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ShaleTechConference.com

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Water Management for Shale Wells

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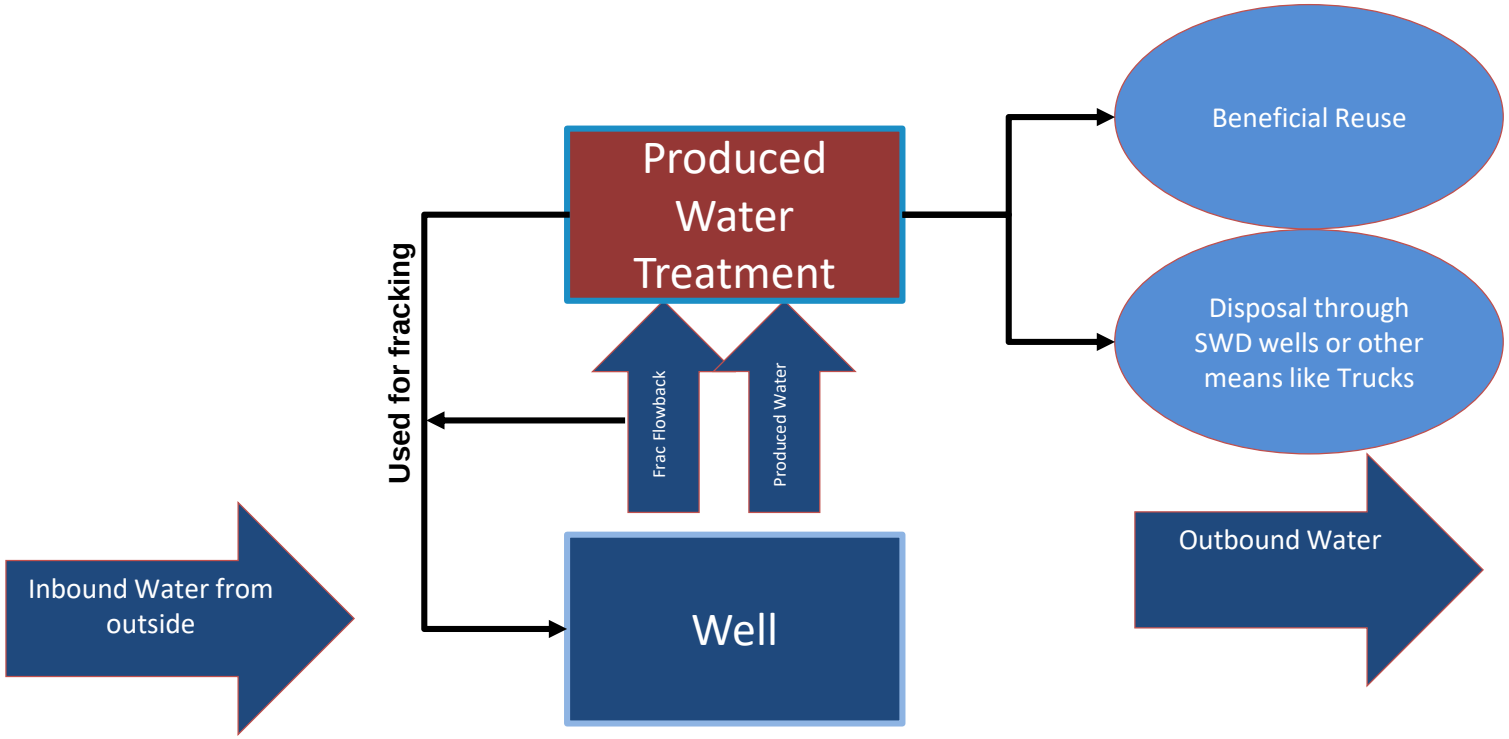
The Water Management Process



Solution Features

Integrated Data Platform

- Automatic data import feature from different SoRs, Spreadsheets, O: Drives etc..
- Consolidated database providing accurate water data.
- Easily accessible via internet/intranet through proper authentication.
- Positioned on the Cloud or in premise as needed

Process Automation

- Remote monitoring of devices.
- Calibrated Software for errors due to water evaporation, percolation etc..
- 3rd party Seamless interface
- Interactive workflows online for accuracy and efficiencies

Optimizer

- Optimizer for best results
- Truck Management
- Inventory Management/ Demand fulfilment planning
- Advance forecasting for cost reduction

Water Regulatory Reporting

- Real time recording of data for complete transparency and audit trails.
- Reporting in real time, customized reports or periodic frequencies as needed
- Advanced alerts for best outputs.

