

# CAPABILITIES STUDY

**TROVE Data**

**TROVE**<sup>TM</sup>  
PREDICTIVE DATA SCIENCE

# TROVE Data Summary

## TROVE Data:

- Provides the richest cache of 3rd-party data in the industry with more than 650 consumer and commercial attributes.
- Delivers the most verifiable data on every person and commercial entity in the U.S., down to the individual, household and business level.
- Is obtained from multiple, reputable sources.
- Is refreshed quarterly, and changes are time-stamped.
- Is competitively priced.

## Predicting Customer Behavior with TROVE Data

Predicting individual customer behavior is a specialty of TROVE Predictive Data Science. This capability, something we call “The Power of One,” is a key enabler of next-gen customer-engagement strategy – using behavioral forecasting for predicting adoption of products and services, marketing campaign response rates, customer attrition and loyalty, and personalizing customer service operations. The accuracy of such predictions hinges on great data, and no company provides the same breadth, depth and vigor of customer and business data as TROVE.

Many enterprises collect data about their operations – typically up to the point where they connect with the customer and no farther. Utilities gather data from the generator down to the smart meter; cable companies amass data through their fiber networks down to the cable box; and security companies collect it right down to the sensors deployed on site. But when it comes to data about the customer they hit a wall. Yes, they have an address and, perhaps, billing and usage history, but what else? To know what that customer – and customers like them – will likely do next requires more data.

To meet this need, many companies turn to large data-aggregation firms who specialize in just that – gathering and packaging data. **But buyer beware.** This kind of data isn't all it's cracked up to be – it comes from a single source, which means you must trust it at face value; it is typically updated annually, which means it isn't fresh; and it provides limited access to key consumer and business attributes, meaning its usefulness in your predictive analytics programs will be limited, too.

Enter TROVE Data. TROVE Data is the industry's best-performing cache of third-party data culled, corroborated, and optimized for predictive analytics. This cache – carefully crafted from multiple, credible sources and refreshed quarterly – **fills in the enterprise's blind spots** regarding its customers with highly verified data covering an amazing **650** distinct attributes, spanning many data types. (See *Figure 1 on back page.*)

So, instead of trying to find targets for your next campaign in a pre-canned list like “Urban Achievers,” let TROVE Data, for the same price or less, bring you a higher resolution view, one that informs you that prospect John Doe owns his own 2,000 square-foot home, earns \$89,000 per year, spends \$175/month on utilities, is married with three kids, has two credit cards, a dog, and a love of baseball memorabilia.

# Evolving from Search to Discovery with TROVE Data

**You may not think you need all that data, but your predictive data science models do.** In fact, they love it. Machine learning, the workhorse of precision predictive data science, is very dependent on the number of attributes, i.e. the richness of the data, it can “learn” from. Furthermore, data quality and richness, when combined with TROVE’s advanced Customer Solvers™, help marketers and other business functions in your organization make the leap from inefficiently “searching” pre-packaged segments for targets based on hunches to using the data to “discover” individual customers to target based on their actual behavior.

This is an important distinction. The majority of companies today follow their hunches, thinking, for example, their target customer is likely a “middle income suburban family that is tech savvy.” They then apply analytics to that list to find the best targets. But what if their hunch was wrong to begin with? It often is.

For example, one TROVE client had analyzed its customer data to determine its optimal target customer made \$80,000 per year and launched a national marketing campaign directed at that demographic. The campaign languished. After supplementing this data with TROVE Data and putting a data scientist on the case, TROVE discovered the \$80,000 income figure was simply the mean for all customers, not a defining attribute of the ideal customer.

The bulk of the client’s customers fell either well below that income level, or far above it, and purchased different services accordingly. What they did share in common, however, was home ownership, a fact surfaced by TROVE Data. These discoveries helped the client achieve its acquisition goals and cut its losses for a campaign directed at an imaginary sweet spot, saving them hundreds of thousands of dollars.

Not that all hunches are wrong, but they are rarely completely right. By enhancing their customer data with TROVE Data and applying TROVE’s machine-learning based Solvers™ to it, companies can move from hunch-based searches – “I want to find high-tech customers that live in urban areas” – to discovery-based answers to questions such as, “I want customers that are **most likely to buy this product.**”

This switch results in dramatically better business outcomes. We’ve seen clients increase product and service adoption rates by 30% (see case study below), improve the accuracy of forecasts by 40%, and significantly reduce customer attrition.

