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High Performance Data Management For Upstream Oil & Gas

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Agenda

- Industry Challenges
- Industry Requirements
- Oracle Solution
- Value Proposition
- Demonstration

Challenges – Pressure for Change

Production

- Need to make more **real time decisions** with fewer engineers
- **Rapid optimization required** to maximize output



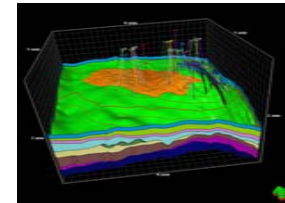
Drilling

- Need to **reduce non-productive time**
- **No access** to contextual data (e.g. offset wells)
- Limited use of RTOCs due to **costs**



Reservoir Characterization

- **Exponential increase** in traditional data **volumes** – seismic, logs
- Management of exploding interpretation and simulation results



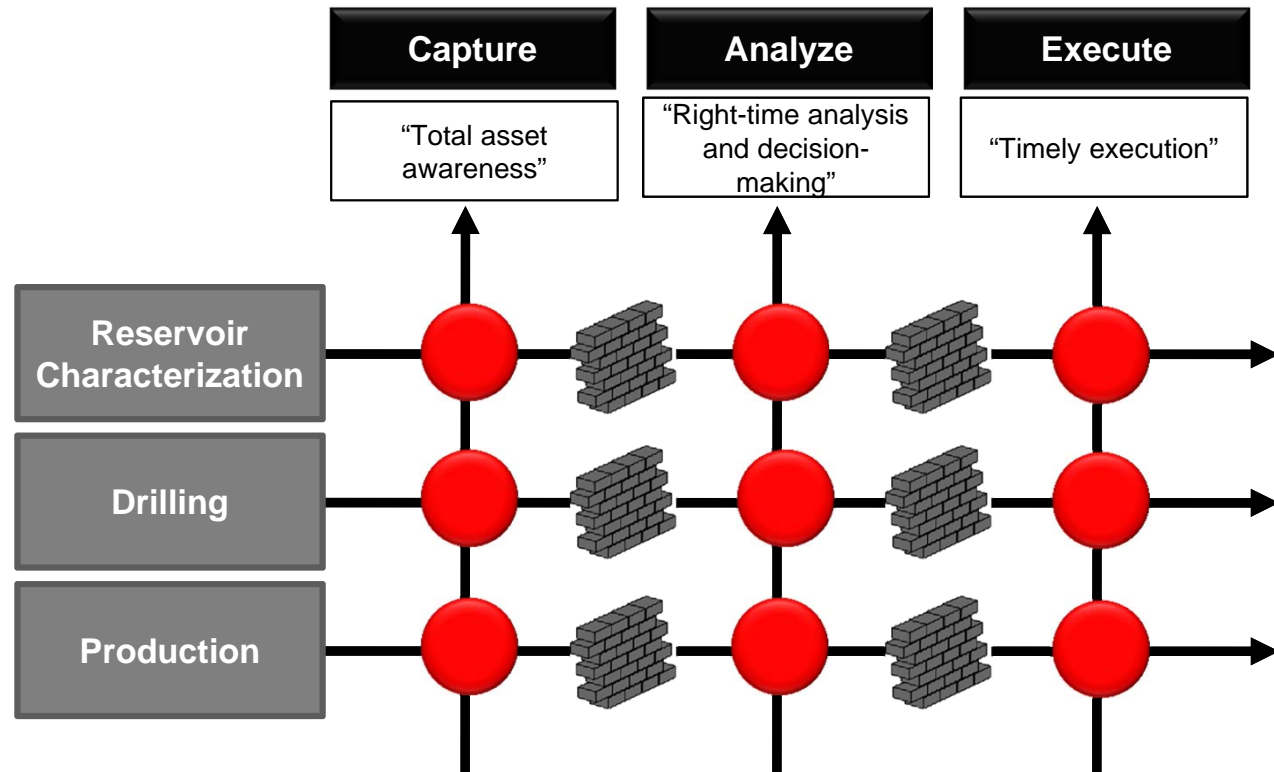
Data Management

- **Enormous data volumes** and lack of capability to analyze it on real time
- **Preserving** real-time data



Why Aren't These Challenges Being Met?