Water Logistics Tracking

- Map based tracking using GIS enabled information
- Real time view of field with trucks
- Real time updates on volumes and availability in every location
- Online interactive platform for water movement, selling and buying.

End-to-End Process Automation

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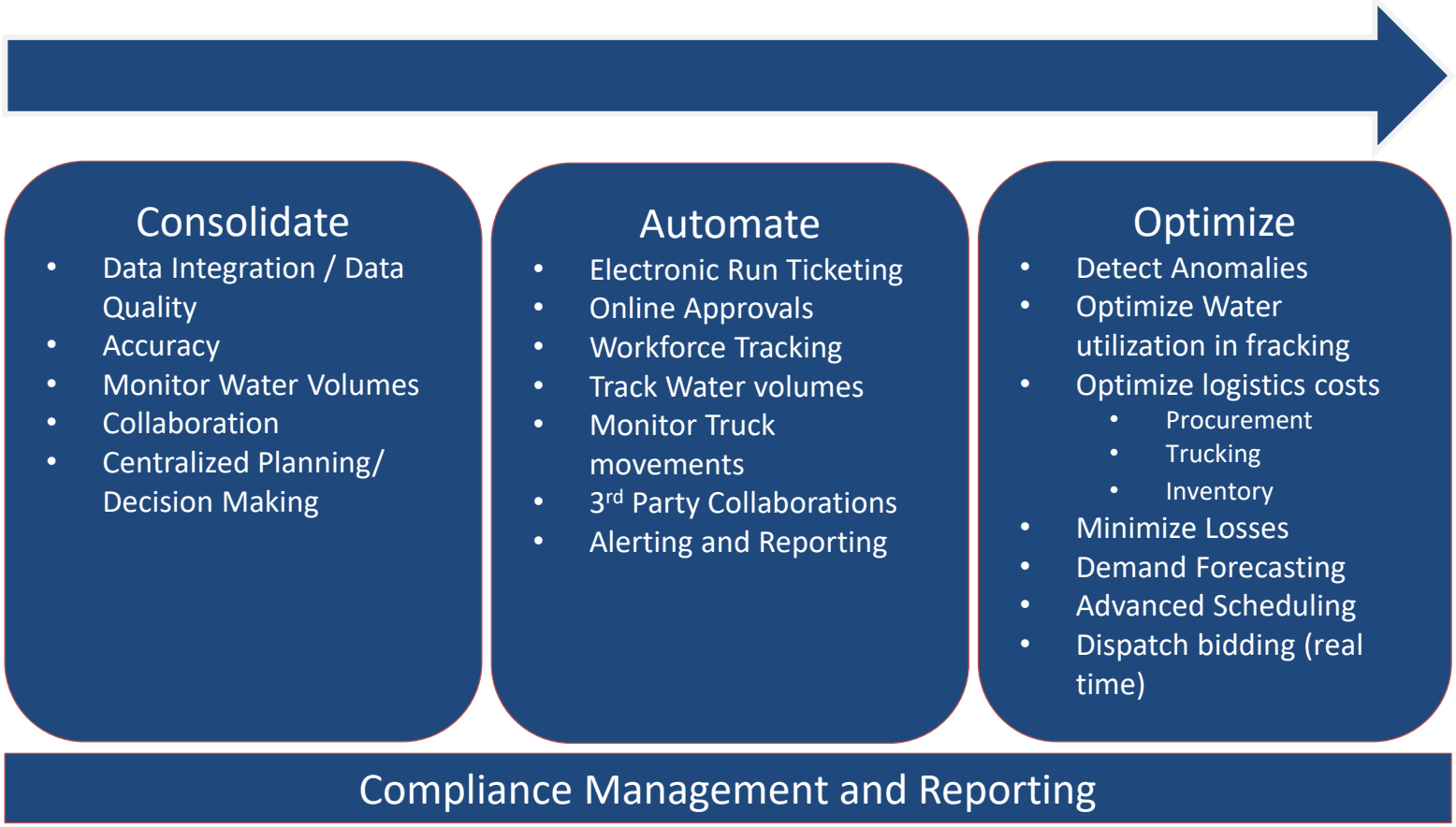
Solution Themes- Process Overview



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Recommended Approach

Creation of Workflows
- Integrated across functions
- Designed for Collaboration
- Dependencies for best results
- Factory Decision Making

Data Integration
- Establish the foundational capabilities of Data Platform
- Integrated views for monitoring
- Cloud based for enhanced access
- Leverage Industry Standards and best practices

Streamline Process Automation
- Automate field processes
- Enable seamless data exchange with third parties
- Minimize manual intervention to reduce errors
- Real time access with interactive capabilities

