# Analytics for Operations & Financial Management in Utilities

## How to Use Data and Analytics to Optimize Utility Operations and Finances

Utility operations and financial management teams are under unrelenting pressure to increase revenue assurance, streamline maintenance costs and reduce unnecessary debt write-offs. They know that achieving these goals depends on such things as enhanced insights from meter-to-cash analyses and improvement in service order efficiency. Yet they struggle to transform investments in data and analytics into the game-changing insights that optimize business value.

A number of factors get in the way:

- An over-reliance on existing reporting that inherently contains many blind spots around revenue cycle performance
- No reliable way to bring together the data needed for an end-to-end view that reflects the key steps in the revenue cycle process
- Failure to include the necessary detail outputs and work lists that allow operations to act quickly on important new insights

Unless your operations and financial management teams can overcome those hurdles to achieve the increased transparency, data reliability and analytic power that enable key initiatives, your efforts will inevitably fall short.

This is where the experts at Teradata can help.

By bringing analytical solutions to the table—along with industry-specific understanding of how to adapt solutions to your individual needs—your operations and financial management teams can successfully pursue tightly integrated initiatives that yield the kind of results most only dream of in a time of unprecedented industry change. These solutions also position you for future growth in your data and analytics journeys.

Consider the following three use cases.

## Meter-to-Cash Analyses

Utility meters generate an enormous amount of data that too often goes underused. Teradata's high value analytics can sift through meter, billing and collections data to supply information about which meters are performing as expected and whether they are delivering all necessary readings. In turn, you can quickly determine if there are concerns ranging from meter tampering through degrading power quality. More specifically:

- Metering Operations can analyze meter events, alarms and trigger notifications within defined parameters; verify and correlate outages and equipment performance against meter event/alarm history and broader circuit analysis; and extend these problem analyses to other meters in the field for risk assessment.
- Billing Operations can identify customers that may be on the wrong rate based on usage patterns. They can then pinpoint under- and over-billing cases and gain genuine insight into the impact such billing issues have on the business so your team can make the necessary adjustments in a timely fashion.
- Credit and Collections can segment payment arrangements by customer type, correlate delinquency with meter and billing analytics, analyze collections performance on multiple levels and prioritize collections based on churn and self-curing accounts.

## Service Order Efficiency and Prioritization

Teradata experts can also help you take advantage of your data and analytics initiatives to better understand which alarms and service orders demand priority and which can wait. In turn, you can significantly streamline truck rolls and realize both efficiency gains and cost reductions.

You'll achieve this by gaining timely insights into such areas as:

- Which premises and service order types are triggering the most false positives—as well as the exact profiles of those premises and service orders.
- The efficacy of back-office analyses prior to service order issuance.

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- How to incorporate service order results into algorithm refinements.
- The aging of pending service orders and the associated financial cost.

## Deriving Value from the Meter-to-Cash Integrated View

Your operations and financial management teams can also leverage an integrated, end-to-end view of the business to discover that they aren't billing for all active meters in the field—an oversight that can cost millions of dollars in annual revenue. Tracking when and where the problems were occurring—as well as the financial impact—can improve revenue assurance and even enable companies to reduce bad debt write-offs attributable to unused revenue and inadequate credit collection. This also works across three key operational groups:

- Metering Operations can identify and profile non-communicating meters, distinguish between communication network and meter problems and conduct meter exception processing analyses and resolution.
- Billing Operations can tally meter consumption without a billing account, conduct billing exception processing analyses and backlog aging—and gain critical insights into bill cycle performance and service quality.
- Credit and Collections can manage days sales outstanding and time from meter reading to collection, analyze payment arrangement performance and churn, and correlate delinquency with upstream process issues.

## The Teradata Advantage

Teradata consultants help your realize these results by bringing the deep utility and technology experience needed to understand what works and what matters for your business. We partner with you in a disciplined process aimed at quickly making you the experts in the use of your analytical tools.

Equally important, Teradata offers a flexible array of data storage and analytics options that we can readily integrate into your existing technology structures. This begins with our Teradata Unified Data Architecture™, a remarkably comprehensive, yet flexible platform for data integration that is widely recognized as the world's most scalable

### Millions in Revenue Recovery

When the CFO of a large North American gas and electric distributor asked the question, "Are we billing *every* meter *every* billing period?" he was alarmed to discover that no one in his organization had a definitive answer. A data integration and analytics implementation revealed that the utility was, on average, only billing about 90 percent of meters in service during a given billing period.

In the ensuing nine months the company billed an additional $10 million, which more than paid for investment in the technology implementation—even beyond the considerable revenue recovered.

analytics platform for structured, multi-structured and Big Data analytics. The integration of the data warehouse with the Aster discovery platform and open-source Hadoop provides deeper insight, integrated access, ease of use, lower costs and better insights.

Our workload-specific platforms all take advantage of our industry-specific logical data model. Data Labs enable individual units to test ideas in an environment safely isolated from day-to-day operations. And our experts can optimize the way your data interacts with our analytic tools or virtually any leading analytical applications.

In short, by significantly improving your ability to uncover operational problems and understand their financial impact, sophisticated data integration and advanced analytics can dramatically enhance your revenue flows and operating margins.

## About Teradata

Teradata is the world's largest company focused on analytic data solutions through integrated data warehousing, big data analytics, and business applications. Only Teradata gives organizations the advantage to transform data across the organization into actionable insights empowering leaders to think boldly and act decisively for the best decisions possible. To learn more about Teradata for Utilities, visit **Teradata.com/industry-expertise/utilities/**