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Quantified Value Creation through Data Flow Optimisation

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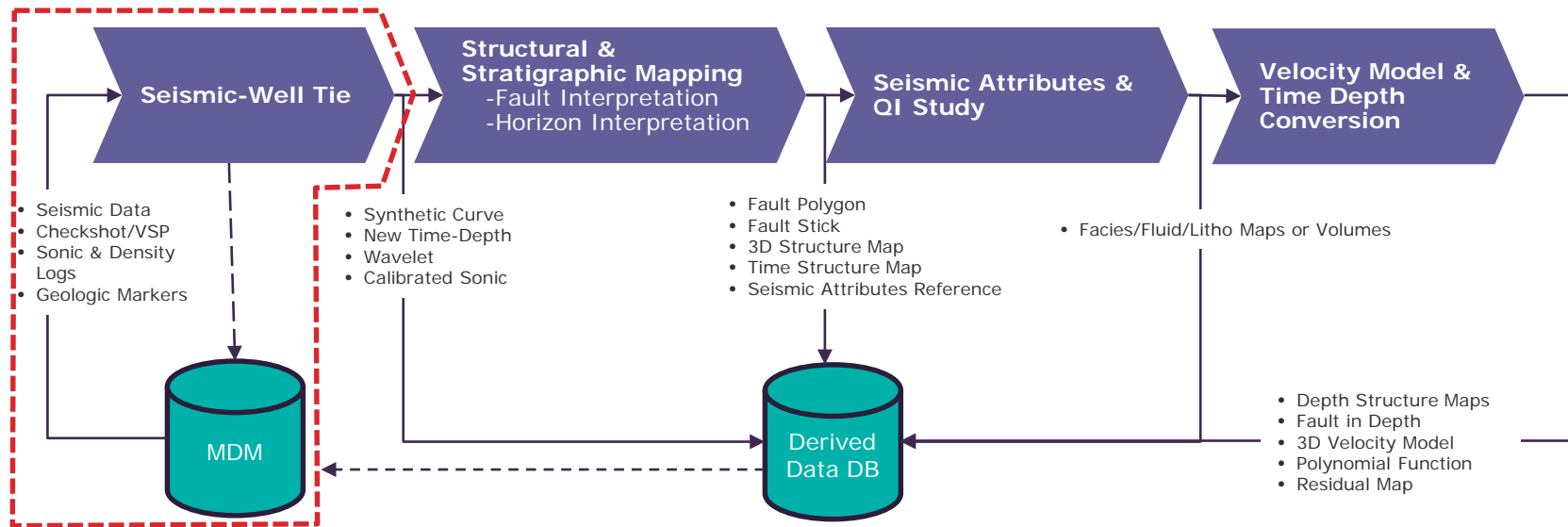
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Introduction

What is Data Flow?

Data flow is a diagram that documents data types and/or attributes that flow between two (2) or more entities in a domain space. Entities may be processes, applications or databases. Domain spaces may be sedimentology, petrophysics, biostratigraphy etc. or even subsets of these.

