Teradata® Communications Industry Data Model

New revenue streams and ever-growing customer expectations are forcing communications service providers to look beyond current business models to find new and better ways to blend traditional carrier services with a new generation of products. As the telecommunications landscape converges, carriers are expanding into new areas—such as video, 5G, IoT and the connected car market—to survive and thrive as innovative digital service providers.

And not only are carriers facing a vastly increasing number of new business relationships, but they are being held to more rigorous quality of service guarantees, greater transparency on all financial transactions, and tighter regulations.

To compete in this challenging environment, you must capture vast amounts of data (customer/subscriber, network, store, financials, product and call center), and be able to deliver an integrated view of your business, trends, and customer behavior—across the enterprise. That transformation process begins by implementing an advanced data and analytics environment—consisting of a unified and integrated data warehouse (IDW). Teradata Vantage, the powerful analytics platform for Pervasive Data Intelligence, empowers you to do this.

Armed with better, faster, and more precise answers based on all data, Teradata lets you identify new opportunities, manage your networks better, create personalized customer marketing and communications programs, improve revenue streams with profitable customers, and provide the right products and services that exceed expectations and reduce churn. You will be able to discover answers to critical questions within each business area, such as:

• Pay-TV Delivery—What genres of pay-per-view movies are my profitable customers downloading? What is the pattern, in terms of time of day, when people download pay-per-view movies or stream live events?

- Pre-Paid Services—How many prepaid customers transfer balances between subscriptions? How many unused downloads are allowed to expire?
- Call Center—What is the performance by call center agent? What is the rank order of the IVR paths that callers follow?
- Store Front—How many upgrades were via manager override? How many subscribers churn due to buyer's remorse by store and by representative?
- Network—What percentage of subscribers is experiencing abnormally slow video download speeds during peak hours?
- Marketing—What are the demographics of customers who drive network peaks during peak hours? What are the demographics of customers who can be added with minimum effect to network peaks?
- Billing—What are the mismatches between SS7 and AMA recordings for all types of call scenarios and all types of interconnect topologies (tandem topology, end office topology)?

Journey to a Better Business

Teradata understands that aligning your enterprise goals with the practical reality of creating a data repository to answer key business questions can be a daunting task. That's why our focus is to provide the tools and expertise necessary to make the planning and implementation of an IDW less daunting.





Teradata provides consulting services combined with industry-specific tools—such as the Teradata® Communications industry Data Model (CDM) within Teradata Vantage—to jump—start your IDW planning and development process.

Similar to planning a journey, building an IDW requires three key components to succeed:

- A clear and worthwhile objective or destination
- A map that shows you how to get to your objective or destination
- A navigational device that helps you know exactly where you are during your journey

The Teradata Communications industry Data Model (CDM) allows your enterprise to:

- Align your enterprise strategy with business questions and data model requirements.
- Identify next steps in implementing an integrated data warehouse.
- Determine the most important enterprise strategy.
- Define business / subject areas to support the strategy.
- Show information and data needed for analysis.
- Enhance interdepartmental communication and understanding between IT and business users.
- Prioritize and attack the correct business problem areas.
- Accelerate time to market by leveraging Teradata industry knowledge.
- Leverage the "store once, use many times" approach, which reduces costs by reusing data and knowledge.

Combined with Teradata Communications Analytic Schemas (CAS), get a jump-start on:

- · Deploying business analytics capabilities.
- Implementing BI analytic reporting.
- Organizing semantic / dimensional requirements.

Teradata Industry Data Model Reference Data Master Data Unified Industry Data Power of Integrated Data Figure 1. Teradata Industry Data Model.

Defining Your Business Objectives

Teradata telecommunications consultants help you start the journey by defining business objectives, and linking them to the analytics, actions, and results that could be taken by leveraging available data. We call this a business use case assessment, and we do this to help you determine and prioritize your business goals.

Supporting Your Use Cases

Teradata has identified numerous use cases that typically challenge most carriers, such as reducing churn, optimizing your networks, and preventing fraud.

Navigating and Running Your Business

Teradata® Industry Data Models (Figure 1) facilitate the task of creating an enterprise data model for your organization, and is the foundation by which the CDM is built. The Teradata CDM is the map that shows all of the pieces of information required to support the use cases that challenge your business. Just as you would not begin a journey without a map, you would not build an IDW without an enterprise data model.



Proven Value and Expertise

What makes Teradata different from the competition when it comes to data and analytics? It is the business value and the telecommunications expertise that we provide. We help your business and IT functions collaborate and agree on the requirements for meeting business objectives and managing data assets better.

Teradata is the market leader in advanced analytics and data warehousing, and we have built that expertise, best practices, and intellectual property into our tools. Our team of industry professionals has business and technical knowledge. They work with all types of communications service providers to solve key business problems with the goal of helping them view and align their businesses around one of their most important assets-data.

About Teradata

Teradata leverages all of the data, all of the time, so you can analyze anything, deploy anywhere, and deliver analytics that matter. By providing answers to the complexity, cost and inadequacy of today's analytics, Teradata is transforming how businesses work and people live. Get the answer at Teradata.com.

For More Information

To learn more about how the Teradata Communications industry Data Model can help you align analytical capabilities across your organization, contact your local Teradata representative, or visit Teradata.com.

The Teradata CDM has nine subject areas and more than 1,500 entities in 104 facets that support analytics for key business process areas such as:

- · Revenue management
- Network management
- Business performance management
- Compliance management
- Call center management
- Content assurance
- Supply chain management
- Campaign management
- Customer information management
- Inventory management
- Settlements assurance
- Promotion management and marketing
- Point-of-sale transactions and detail
- Web commerce and interactions
- Forecast and scoring
- Financial management
- Payroll, personnel, and labor distribution

17095 Via Del Campo, San Diego, CA 92127 Teradata.com

Teradata and the Teradata logo are registered trademarks of Teradata Corporation and/or its affiliates in the U.S. and worldwide. Teradata continually improves products as new technologies and components become available. Teradata, therefore, reserves the right to change specifications without prior notice. All features, functions and operations described herein may not be marketed in all parts of the world. Consult your Teradata representative or Teradata.com for more information.















