ARIESTM Economics System – Managing the Petroleum Investment Lifecycle

SPEE Software Symposium

September 10, 2015
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ARIES™ – The Foundation for the End-to-End Solution

ARIES is a widely-used reserves and economics solution that helps oil and gas companies establish asset and reserve values.

- Property-level evaluations easily consolidate to asset, business unit, and corporate levels as the basis for *end-to-end* project decisions.

- The open, sharable database enables access for business solutions
ARIES™ – Key Benefits Add Value

Enterprise power and capacity rapidly and efficiently handles any number of properties and projects

Automation for property forecasting and updating, for scheduling of development drilling projects, and for profitability testing

Powerful data quality management tools to ensure transparency and provide confidence

84% of the O&G Journal top 100 use ARIES for reserves and economics
Introducing the **Landmark – Palantir** Strategic Alliance

- Integrates ARIES™ with Palantir’s suite of reserves, financial, portfolio solutions
- Bridges the gap between the petro-technical world and business planning
- DecisionSpace® meets PlanningSpace™

Game Changing Global Solution
The Oil & Gas Business isn’t getting any easier!

Technical, political and commercial uncertainty is impacting the oil and gas business more than any other time in the previous 40 years.

In our business, uncertainty is seen in oil price.
Large, Capital Intensive, Integrated Projects are becoming the Norm

- Much of the associated forward risk lies in engineering and execution models which exist only in petro-technical applications;
- Economics models currently in use are currently unable to access and calibrate to engineering and execution risks;
- Therefore, technical, operational and commercial uncertainties aren’t effectively coupled to allow for ongoing, quick and optimal decision making.

• 8 out of every 10 upstream oil and gas project overrun its budget (CAPEX) by an average of 40%  

Source: Presentation, Evans Akwasi Gyasi, Warwick University, UK
Why has Planning been a challenge?

The oil business is very complex. Technical teams operate in silos.

Asset teams and Corporate use complex software tools that are disconnected.

Excel models become the way that people share and analyze information.
There is a better way to do this!

Fully Integrated Lifecycle Economics Planning

Corporate Planning Teams
- Planner
- Executive
- Finance
- Tax

Asset Technical Teams
- G&G
- Reservoir Engineer
- Facilities Engineer
- Economist
- Analyst

Feedback to Business Unit
Feedback from OpCo
Connect People, Platforms and Processes

- Eliminate data sharing via Ad Hoc Methods
- Directly connect platforms using common protocols
- Standardize data definitions and create alignment between Asset and Corporate Teams
- Continuous feedback improves data quality enabling better decisions and better plans
Our Life Cycle Planning Solution Removes the Pain of Consolidating US Onshore and International Portfolios
Palantir and Landmark “Petroleum Investment Lifecycle”

PETROLEUM INVESTMENT LIFECYCLE

- Reserves Management & Financial Forecasting
- Integrated Technical Development Options
- Capital Budget and Portfolio Planning
- Full Cycle Economics

- INTERPRET & MODEL
- PLAN & DESIGN
- EXECUTE & OPERATE

- EXPLORATION & APPRAISAL LIFECYCLE
- RESERVOIR DEVELOPMENT LIFECYCLE
- DRILLING LIFECYCLE
- PRODUCTION LIFECYCLE
In order to deliver the Portfolio Investment Lifecycle, the products you know are coming together:

1. Exploration Prospect Value
   • FieldPlan-PalantirCASH

2. Portfolio Analysis
   • ARIES-PalantirPLAN
   • ARIES-PalantirFINANCIALS

3. Reserves Management
   • ARIES-PalantirRESERVES

4. Resource/Rig Scheduling
   • ARIES-PalantirRESOURCE

5. Lifecycle Economics
   • Petro-Technical Tools + PalantirCASH

“Petroleum Investment Lifecycle”

Landmark
DecisionSpace® PlanningSpace™
Benefits of Integrating Economics with Robust Petro Technical Data

- Scenario plans can be designed to perform under the widest range of business environments
- Enable focus on analysis and intervention rather than data gathering, entry and manipulation.
- Match Strategy with delivery
  - Strategies can be developed or modified as market conditions change
- Planners can make fact based, economic decisions throughout the full lifecycle of their asset
- Portfolios can be balanced for the desired level of risk and reward