That’s the power of TROVE Data.

## Benefits of TROVE Data

1

Supplements your data to provide the most comprehensive, 360-degree view of your customers and prospects available today, enabling you to “zoom in” to predict the behavior of individual customers and prospects and “zoom out” to understand the behaviors of larger groups or segments. We call this capability “The Power of One.”

2

When fused with your data through our Datasynthesis™ process, the resulting data set is clean, complete and “prediction ready.”

3

Improves the performance of machine-based learning models.

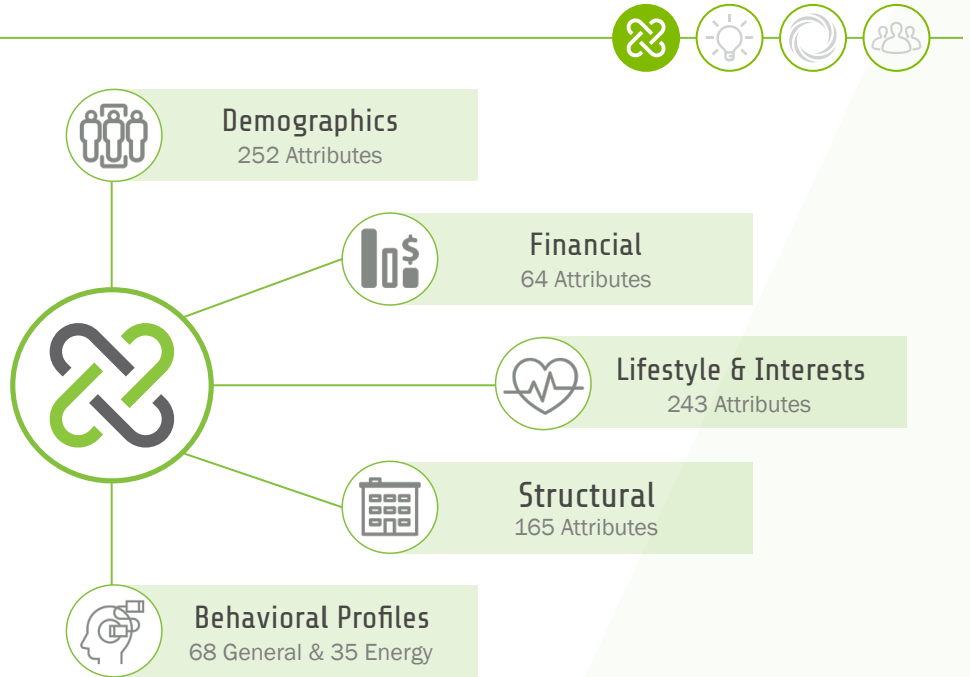
4

Increases the accuracy of your predictions, fueling better marketing campaigns, adoption of products and services, and customer satisfaction and loyalty.

Figure 1

# TROVE Data

- 650+ consumer and commercial attributes
- Data obtained from 6 reputable sources
- Provides the most verifiable data on every person and commercial entity in the U.S, down to the individual, household and business level
- Data refreshed quarterly



## Case Study:

### *“Propensity Scoring” for a Large Natural Gas Utility*

#### CHALLENGE

A large natural gas utility turned to TROVE to increase the cost-effectiveness and adoption rates of its “weatherization” marketing efforts, promoting energy-efficiency measures such as HVAC upgrades and insulating doors, windows and ducts.

#### APPROACH

To start, TROVE trained its machine-learning models on the utility’s customers who had engaged in weatherization efforts in the past and on the impact those measures had on gas usage. Then, using a combination of TROVE Data and the utility’s historical-campaign and gas-usage data, TROVE directed its machine-

learning models to produce two scores: a “response score” that measured a customer’s likelihood to respond to a weatherization offer, and an “opportunity score” that assessed the potential savings of such weatherization efforts. TROVE then combined those two scores to give the utility a rank order, on a scale of 1-10, of gas customers the utility should target.

#### RESULT

The utility ran a direct-mail campaign pitting TROVE’s ranked list (those with scores of 7 or better) vs. a control group of current gas customers. The TROVE list generated a **31% better response rate** than the control group.