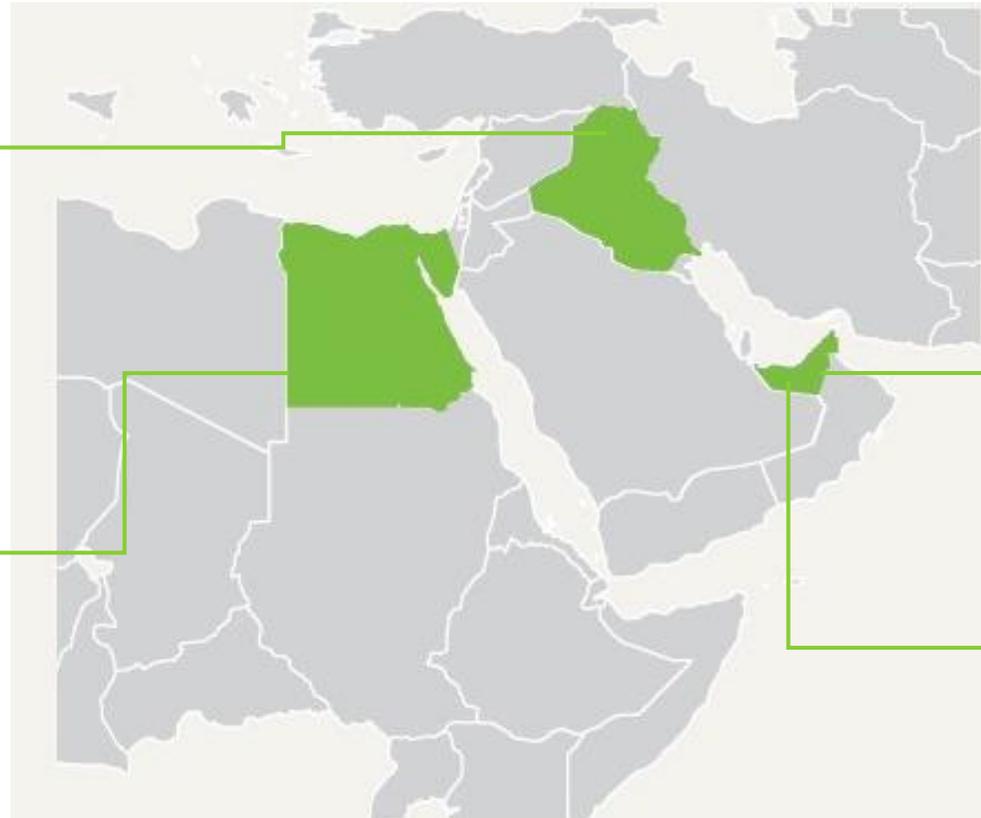
- 35,600 boepd (H1 2018)
- Top five gas producers
- 13 Development Leases and three exploration concessions
- Significant exploration upside

UAE – CRESCENT PETROLEUM CONCESSIONS

- Sharjah Onshore Concession
- Sir Abu Nu'ayr Island

UAE – DANA GAS

- 1,300 boepd (H1 2018)
- Zora – offshore gas field project



Sustainability is a strategic pillar

One of the first in industry to reach carbon neutrality in 2021

- Avoided 42m tonnes of CO2 emissions from 2008 to 2020 by displacing diesel with gas
- Equivalent to removing 1 million cars from the road for 2 years



6.0kgCO₂e/boe
Carbon intensity

42m tonnes
CO₂ emissions avoided

- Carbon intensity of 6.0 kgCO₂e/boe as of 2021, which is one-third the industry average
- Reduction in flaring by 80% to 0.12% of production (as of 2021)