Enablement
- Mobile Apps to capture ticket data in real time
- Remote Assistance using mobile access
- Approvals and back end processes done online
- Interactive processes for optimal results

Optimize
- Optimize using analytics
- Machine Learning models to detect anomalies
- Advance Planning tools with Machine Learning
- Real time bidding

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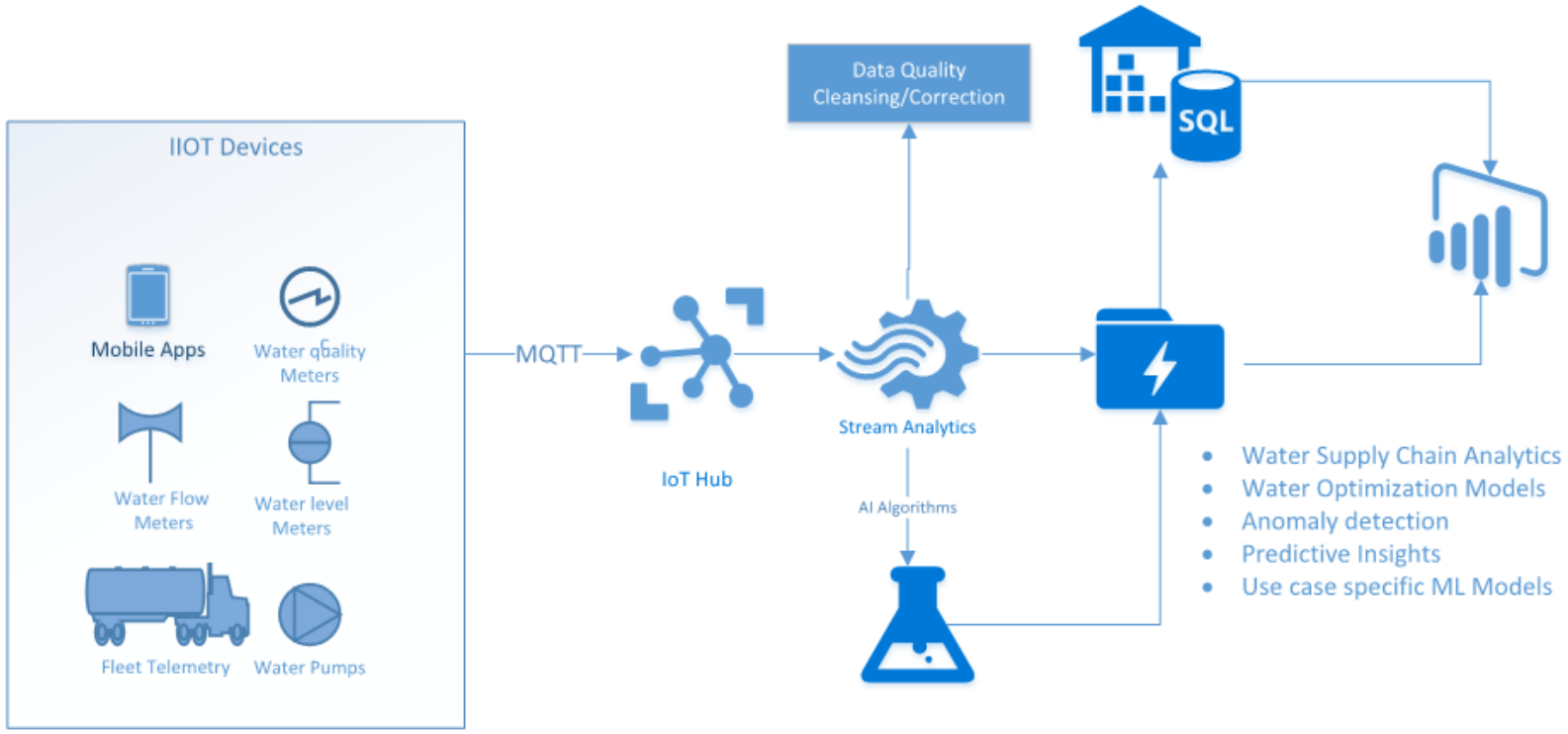
Solution Overview



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Inputs into Well Planning for Shale Wells

Consolidated Data for a Unified view into Well Planning

- Surface Constraints for Well Planning
  - Terrain
  - Availability
  - Existing landscape in terms of players, infrastructure
- Understanding of Logistics and associated costs
- Sub-surface constraints on laterals and their length to optimize the number of pads, size of each pad etc.
- Cost Projections for Well Operations
- Inputs into modeling scenarios for development planning and optimization

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Please Share your feedback– Thanks!!

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