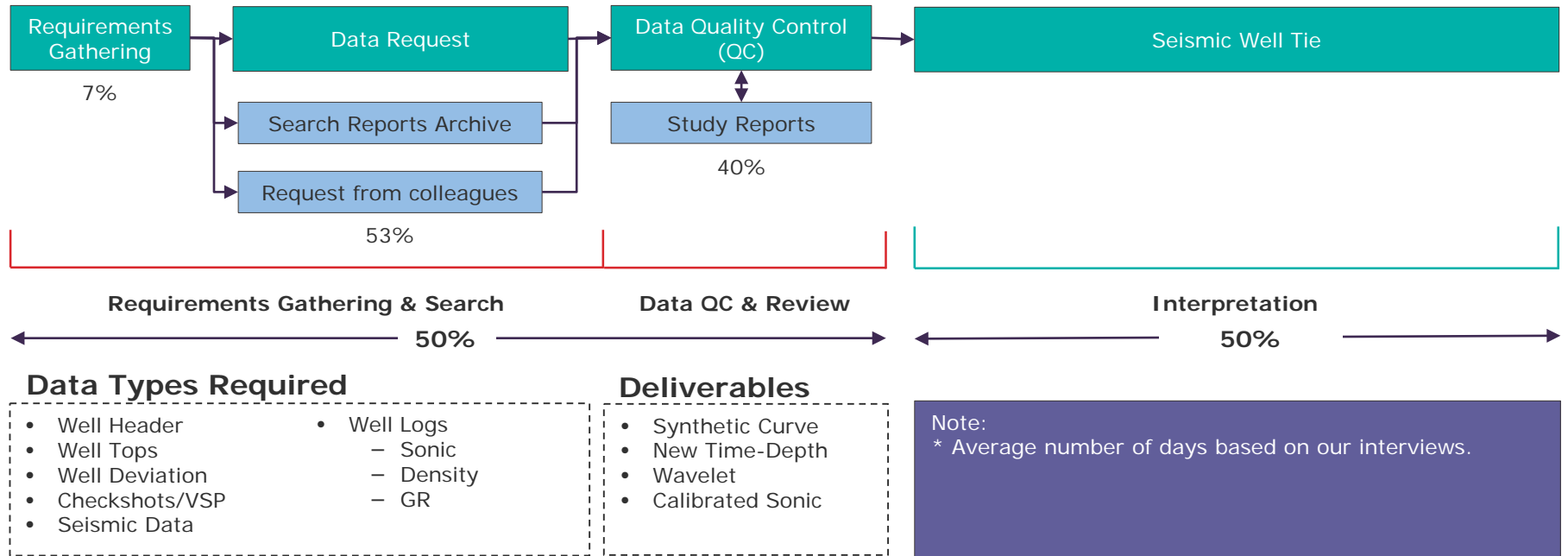
Seismic Interpretation Workflow



MDM – Master Data Management
DB – Database
VSP – Vertical Seismic Profile

Seismic to Well Tie

As-Is



Problem Statement

- **52% of business users' time** are spent on data-related matters such as data gathering & searching, quality control (QC) and loading based on 10 key workflows in Field Development Plan (FDP).

The Importance of Quantifying Data Flow Optimisation

Increase Reserves

Asset Development

Increase Production

Data as an Asset

- Data management framework
- Defined data flows and standards
- Data quality metrics (DQM)
- Corporate data & master data

Productivity

- Eliminate data downtime
- Reduce repetitive data QC tasks
- Data reusability
- Effective data access and retrieval
- Shorter project timeline

Risks

- Decrease bad & non compliance data.
- Avoid data leakage.
- Utilising the right data and the right format.
- Increase accuracy in deliverables.
- Reduce churn

Cost

- Reduce operational cost
- Improved lifetime value of Exploration and Production (E&P) data



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Case Study

Data Collation & QC for Development Project

Overview of the Use Case

Why are we doing this?

To assure all priority data required are made available to the development team to start work in FDP.

What are the selected projects?



Where do we focus?



Data Assurance



Priority Data Types

What is the goal?



All priority Data Types are QC-ed and signed off by appointed Subject Matter Experts (SMEs).

When to deliver?