- Data capture and analysis often manual (islands of information)
- Lack of visibility across operational, technical and financial data to make “right-time” operational, tactical and strategic decisions
- Disconnected systems supporting siloed asset team members
- Limited real-time team collaboration
- Batch analysis tools not adapted to modern real time data flow



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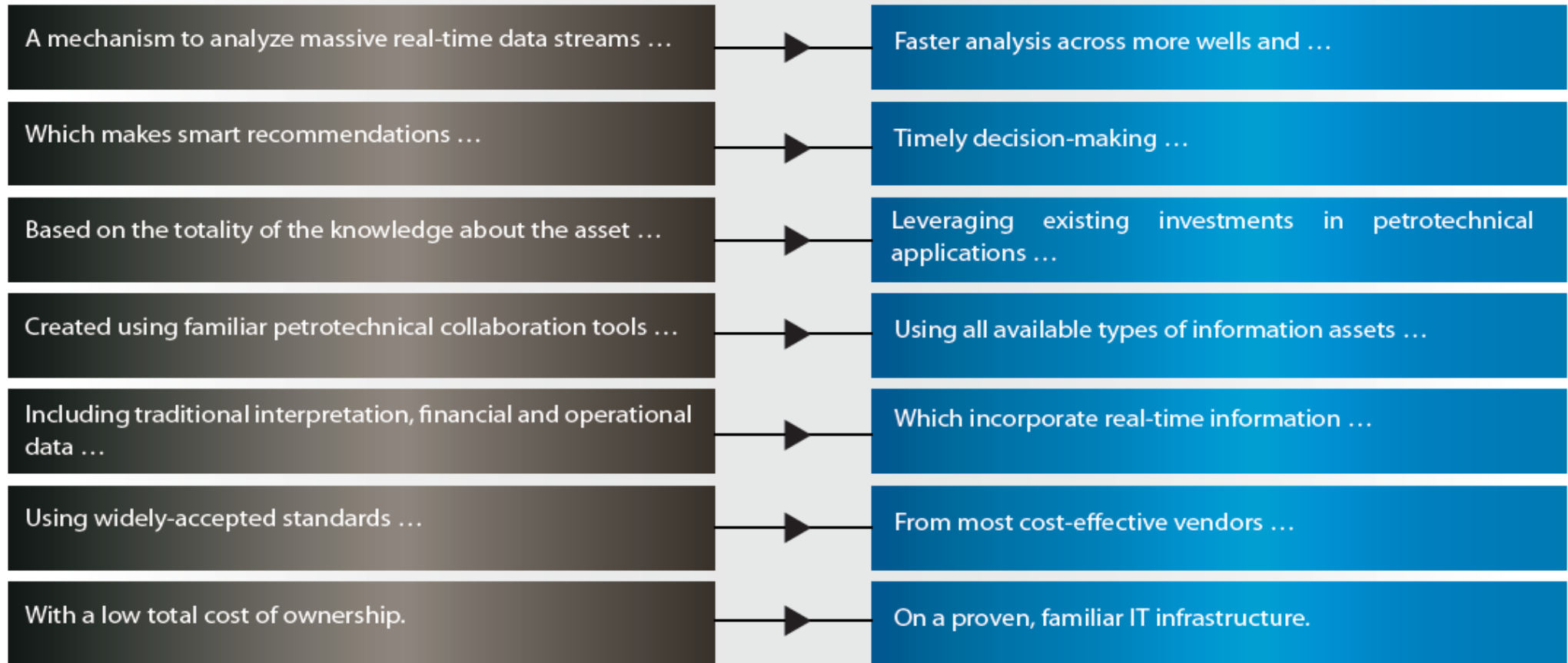
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Solution Requirements and Benefits

Would You Agree that ...

If you could implement these requirements, ...

... you would be able to achieve these benefits?



