



CUSTOMER CASE STUDY

Standardizing Industrial Analytics with Rapid Asset Contextualization

Rebuilding operational data architectures and migrating billions of data points in days

Solution: BKO Asset Contextualization **Industry:** Industrial Operations **Use Case Focus:** Data Migration and Asset Analytics

GOALS

- Migrate operational analytics tools without losing historical context or data integrity.
- Standardize asset analysis methods to eliminate manual and variable processes.
- Establish unified key performance indicators across all equipment and facilities.
- Enable cohesive operational decision-making for plant managers and operators.

SOLUTIONS

- Deploy BKO's specialized methodology to quickly recreate robust data architectures.
- Implement standardized, templated asset-specific analytics to prevent KPI variation.
- Unify performance calculations to ensure consistent metrics across all systems.
- Utilize high-speed data migration tools to backfill billions of historical data points rapidly.

CHALLENGES

- Inconsistent asset metrics across systems create operational confusion and misalignment.
- Manual asset analysis processes lead to a lack of standardization and varying methodologies.
- Operational discrepancies arise when non-uniform data hinders cohesive decision-making.
- Traditional migration and backfilling processes require months to recreate complex data architectures.

RESULTS

- Backfilled 53 billion data points in three days instead of several months.
- Achieved unified performance metrics and single-source conclusions for plant operators.
- Improved overall operational efficiency through enhanced data accuracy and decision-making.
- Scaled standardized templates seamlessly across multiple plants and diverse equipment types.

EXECUTIVE SUMMARY

Organizations frequently struggle with migrating analytics tools and maintaining consistent asset KPIs across diverse equipment. To address this, BKO developed an advanced asset-contextualization methodology that standardizes analytics through reusable templates, eliminating operational confusion. By unifying calculations and performance metrics, the solution provides plant operators with a single, cohesive source of truth for decision-making. In a real-world application, this high-speed data architecture methodology successfully migrated and backfilled 53 billion operational data points in just three days, reducing a typical multi-month transition period to a matter of weeks.

The Challenge of Fragmented Asset Data

Organizations operating complex industrial facilities frequently struggle with fragmented data architectures when migrating analytics tools. Without standardized frameworks, different systems generate conflicting key performance indicators for the same assets, leading to severe operational confusion. Manual analysis methods further exacerbate this issue, introducing human error and inconsistent calculations. Plant operators and managers are often left to reconcile divergent reports, which delays critical decision-making and compromises overall facility efficiency. Resolving these operational discrepancies requires a systematic approach to asset data integration and historical contextualization.

Standardization Through Reusable Templates

BKO addresses these persistent data silos by introducing a methodology based on templating asset-specific analytics. This standardized template framework ensures that all calculations and performance metrics are unified across every piece of equipment and facility. By defining singular, cohesive rules for KPI calculation, the platform eliminates the possibility of conflicting metrics arising during daily operations. Plant personnel gain access to a reliable, single-source dashboard that fosters cohesive decision-making, while the scalable template design allows enterprises to seamlessly expand the standardized analytics to new assets.

Rapid Migration and Operational Impact

Beyond standardizing active metrics, the BKO methodology excels at handling massive historical datasets during migrations. Recreating data architectures typically demands months of tedious manual mapping and validation. BKO's high-speed backfilling techniques compress this timeline into weeks, executing massive data transfers with unprecedented speed. In practice, the system successfully processed and backfilled 53 billion operational data points in just three days. This rapid deployment minimizes downtime, preserves invaluable historical insights, and immediately empowers plant personnel with accurate, highly standardized performance analytics.