

Value of data analytics in fracturing design and production optimization

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Summary

Data analytics can produce significant tangible value for geologists in exploration and production. Data analytics unlocks the value in the big data that oil and gas producers:

1. Acquire from seismic surveys and digital well logs.
2. Create through subsurface interpretation of reservoir properties and geomechanics.
3. Employ for superior hydraulic fracturing design.
4. Gather from conventional and unconventional well operations.

In this presentation, Yogi Schulz will explore best practices for achieving tangible value from geologic data using analytics.

Yogi will illustrate his ideas based on experiences gathered during a recent data analytics project he managed for a Calgary-based oil and gas producer.

Theory / Method / Workflow

In this presentation, Yogi Schulz will explore best practices for achieving tangible value from data analytics can overcome common issues including:

1. Poor data access
2. Inadequate data quality
3. Hand-crafted data integration
4. Poor data presentation
5. No data query flexibility
6. Poorly organized implementation project

Yogi will describe solutions for these issues that have been successfully implemented to support the work of geologists.

Results, Observations, Conclusions

Data analytics has demonstrated the ability to deliver incremental net revenue from existing exploration and development opportunities.

Data analytics remains an under-utilized technology among oil and gas producers.

Oil and gas producers can produce significant tangible value from employing best practices for the implementation and operation of data analytics.

Novel/Additive Information

Data analytics is new technology that is overcoming data issues that have hindered geologist for many years in the past.

Data analytics has produced tangible value in these aspects of oil and gas producer operations:

1. Interpreting seismic and well log data.
2. Integrating geologic and engineering data.
3. Optimizing the design of hydraulic fracturing.

Acknowledgements

References

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Analytics time has come, so learn how your business can unlock the value

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