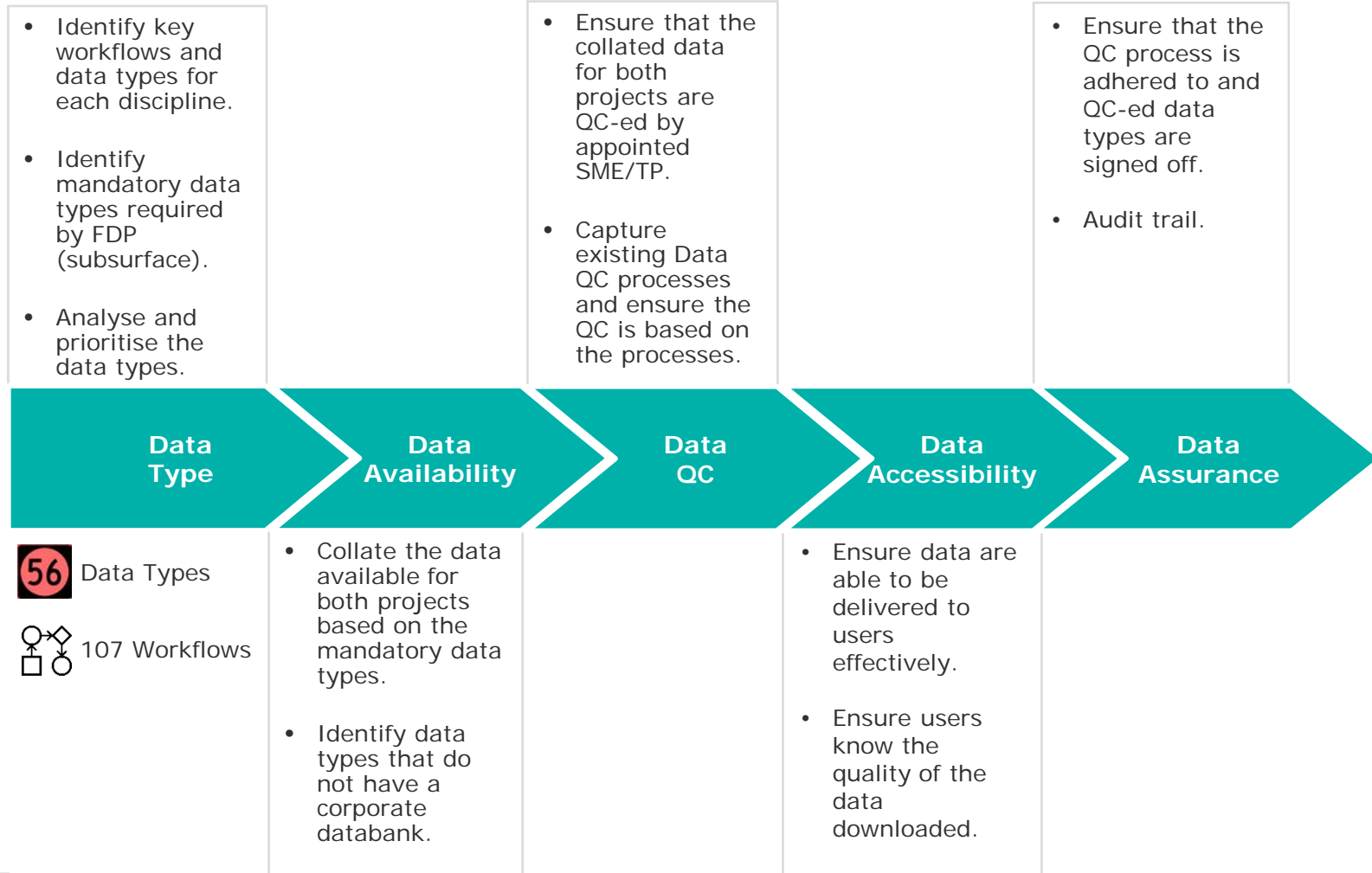


3 months to collate, QC and assure.