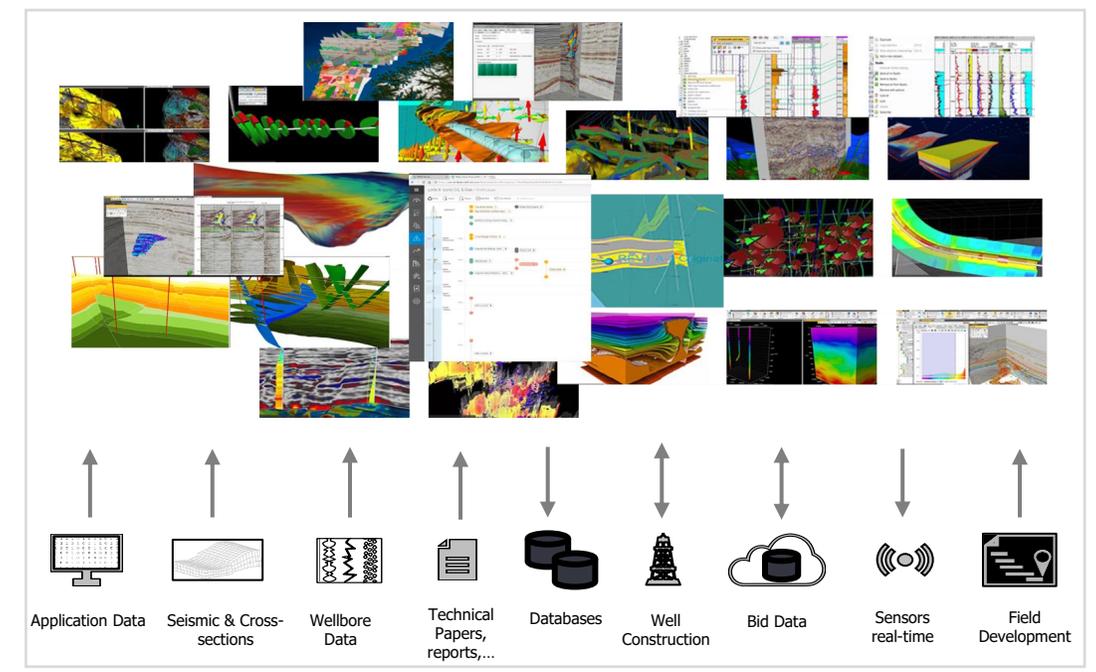
Background

DISCIPLINES: Petrophysics Reservoir Engineering Geology Geophysics Well Planning D&C Engineering Production Engineering Facilities Engineering Economics



Situation/Challenge

- **Data:** Large data volumes (Seismic & Well Data), Mixed data quality, Multiple sources
- **Applications:** Additional licenses require a lengthy procurement process, Updates / Patches, Management
- **Infrastructure:** Servers used for storage, and when required were not available!
- **Collaboration:** Restricted geographical collaboration (UAE, Iraq,...)



Deployment Plan and Approach

Comprehensive Security Assessment



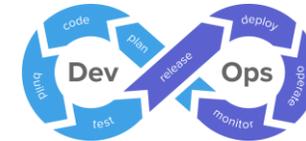
- Secure Access
- Data Protection
- Agile Security

Proof of Value



- Domain Workflows
- Collaboration
- Elasticity
- Scalability
- Accessibility

Seamless Migration to Operation



- Cloud Data Migration
- Cloud Infrastructure Customization
- Profile Subscriptions (Applications) and users onboarding