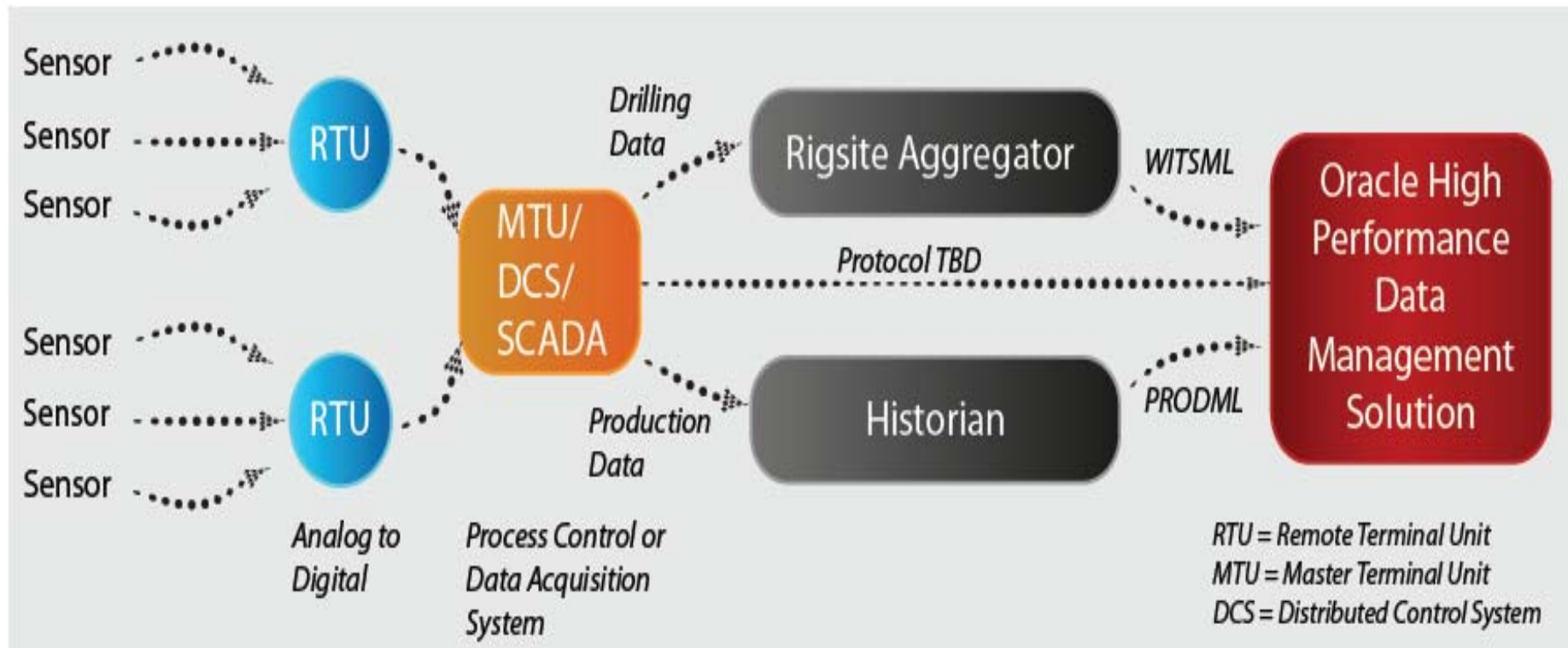
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Data Flow from Sensors to Oracle Solution

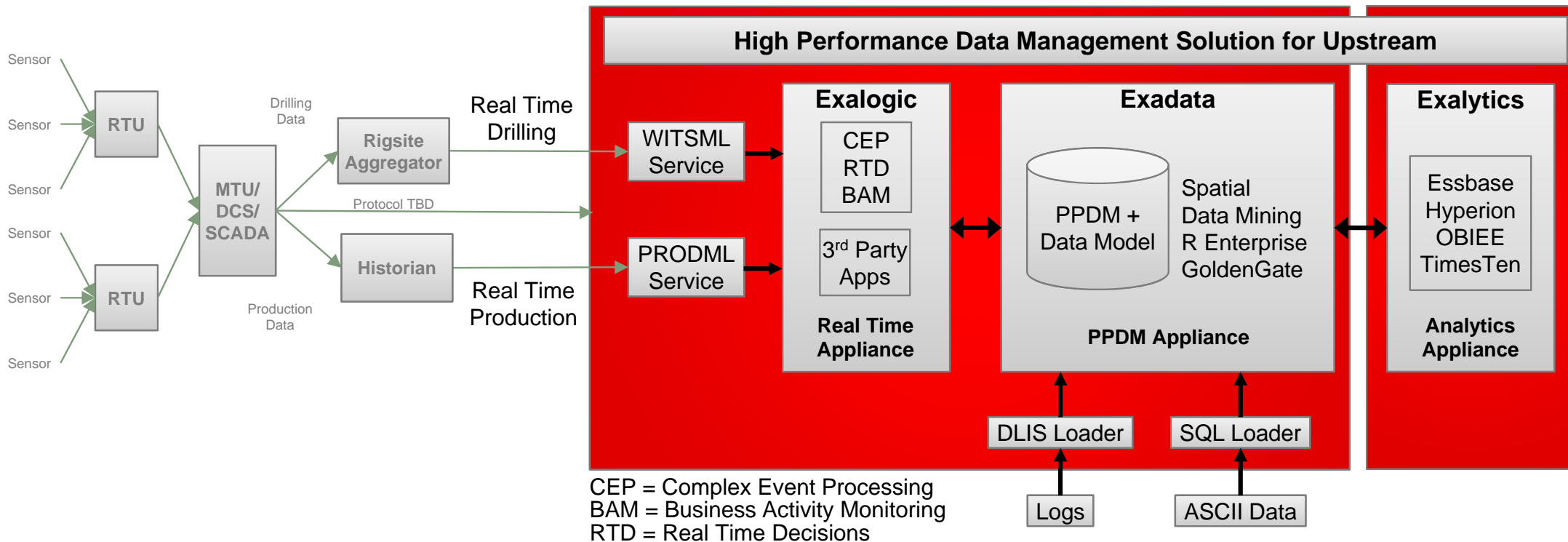
- The Oracle High Performance Data Management Solution will leverage the existing data acquisition instrumentation layer



