Microsoft

TANK LEVEL FORECASTING

Cortana Intelligence Solution

The Need for Tank Level Forecasting?

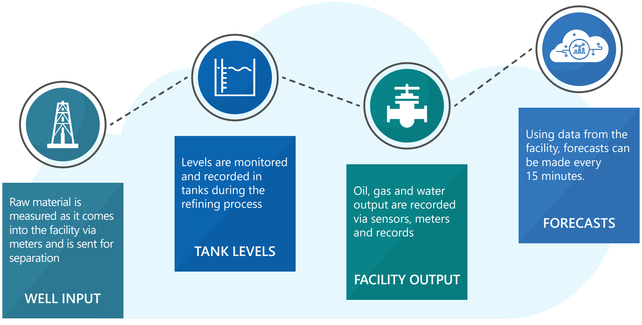
Today, most facilities operate reactively to problems in tank levels. This often leads to spills, emergency shut downs, expensive remediation costs, regulatory issues, costly repairs and fines. Tank Level Forecasting allows facilities to manage and abate these and other problems.

Forecasts are created by harnessing the power of real-time and historical data from sensors, meters and records that is readily available.

Benefits of Tank Level Forecasting

PREVENT	Tank Spillage and Emergency Shut Downs
DISCOVER	Hardware Malfunction or Failure
SCHEDULE	Maintenance, Shutdowns and Logistics
OPTIMIZE	Operations and Facility Efficiency
DETECT	Pipeline Leaks and Slugging
REDUCE	Costs, Fines and Downtime

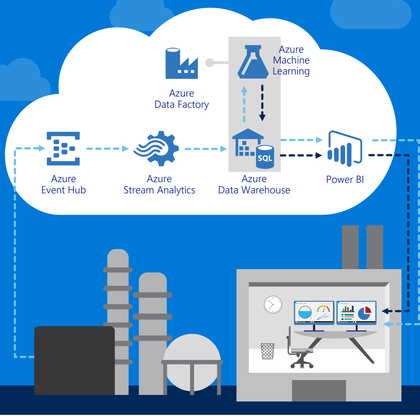
Tank Level Forecasting Process?



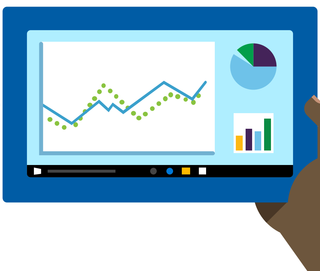
Tank Level Forecasting End-to-end Data Flow

The Cortana Intelligence Suite is scalable and adaptable enough to be customized to meet every configuration and requirement facilities and corporations have. Deploying the suite in an Azure-optimized environment leverages the power of Cortana Intelligence Suite and produces optimal results.

1. Data from sensors, meters and reports is ingested by Azure Event Hub.
2. Azure Stream Analytics aggregates historical and real-time data and transfers them to Azure Data Warehouse.
3. Azure Data Factory coordinates the transfer of data to, and predictions from Azure Machine Learning.
4. Azure Machine Learning ingests historical and real-time data to create tank level predictions.
5. Power BI creates reports and visualizations from historic and real-time data, and predictions.



FORECASTING
makes facilities
PROACTIVE
instead of reactive



Who Benefits from Tank Level Forecasting?

MAINTENANCE

- Proactively schedule maintenance
- Plan intelligent shutdowns and remediation

FACILITIES

- Optimize operations and logistics
- Prevent spills and emergency shutdowns

CORPORATIONS

- Visualize facility performance
- Reduce costs due to spills and unscheduled maintenance