GAIN BUSINESS-FRIENDLY ACCESS TO YOUR DATA

TERADATA.

ACCESS LAYER BEST PRACTICES AND SOLUTION MODELING BUILDING BLOCKS

In the ongoing storm surge of new data—structured or semi-structured—the constant lighthouse that guides business stakeholders is the demand for easy and flexible access to their data. A business-friendly Access Layer can facilitate this easy data consumption by business analysts without requiring them to wrestle with underlying complex data structures or deal with specific BI tool limitations.
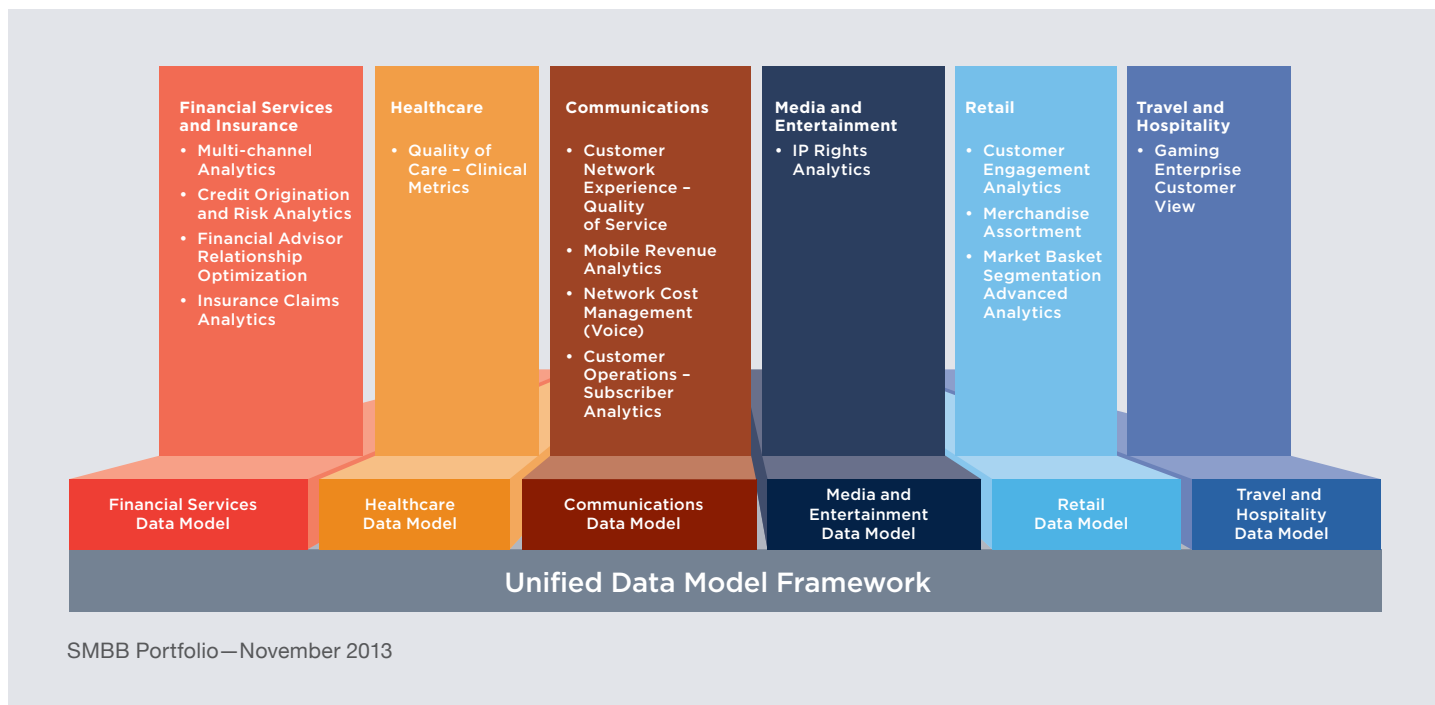
Creating an Access Layer using best practices is critical to project success. To this end, Teradata has defined Access Layer design and implementation best practices specific to its platforms and reference information architecture. Additionally, Teradata provides services and products to accelerate the adoption of these Access Layer best practices.

Solution Modeling Building Blocks (SMBBs) are best practice industry and solution-specific semantic data models (dimensional, analytical data sets, or relational) used to accelerate build-out of a powerful business Access Layer, regardless of platform (data warehouse or discovery), BI tools, or environment maturity.