Oracle High Performance Data Management

Overall Architecture

The Oracle Solution will enable the capture and analysis of real time drilling and production data alongside traditional interpretation data



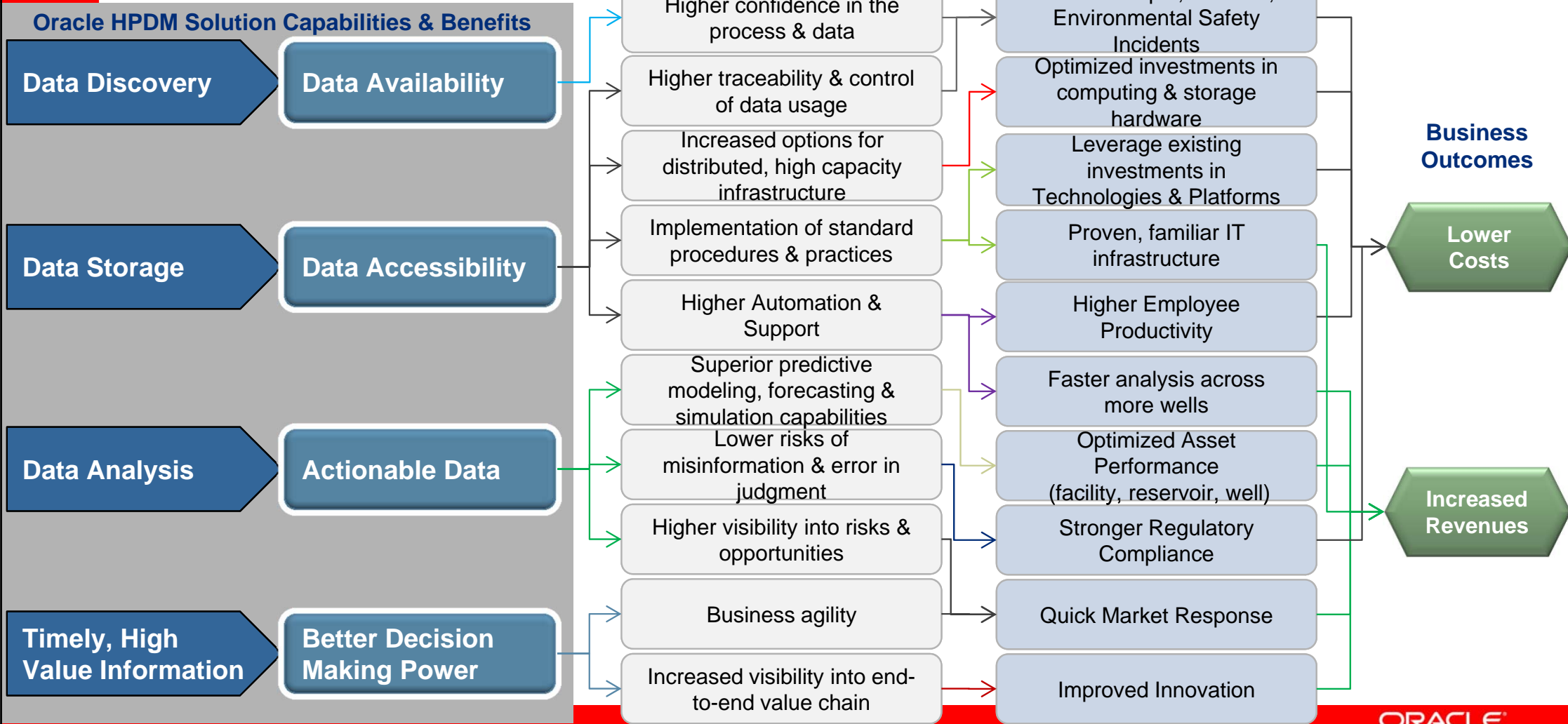
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Value Proposition

Oracle HPDM Solution Capabilities & Benefits



Oracle High Performance Data Management

Differentiators

- Oracle has hardware specifically engineered for real time data analysis
- Oracle has separate hardware engineered for optimal database performance and scale
- Oracle has the breadth of software offerings to bring a unified approach to these problems
- Oracle can do all this with familiar industry-standard components
- Oracle is committed to develop standards-based solutions

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Summary

- Oracle is the only vendor with the complete stack to deliver a **High Performance Data Management** solution ...
- ... that will enable Oil & Gas companies to deploy **automated analytical processes** ...
- ... across **Reservoir Characterization, Drilling and Production** ...
- ... in order to make optimal **near real-time, tactical** and **strategic** decisions



Hardware and Software

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