Methodology

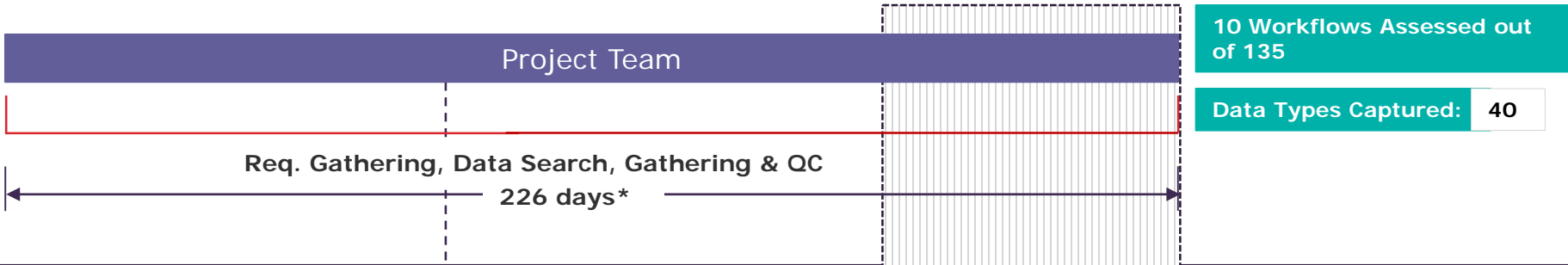
August 2015

Oct 2015

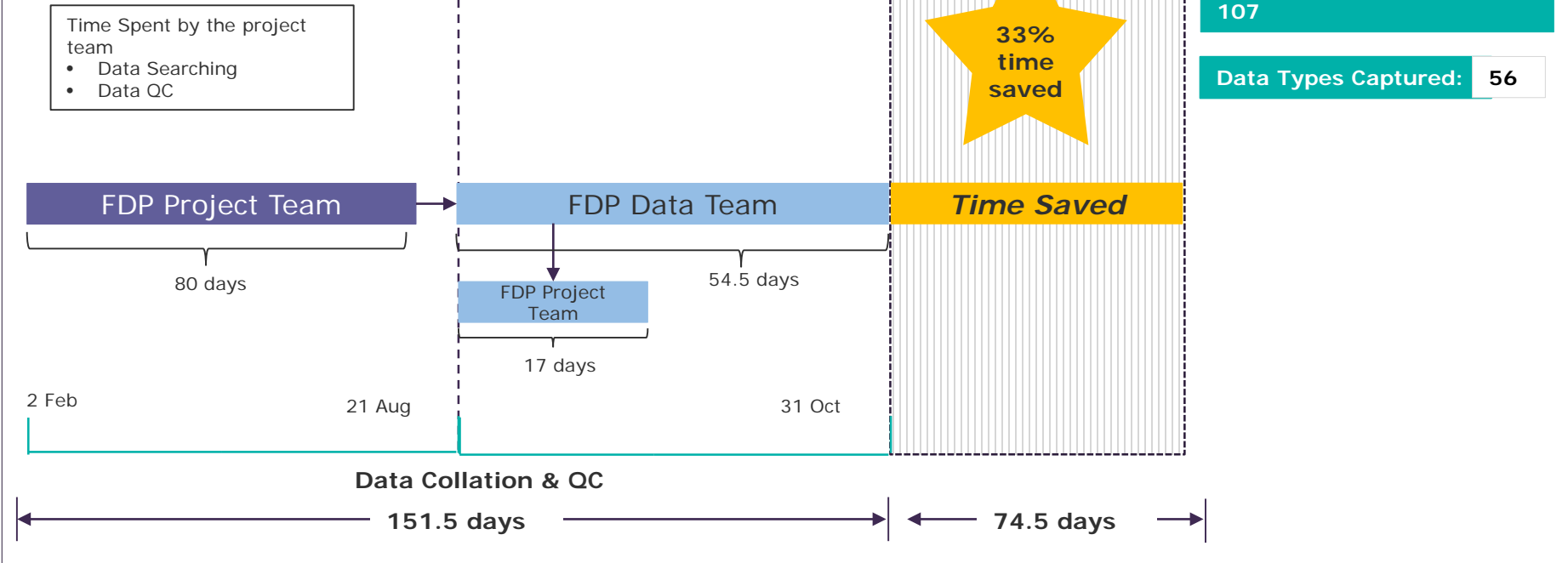


Quantified Time Saving

A FDP Dataflow Optimisation Survey 2015



B FDP Data Collation & QC -Brownfield



FDP Dataflow Optimisation: Non Quantitative Benefits



Data Quality

- Final QC-ed data – unique and non ambiguous ensuring less clarification needed (improved data quality)
- Capturing of the existing QC processes help to assure the data quality
- To view data in an integrated way



Data Accessibility

- Access to available QC-ed data types enables teams to collaborate better



Inter-Disciplines Collaborations

- Strengthen the collaboration between Technical Data and Project Teams by clearly introducing the role of Technical Data



Improve efficiency in data management

Summary

75
days



7
projects



525
days

Time Saved

Calculated time saved for a brownfield project

Project Selected

7 developments project selected for second phase

Estimated Savings

Estimated 1.5 man years of saving for the 7 projects

NEW OPPORTUNITIES



Develop new Data QC processes



Additional data types in Quality Data Inventory (QDI)



Identified new Corporate Databanks



Master Priority Well List



Additional data types in Data Access & Retrieval (DART)



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Thank you