Although Teradata Access Layer best practices can be adopted independently of SMBBs, SMBBs include industry specific assets that can accelerate adoption of these best practices. The following table shows Teradata Access Layer best practices and Teradata accelerators in the context of common challenges:

BUSINESS CHALLENGE	BEST PRACTICE	ACCELERATORS
Why is it too hard for our analysts to access and analyze the integrated data?	Business user friendly and BI tool independent Access Layer for integrated data	Teradata industry semantic data models (SMBBs), Access Layer Modeling Process
Why can I not see details behind this yearly summarized report?	Access Layer summary facts built on top of transaction facts	Retail SMBB example: Market Basket Fact built on Sales Transaction Fact
Why can't we easily reuse data to speed up this new analysis?	Reusable Access Layer structures built on integrated data	Healthcare SMBB example: "Member" conformed dimension can reuse "Individual" access path building block
How can we accommodate use of different BI tools to analyze the data?	BI tool agnostic and business friendly Access Layer for integrated data	Multiple variations of dimension building blocks such as flattened, snow-flaked, and recursive

Financial Services and Insurance	Healthcare	Communications	Media and Entertainment	Retail	Travel and Hospitality
• Multi-channel Analytics • Credit Origination and Risk Analytics • Financial Advisor Relationship Optimization • Insurance Claims Analytics	• Quality of Care – Clinical Metrics	• Customer Network Experience – Quality of Service • Mobile Revenue Analytics • Network Cost Management (Voice) • Customer Operations – Subscriber Analytics	• IP Rights Analytics	• Customer Engagement Analytics • Merchandise Assortment • Market Basket Segmentation Advanced Analytics	• Gaming Enterprise Customer View
Financial Services Data Model	Healthcare Data Model	Communications Data Model	Media and Entertainment Data Model	Retail Data Model	Travel and Hospitality Data Model

Unified Data Model Framework

SMBB Portfolio—November 2013

Business Success Stories

A major telecom company had multiple ad-hoc Access Layer structures developed without a well-defined process. There were more than 250 canned reports and 400 de-normalized aggregated, causing inconsistencies and data redundancy. Using the Mobile Revenue Analytics SMBB, the company developed a proof-of-concept Access Layer that reduced query time by 72%. This company has since proceeded to extend its Access Layer to address other business areas.
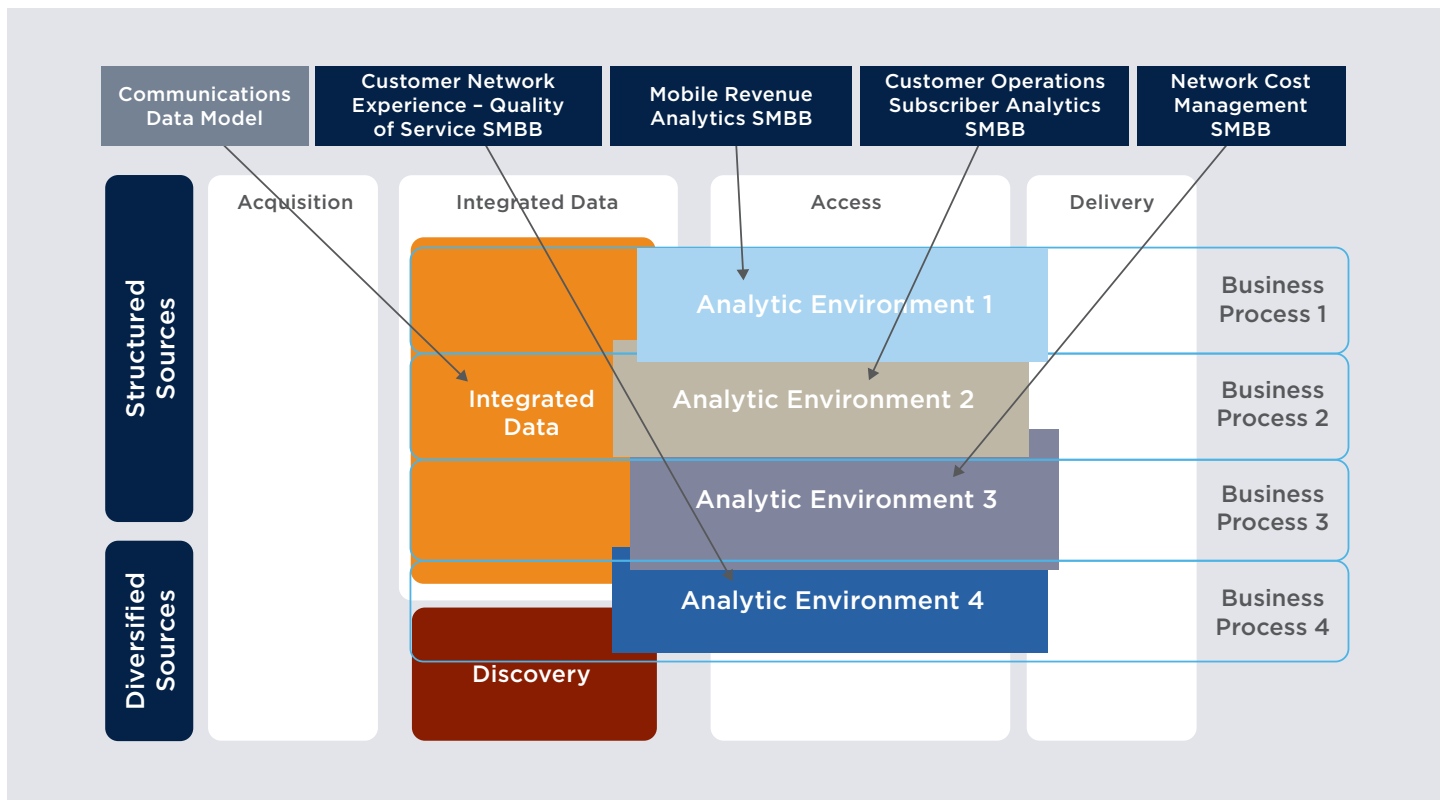
Similarly using Teradata Access Layer best practices, the Marketing department for a major bank created an Access Layer for its integrated data warehouse that will gradually replace all existing solo Marketing data marts to do the following:

~ Provide a single and consistent source for all customer insights and campaigns

~ Remove redundancies in data and processes to improve time and resource utilization

~ Save Teradata system resources (Tperf)

This Marketing Access Layer was so successful that other departments, such as Internet Banking and Deposits, have also joined the effort to use and extend the fast growing Access Layer.

BIG DATA AND ACCESS LAYER IN THE TERADATA UNIFIED DATA ARCHITECTURE™

Access Layer best practices also apply when business stakeholders expect to analyze big data independently of data scientists. One major Telecom company, for example, needed to persist some of their big data on Teradata Aster for a limited audience of advanced business analysts (not data scientists). Dimensional data models from an industry SMBB were used to persist this high volume structured result set on Aster. The company also needed to aggregate this same persisted data and publish it for consumption by a wider business audience. This aggregated data on Teradata Aster was merged with integrated data on the Teradata database and implemented within an Access Layer.

| Communications Data Model | Customer Network Experience – Quality of Service SMBB | Mobile Revenue Analytics SMBB | Customer Operations Subscriber Analytics SMBB | Network Cost Management SMBB |

Acquisition | Integrated Data | Access | Delivery

Structured Sources

Diversified Sources

Integrated Data

Discovery

Analytic Environment 1
Analytic Environment 2
Analytic Environment 3
Analytic Environment 4

Business Process 1
Business Process 2
Business Process 3
Business Process 4

Access Layer in the Information Architecture

The Access Layer complements the Integrated Data Layer. The Integrated Data Layer provides long-term data stability by being generic and abstract (with concepts like "Party"), while the Access Layer drives ease-of-use by being specific and business user friendly (with concepts like "Financial Advisor" or "Subscriber").

The Access Layer does not replace the BI Layer and is not the same as the BI Layer. Unlike the BI Layer, the Access Layer is implemented in the data platform. This not only shields the BI tools from having to process unnecessary data volume, but also provides business users the ability to analyze data independently of BI tools.

Learn more about Teradata Access Layer best practices or Solution Modeling Building Blocks by contacting your account representative or go to **Teradata.com**.

QUICK FACTS

The SMBB portfolio has 200+ business questions, 250+ facts, 500+ dimensions, and analytic data sets defined for solutions across six industries.

Two key assets included with an SMBB product include comprehensive **business requirements** documentation and fully attributed **semantic data models** to address the business requirements.

Teradata SMBBs are not out-of-the-box, end-to-end BI solutions; in fact, there is no BI metadata or predefined ETL included in the SMBB product.

SMBBs are aligned with, but can be used independently of, Teradata Industry Data Models.

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