Assess to Operate in Four Months

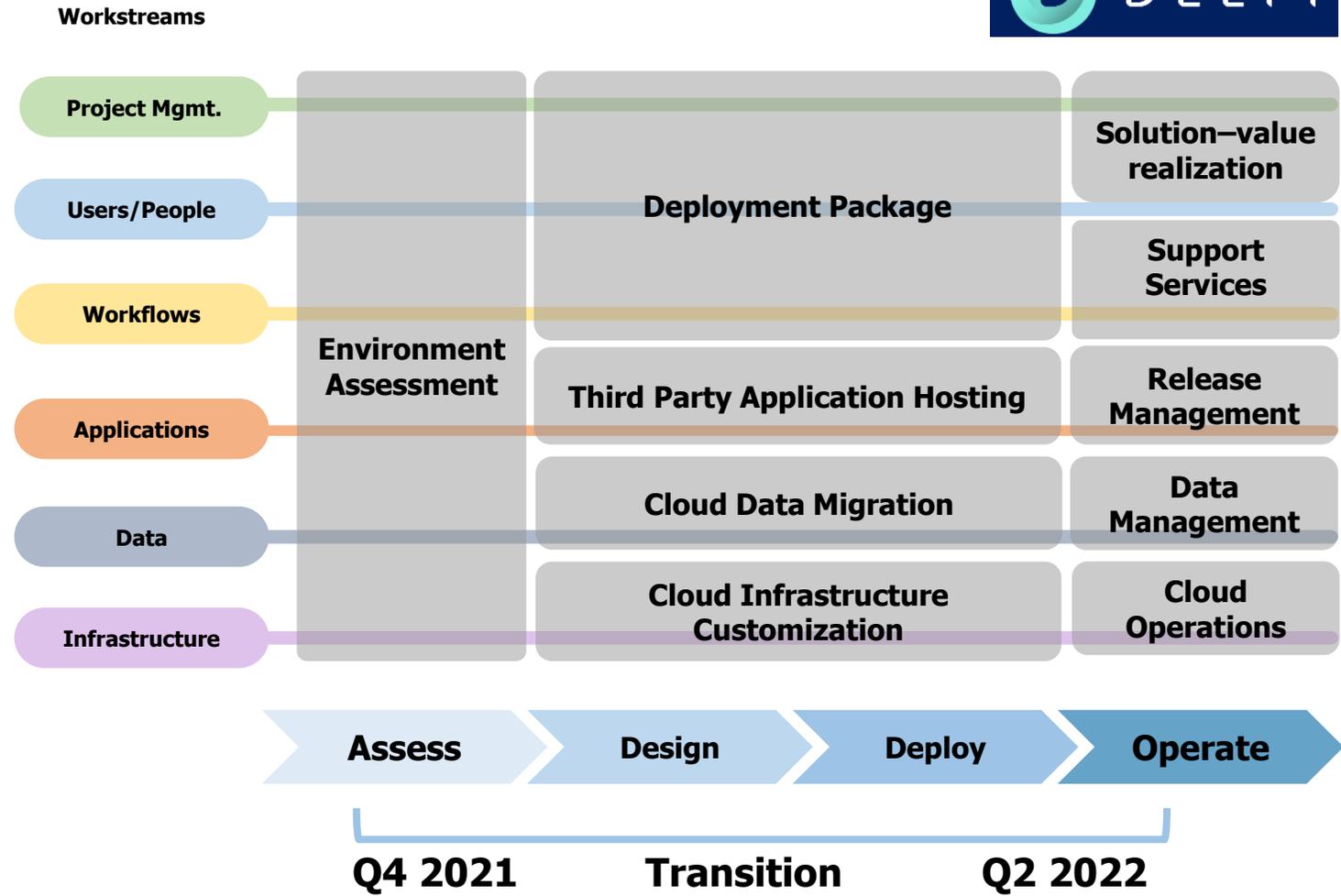


Cloud Data Migration



Data transfer to DELFI environment/cloud:

- 2+ TB data migrated to cloud
- Crescent G&G, RE and Petrophysics users onboarded
- Operational since early Q1 22



The Experience

✓ **Budget optimization:**

- Elasticity on demand access to all applications
- Scalability on demand access to infrastructure resources

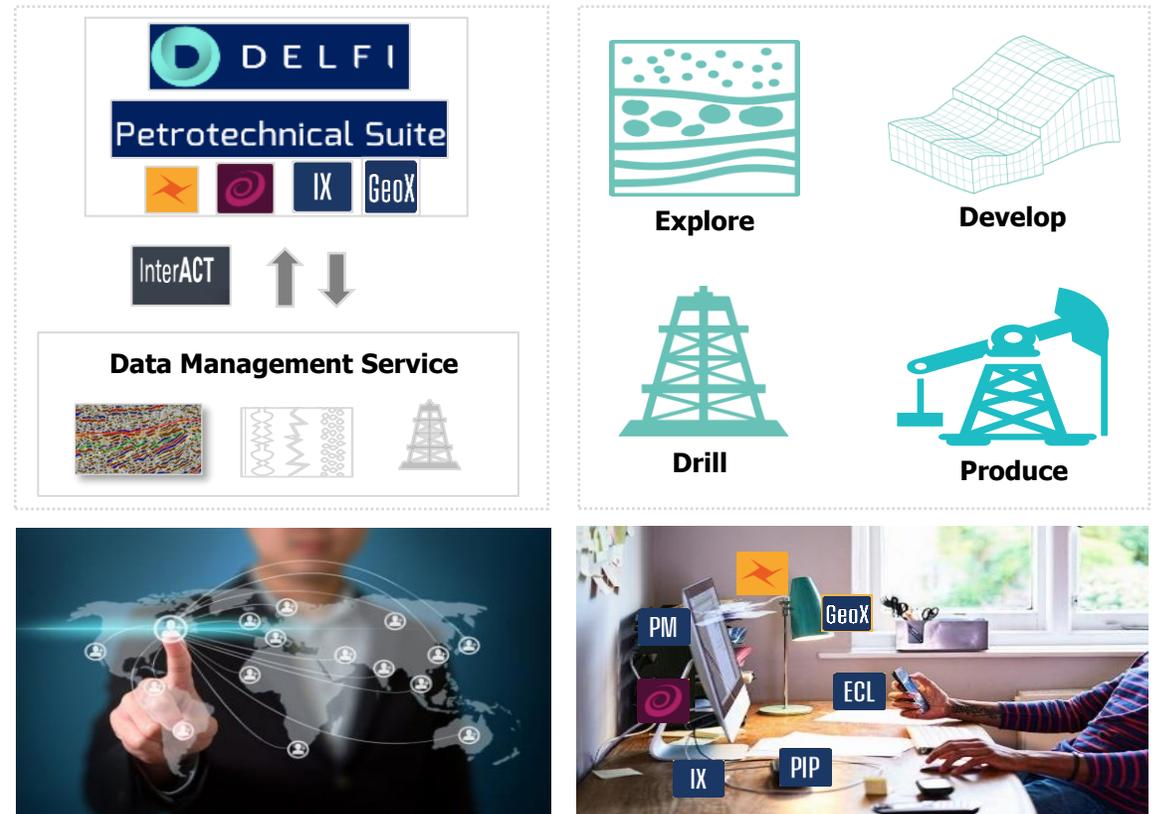
✓ **Performance:** 20% Computation Time Saving

