Customer

INDUSTRY

Telecom

ORGANIZATION PROFILE

- Fortune 50 Company
- $80bn annual revenue
- 150,000+ employees
- U.S.-based

Case Summary

BEFORE TMMDATA

The client's rate of matching third-party vendor data to its confidential unique customer identifiers hovered around 50%, and analysis of business activities lacked the depth and granularity that a comprehensive view of customer behavior would enable.

WITH TMMDATA

TMMData consultants built a solution to map nearly any vendor-generated data to the telecom's specific customers while maintaining the confidentiality of the company's internal unique identifiers, and automated data flows for painless blending of data sets, achieving a 98% or greater match rate between external data and customer accounts. **Complete visibility into customers' journeys enabled precise analysis across the business for greater returns on investments and cost savings.**

TMMData achieves 98% match rate in mapping third-party data to customer profiles, giving Global Telecom Giant a complete view of the customer journey

TMMData's client, one of the nation's largest telecommunications enterprises, employs a vast network of third-party vendors to market, install, maintain and service its products and customers. With thousands of contractors accessing and contributing data to its various information systems, the Fortune 50 company needs powerful, intelligent data management software to effectively connect, track and measure its efforts – from the first marketing piece a potential customer sees, to a call to the sales department, to establishing a service connection, and throughout the customer's relationship with the telecom company.

MAPPING CUSTOMER TOUCHPOINTS FOR A COMPREHENSIVE ANALYSIS OF PERFORMANCE

TMMData helps the telecom company thoroughly map its diverse range of customer touchpoints, which enables the enterprise to get a complete analysis of business performance. With a large network of trusted vendors assisting the telecom company and providing it with data via a range of platforms, APIs and business intelligence tools, creating a clear picture of a customer's journey requires not only aggregating massive, diverse data sets, but an intelligent data disambiguation process that connects the dots between marketing, sales, service, billing and more. With TMMData's powerful Foundation platform, **the client now has a deep and accurate understanding of each part of the customer journey, enabling precise resource allocation in targeted marketing, customer service and process improvements.**

The Challenge

Disjointed data sources and multiple unique identifiers

Like many enterprise-level organizations, the telecom's business model involves utilizing contractors to execute a range functions, and employs several analytics and business intelligence tools to keep a constant pulse on performance. With contractor sources and analytics platform data requiring their own proprietary unique identifiers, in addition to the unique account identifier the telecom uses to maintain its customers' privacy and never revealed to third parties, surface-level paths connecting various data sets to specific customer profiles are often unavailable. For example, information about customers' online cable account activity from Adobe Analytics contains a different unique identifier than the company's internal billing data warehouse, without any singular system containing a complete index mapping each unique identifier to a specific customer.

Formatting discrepancies between all the various data sources that the telecom giant aggregates also made the company's attempts at matching various business activities to specific customers difficult and largely unsuccessful, hovering at around the 50% range for accuracy.

> We wanted to pull a bunch of website data around which customers did this, that or the other thing, and we wanted to profile them or see their billing history. Being able to stitch those data sets together is difficult. TMMData makes it very simple for us, which is extremely valuable. Now that we have full visibility from a data perspective, we're able to see what customers are doing on the website and how that's directly contributing to call volume. It's been invaluable"

Senior Manager,
Digital Search Analytics

The Solution

Automated data cleansing and blending, and expert consultants

TMMData's Foundation platform automates data aggregation, cleansing and blending processes, enabling its client to easily centralize every data source that informs its business. TMMData's expert consultants work closely with the telecom's teams and know their data inside and out, and are quickly able to resolve disjointed customer touch points and write custom code to automate customer account matching between data sets that contain different unique identifiers.

CONSULTANT-CREATED LOOKUP TABLES TO TRANSLATE UNIQUE IDENTIFIERS BETWEEN DATA PLATFORMS

TMMData's data scientists worked closely with the client's Digital Center of Excellence to become experts on their data infrastructure and operations. After diagnosing that no singular system contained each unique customer identifier used across various vendors and analytics platforms, our consultants worked to build a lookup table that is able to translate unique IDs between systems and ultimately tie all business activities to the client's in-house account identifier.

AUTOMATED DATA INTEGRATION, CLEANSING AND BLENDING

TMMData's expert team deeply examined the nearly 50% of customer touchpoints that the company was unable to match to its unique account identifiers and resolved the formatting source errors at the root of the mismatches. TMMData consultants programmed the data flow to cleanse formatting issues and inconsistencies automatically. As Foundation's [Flow tool](#) automatically ingested data from thousands of contractors via hundreds of platforms and data dumps, the formatting of unique identifiers was also automatically cleansed, indexed against the master lookup table, and combined with other relevant data sets to create data tables that are then automatically pushed to business intelligence and analysis tools like Tableau and Domo for comprehensive analysis.

