

Corvelle Service Offering Visual Analytics Implementation

Corvelle recently led a successful visual analytics software package implementation project for a mid-size Canadian oil & gas producer. Corvelle can produce similar results for your oil & gas company.

Visual analytics is an important tool for performance improvement in many industries including upstream oil & gas producers. This oil & gas project produced the following benefits:

- 1. Delivered incremental net revenue from increased well production to the bottom line.
- 2. Shifted the work of engineers to engineering and away from data gathering and manual data integration.
- 3. Eliminated the risk of:
 - a. Spending time on optimizing wells where no opportunity exists.
 - b. Implementing production enhancements that produce negative net revenue.

This visual analytics project produced a one-year payout for production engineering.

This project focused on solving the following common production engineering challenges:

- 1. Poor access to production performance, financial, asset characteristic and public data.
- 2. Excessive reliance on time-consuming, manually-crafted, complex Microsoft Excel routines for data integration.
- 3. Frustrating inability to achieve business value from the mountains of data being collected daily.
- 4. Risk of implementing production enhancements that produce a negative net revenue outcome due to:
 - a. A lack of adequate analytic data.
 - b. Errors in the data integration.
- 5. The limitations of Microsoft Excel as a graphing tool.

Corvelle Drives Concepts To Completion

This monograph explores the:

- 1. <u>Business value of visual analytics</u> to improve:
 - a. Well performance through reduced down time.
 - b. Productivity and morale of production engineers.
- 2. <u>Characteristics of a well-designed project</u> that delivers the business value of visual analytics.

Business value

The business value of using a visual analytics software package includes:

- 1. Presenting data visually as graphs for decision-making. Graphs make trends, unacceptable variances and looming problems unmistakably clear.
- 2. Reducing the elapsed time to business value in comparison to alternatives that require custom software development.
- 3. Eliminating use of Microsoft Excel routines for data integration and for data presentation.

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Audience

Building an understanding of visual analytics software package implementation projects will typically interest oil & gas professionals in the following disciplines:

- 1. Engineers
- 2. Management for performance measures
- 3. Reserves staff
- 4. Acquisition & divestiture staff

Visual analytics software package implementation project description

A typical visual analytics software package implementation project consists of the following phases that Corvelle can deliver for your oil & gas company.

Visual analytics software package selection

1. Documenting visual analytics business requirements:

- a. Functionality
- b. Performance
- c. Required data sources
- 2. Documenting visual analytics software package selection criteria:
 - a. Software capability
 - b. Vendor capability and track record
 - c. Acquisition and operating cost
- 3. Selecting a visual analytics software package
- 4. Piloting the selected visual analytics software package
- 5. Determining the visual analytics software package implementation approach:
 - a. Change management, training, communication
 - b. Software development and configuration

Visual analytics software package implementation

- 1. Install the visual analytics software package
- 2. Integrate the visual analytics software package with in-scope data sources
- 3. Schedule and deliver training and one-on-one support
- 4. Configure visual analytics software package graphs and reports:
 - a. Document typical workflows
 - b. Develop supporting graph and report templates
- 5. Identify, prioritize and resolve data quality issues and software package defects
- 6. Identify, prioritize and develop software package enhancements

More information?

For more information on this and other ways that Corvelle helps oil & gas producers improve performance and net income, please contact <u>Yogi Schulz</u>.