✓ **Seamless** Data Ingestion

✓ **Efficiency:** Domains and Workflows Integration

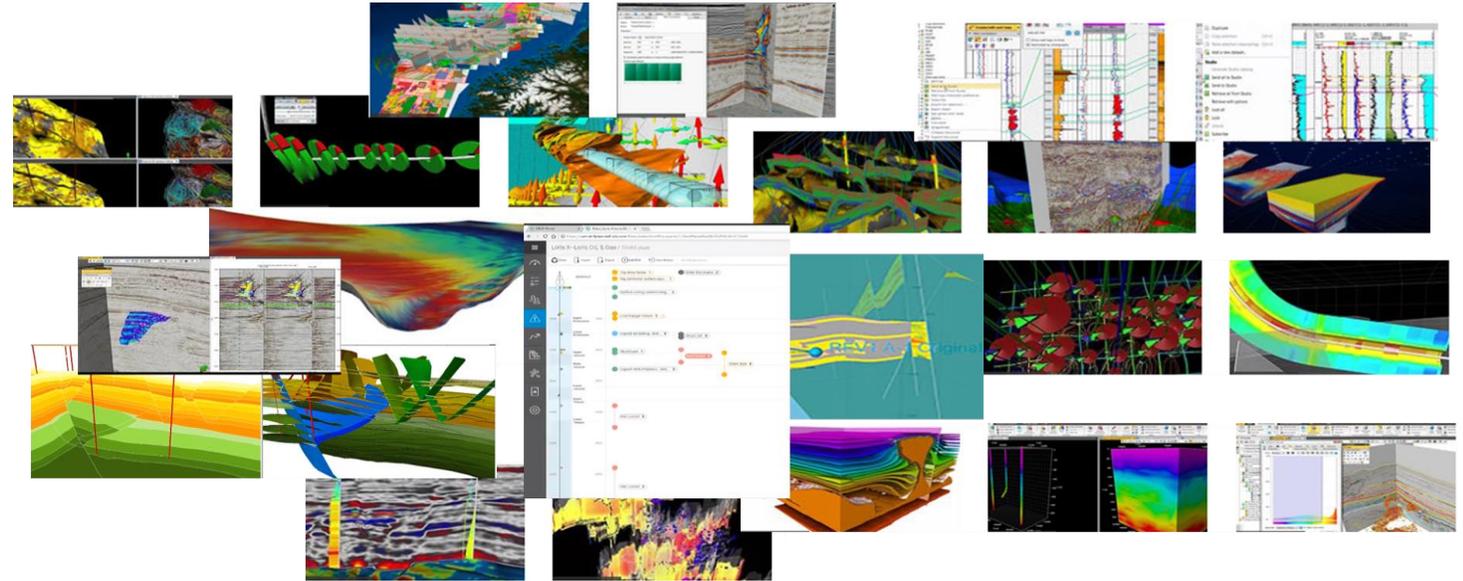
✓ **Collaboration** Between Different Locations

✓ **Accessibility** / Remote Work



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 - Anik Pal
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THANK YOU

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PROGRESS

