

Building the smart utility of the future with Teradata Vantage™ Utilities Data Model

Utility companies are searching for new and better ways to make their facilities—and their entire operations—more efficient. However, in the quest to optimize everything from operations to customer consumption habits, utilities are often hampered by inaccurate and inconsistent data.

Multiple data sources make it difficult to make informed business decisions across the enterprise. As different teams and departments use different information, the result is confusion and missed opportunities. The number of disparate information sources will only increase as Advanced Metering Infrastructure (AMI) and Smart Grid technology implementations move forward. These developments will generate huge volumes of new data—and more potential for data integrity problems—while pressure to reduce costs increases.

For utilities to succeed and thrive in a disruptive landscape, solutions for optimizing scalable, integrated data and advanced analytics must be part of any business outcomes strategy.

Teradata Vantage™ Utilities Data Model (UDM) enables utility companies to:

- Present a single view of the business.
- Provide the critical data relationship structure needed to make smarter and faster decisions.
- Ensure discipline and structure in the complexities of an ecosystem implementation.
- Facilitate effective communication between business users and IT analysts.
- Accelerate time to market by leveraging Teradata Vantage and deep industry knowledge.

Integrating Information with the Utilities Data Model

Utilities of the future need a blueprint to make the most of their data, a framework that will save time and money

while providing all users with quick, convenient access to information that's accurate, cross-functional, and integrated. The Vantage Utilities Data Model does that, providing a clear foundation for better analysis and more accurate decision making.

Designed specifically for utilities, the UDM is the first data model that integrates operational information about utility customers, facilities, inventory, finances, and events into one data warehouse—and sets the stage for a single view of the business. As the fundamental building block of your data warehouse, it's the first step toward constructing powerful, data-driven insights.

The UDM provides you with everything you need to:

- Collect, organize, manage, and use huge volumes of data.
- Combine data in new ways to answer your most important business questions.
- Enable your data warehouse team to build faster and smarter.
- Save development time and money while minimizing the risks associated with implementing an integrated data ecosystem.
- Capture the relationships of data extracted from disparate sources.
- Get an enterprise-wide view of your business in multiple areas, including network topology, operations, marketing, assets, customer service, accounting, and financial.
- Cut the costs of maintaining multiple data silos and inconsistent internal records.

As business needs evolve, the UDM can adapt to ensure your data warehouse contains the information needed for complete and accurate analyses.

Answer Crucial Questions

Get the structure and standardization you need to address your most crucial business questions. The Vantage Utilities Data Model organizes data to make them accessible, enables reuse of data in other applications, highlights data integrity problems, and provides comprehensive documentation of your data. The UDM also makes it easy to identify inaccurate or duplicate data. This eliminates the potential for errors and enables fast and accurate communication with both customers and regulators.

UDM provides much needed insight into an array of subject areas, including:

- **Financials:** service meter events, stop bill events, billing, deposit events, fraud profiles, and 360-degree view of customer financials across channels.
- **Party:** customers, associates, suppliers, vendors, human capital management, payroll, personnel, training, labor distribution, and privacy.
- **Infrastructure:** meter reading and meter management, service points, equipment, network/smart grid topology, meter reading route, asset lifecycle, and site premises.

Analyze with Insight

The Vantage Utilities Data Model provides the capability to drive strategic and tactical analysis from a single, integrated view of your business.

- **Enhance operations:** Enable insight into every aspect of your business performance through sophisticated modeling of relationships between departments. This vital information is essential to efficient and effective operations.
- **Reduce development time:** Save valuable data warehouse development time, as well as considerable human and financial resources, while enabling faster data warehouse implementation and ROI.

Case Study: Utility Identifies Over \$10 Million in Recoverable Revenue

A large North American utility provider couldn't easily integrate metering, customer, billing, and inventory data for analysis. Whenever meters stopped recording customer consumption, it would take a week to detect the nonrecording meters. The process required manual extracts from multiple systems and lengthy query execution. In the meantime, with no meter readings, no bills were being produced.

The company needed an enterprise data model to overcome these challenges. Within the first three months of implementing the Vantage Utilities Data Model as the relational blueprint for its data warehouse, the utility provider unlocked the answers needed to identify more than \$10 million of recoverable revenue.

- **Protect investments:** Avoid common and expensive modeling oversights and errors with proven modeling methodologies and experienced Teradata consultants that have been deployed in hundreds of data model development and implementation projects for utilities.
- **Increase flexibility:** UDM can be easily adapted and extended as your business grows and changes—or as new subject areas, entities, and attributes arise. It's easy to add enhancements and new applications without rearchitecting your data warehouse.

About Teradata

Teradata is the connected multi-cloud data platform company. Our enterprise analytics solve business challenges from start to scale. Only Teradata gives you the flexibility to handle the massive and mixed data workloads of the future, today. Learn more at [Teradata.com](https://www.teradata.com)