CONNECTED PLATFORMS

Adobe Analytics

Adobe Audience Manager

Excel

tableau

TERADATA

DOMO

MySQL

TMMData
FOUNDATION

The Results

Accurate and robust evaluation and optimization of nearly all business activities

Through TMMData's consultation and custom-built automated matching data flows, the client was able to improve its **accuracy in pairing third-party data to customer profiles from roughly 50% to 98%** or above. As a result, the enterprise is now able to not just evaluate marketing, advertising, web user experience, customer service satisfaction and more via top-line performance statistics, but can tie nearly all of its business activities and results to specific customer profiles, enabling the telecom to identify the types of customers that generate the most revenue and build cohort segments for greater ROI on its marketing and advertising, optimize operations around customer service and connections to cut costs, and much more.

Improved accuracy of pairing external third-party data with customer profiles for a **98% match rate or above**, from roughly 50% previously

Consider the following scenarios realized by TMMData's client once the enterprise was able to accurately map online and offline vendor data with specific customer accounts:

1. *Matching customer service call data to online behavior to save $2.3 million in call center costs:* As part of its customer retention strategy, the telecom company prioritizes improving its customer service experience – but relying heavily on the human resources provided by call center representatives can be costly. The company wanted to map Interactive Voice Response (IVR) data from its call centers to its customers' online cable account activities, with the goal of identifying when and why customers attempted to utilize self-service resources via online help pages, but then ended up needing additional support from a call center service representative. The challenge was that the offline IVR data and online account data used different unique identifiers and lived in different data management systems. TMMData's Foundation centralized the data sets and automated a data flow that referenced the custom-built customer identification lookup table to painlessly match customers' online and offline behaviors, enabling the online help team to identify which of their pages were the least successful in assisting customers with self-service and thus driving the highest rates of calls to service representatives. By improving online help content, the telecom reduced call center costs by $2.3 million over two years.

FOUNDATION CAPABILITIES UTILIZED

- Automated data access + movement ([Flow tool](#))
- Data storage + management ([File tool](#))

BUSINESS UNITS UTILIZING FOUNDATION

- Self-Service
- Marketing
- Sales
- Digital Center of Excellence

2. ***Matching keyword-driven purchases to authenticated users for advertising optimization and segment-building:*** The Adobe Analytics data set that tracks the telecom's online purchases contains some, but not all, of the information needed to map those purchases to specific keywords and specific customers. By ingesting, centralizing and blending the Adobe Analytics tracking data with purchase data from a second system, TMMData's powerful Foundation platform is first able to tie online events to specific purchase orders. Then, TMMData scans event data for information that will help connect tracking code clicks and purchase IDs to the telecom's specific customers. Some events contain authenticated unique identifiers, but many contain only a third-party unique identifier. Indexing the TMMData-built identification lookup table enables the client's team to create a map of which keywords drove which customers to make a purchase. As a result, they are able to perform accurate, granular analysis of which advertising efforts are most successful and tailor resource allocation accordingly, and to build customer segments for additional marketing efforts.

> "The TMMData consultants we work with really know our business and know our data, and that's been a huge component of our success. You think the consultants are part of the team because they understand how everything works. The partnership has been outstanding; TMMData has constantly looked for new ways to make our lives easier."

Senior Analyst,
Digital Search Analytics

Beyond Results:

We've never met a data problem we couldn't solve

Most of TMMData's clients come to us with data integration challenges that they've brought to their analytics platform service representatives, IT departments or consultants and were told were impossible to solve. The enterprises we serve are on the cutting edge of data analysis and are relentlessly pursuing avenues to connect as many data points as possible to create unprecedented visibility into marketing performance, operational optimization and more – and we're here to make their data dreams a reality. While our out-of-the-box Foundation platform and tools are powerful game changers for any data-driven organization, our outstanding data engineers regularly build custom solutions for companies that aren't willing to accept that their integration challenges are "impossible." Have a data challenge no one else can solve? Try us.

ABOUT TMMDATA

TMMData simplifies the movement and enrichment of data for analysis through its self-service data integration, preparation and management platform **Foundation**. A range of users—from marketers and analysts to developers and engineers—rely on TMMData's enterprise-grade software to ingest data from any source, automate complex data synthesis and customize direct data outputs for delivery to any platform. Whether implemented in-cloud or on-premises, TMMData's powerful data governance and taxonomy functionalities ensure data quality and protection of sensitive information across data environments.

TMMData Foundation powers the data supply chains of clients including Comcast, FedEx, Blue Cross Blue Shield, the Pennsylvania State University, Expedia and others. TMMData was founded in 2008 outside of State College, PA, and has additional offices in Philadelphia and Baltimore. For more information, visit TMMData.com.