

Quick Data Management Evaluation

eBook–June 2016





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Practical Pragmatic Data Management

More and more exploration and production companies are realizing the value of managing their data assets and are taking the steps to become data driven organizations. Oil company executives and managers are confronted with an assortment of terms and ideas such as:

- Information orientation
- CMMI Data Management Maturity (DMM)
- People, Process, Technology
- Strategic value initiatives
- DMM models
- Master Data Management (MDM)
- Data governance
- Data coherence, data currency, data correctness, data availability
- Data initiative alignment to data management strategy

At issue is not the value of data management or whether to initiate a uniform data management approach, but where to start and how to ensure the completion of the project. What do all these things mean to the organization and how does one choose what to do? Can the organization demonstrate that a data management program will deliver meaningful change and value to the business? How long will it take? How much will it cost?

Even with modern web-based tools, such as iStore's Quick Quality Data Management (QQDM) software, that enable and empower company subject matter experts to effortlessly manage their E&P data, finding a starting point is often difficult. This is why a quick initial data management evaluation is a helpful and informative first step.

Through iStore's Quick Data Management Evaluation (QDME) service, the data management fundamentals are quickly reviewed and gaps are identified to reveal the next steps needed to create better data management practices.

These steps include suggestions which lead to practical, repeatable processes for improving data quality and getting data problems under control. iStore's team of data management professionals understands E&P data and the processes and technologies involved in designing and implementing a data management strategy that works for E&P companies. The data management team is composed of practitioners who have delivered real world projects involving production allocation, basic well headers, directional surveys, perforations, well schematics, and more.

QDME includes four fundamental steps:

- 1) Identify where the company needs to be in terms of data management capability.
- 2) Assess and determine the company's current data management capability or maturity level.
- 3) Determine a practical and realistic rate and pace of change appropriate for the company.
- 4) Identify and determine the critical business issues at hand.

Establishing a Data Management Efficiency Index (DMEI) appropriate for the company will indicate the health of the data based on evaluation criteria applied to each data type. The DMEI will be valid regardless of whether a federated or consolidated Master Data approach is desired.

The QDME process evaluates raw data, criteria weights, and data type weights. The DMEIs are then generated by data type and for the whole organization being evaluated. These scores and indexes are calculated and graphed to illustrate how data management efficiency is changing over time in various organizations and across data types.

Evaluation criteria can include:

- Perceived data quality
- Reasons for stated data quality
- Time required to find true and correct data
- Master database actively managed
- A single version of the known truth
- ▶ All data types from a well-known master database
- All data types with an identified owner
- Data routinely inserted and updated in the master database
- ▶ All personnel aware of the master database
- All personnel viewing the master database as the definitive source
- Data gathered for projects beginning with the master database
- Data management personnel embedded in business groups
- Data management personnel with a career continuum defined
- Data management personnel viewed as important to business success
- Data management viewed as essential to the business

Answers to these, as well as additional questions, are compiled and scored, given weightings according to business priority, which generates a DMEI. Observations are compiled across all data types. General conclusions are reported. Clear, unambiguous recommendations are provided for general data management issues, as well as for improvement in managing specific data types. The goal is an actionable plan that targets important data issues for the organization.

Built on world class knowledge and over twenty years in the industry, iStore brings real world experience to E&P companies to walk them through these decision points.

The iStore data management team then advises the companies by proposing a tailored data management strategy that includes business priority-oriented and achievable data management projects that deliver the data management strategy at a pace compatible with the business.

Typical factors in a data management strategy include:

- Data owners
- Data acquisition formats
- Data identification standards
- Data access methodologies
- Data transfer protocols
- Datum/projection standards
- Standard units of measure
- Data governance processes for each data type

Once the data management strategy is established, domain-specific data management projects can be performed that implement the standards and processes to deliver data management value to the business. Typically, these projects will be selected based on real-world priorities and delivered in accordance with the company's data management strategy.

iStore's QDME service benefits E&P companies by providing:

- A fast understanding of the state of qualitative and quantitative data management practices in the company
- A prioritized set of data management improvement actions specific to the organization, organized by data type
- A roadmap to data management success defined by the company with iStore's assistance
- ▶ The ability to do data type assessments at time increments using iStore's QDME process

QDME is just the first step of the data management roadmap. Once existing data has been analyzed, evaluated, and prioritized, a data management system must be selected to house and maintain the information. iStore's QQDM software enables data managers to access, edit, synchronize, and enforce data standards into an industry-standard data store.

Read more about it in the future release of iStore's upcoming eBook Quick Quality Data Management.

iStore provides integrated products, services, and solutions for the oil and gas industry focused on maximizing the value of data by providing quick and easy access to organized, high quality information.

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