

# The Data-Driven Marketer's Guide to Identity Resolution



Recognize Your Customers as Individuals

White Paper



Has someone you met at a party ever asked for your name the next time he or she saw you? Or worse, has someone called you by the wrong name — or even forgot that they met you at all? Most of the time it's an honest mistake, but when it happens to you it can feel like a deliberate snub, like you're just not interesting enough to be remembered.

That's what your customers feel like when your personalization strategy misses the mark. Customers expect to be recognized by companies in return for providing data, and marketers must take steps to use that data in the right context. Consumers get frustrated when they see ads for products they've already purchased or when they start a purchase on their PC but don't see it if they have to move to mobile, and companies without the ability to deliver a consistent personalized experience across channels risk losing business.

Recognizing customers is easy to do if you run a small local coffee shop with a core group of people who come in for their hot latte every morning. But for enterprises operating worldwide, with multiple brands in a multi-channel environment, it's more difficult than ever to keep things straight.

With effective customer identity resolution, isolated pieces of data come together to form a multi-dimensional picture of each individual who engages with your business.

## What Is Customer Identity Resolution?

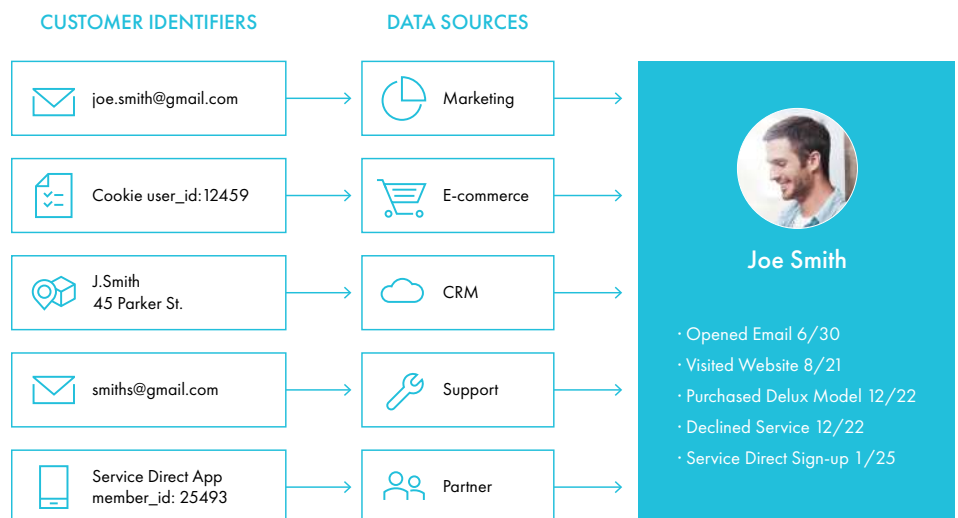
Customer identity resolution is the scientific method used to untangle the complex web of customer interactions. It acts as a digital detective, piecing together information from disparate data sources to connect the dots between relationships that may or may not appear obvious.

In Figure 1, for example, a customer named Joe Smith can be identified in five different ways—via an email address in a marketing database, a web cookie, a street address, an email address in a support database, and a member ID from a third-party partner program. A business with a robust customer identity resolution solution should be able to track Joe Smith as he interacts across devices and platforms, resulting in a single, unified profile that includes all of his attributes (contact info, demographic info, etc.) and his entire transactional and behavioral history.

With effective customer identity resolution, isolated pieces of data come together to form a multi-dimensional picture of each individual who engages with your business.

**Figure 1. — Who is Joe Smith?**

Companies with an effective customer identity resolution solution understand the unique ways a customer engages, and can unify those engagements into a cohesive customer profile.



### Do You Need Data Enrichment?

If your organization's first-party data is missing information required for fully understanding customer engagement across channels (such as device IDs and mobile app IDs), you may need a third party to fill in the gaps. With additional input from device graph vendors, you can typically stitch together more data points for more complete customer profiles.

Treasure Data's enterprise CDP can ingest data from any provider you choose and add it to the identity graphs we already generate.

## Why Is Customer Identity Resolution so Important?

Forrester asserts that customer identity resolution is “a strategic imperative and fundamental enabler for customer experience.” In other words, if you're not using customer identity resolution to figure out who your customers are and how they're engaging with your brand, you're likely to miss out on important opportunities.

If the holy grail is a perfectly personalized customer experience, you must understand each of your customers and where they are in their customer journey. As shown in the example above, customer identity resolution can give you a single record of each customer, which includes all their attributes and a full mapping of their interactions with your business. This is the primary prerequisite to effective personalization.

Additional benefits of customer identity resolution include:

1. Multi-touch attribution
2. Campaign optimization
3. More effective marketing through suppression of customers who've already purchased particular products, better targeting, and cross-channel frequency capping

All of these benefits are related to two key business goals that most companies have: improving the customer experience and doing more with fewer resources.

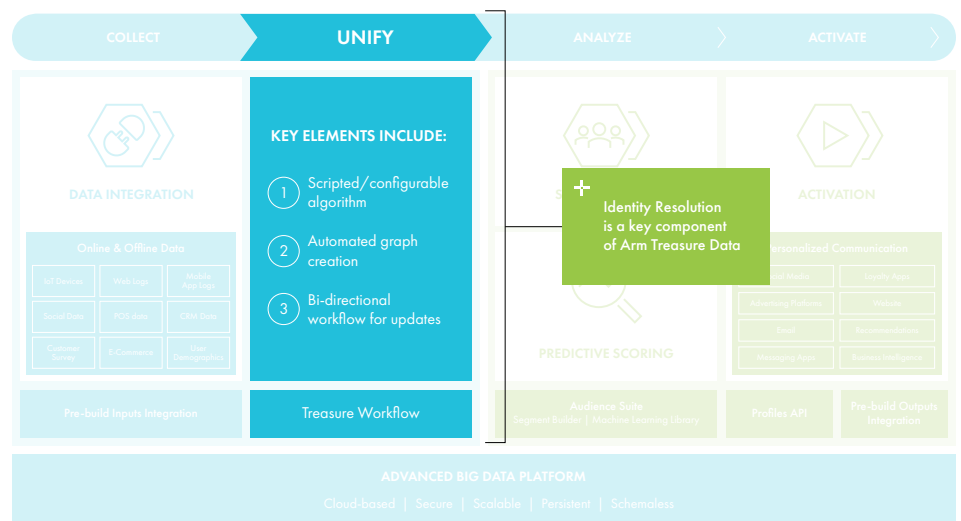
## How Arm Treasure Data Can Help You

While identifying customers and tracking them across channels might seem like a daunting task, customer identity resolution doesn't have to be intimidating. In fact, most companies already collect data in a privacy-compliant way, and that's a great start.

The primary obstacle to identity resolution is that the identification data you need — from cookies, devices, checkout baskets, mailing lists, loyalty programs, partners, social media platforms, point-of-sale (PoS) systems, and other sources — is typically spread out in silos across a wide variety of applications.

Figure 2. — Customer Identity Resolution Lives in Our CDP

Data unification is where all the action is when it comes to customer identity resolution. The Treasure Data enterprise CDP offers the algorithms, identity graphs, and workflows you need to create and update complete customer profiles.



## Two Types of Customer Identity Resolution

Based on the quantity and quality of the data at your disposal, two types of customer identity resolution can be used to unify customer records.

### 1. Deterministic Identity Resolution

Unique IDs for customer records in each system are matched using common information, such as an email address or name. This high-confidence approach works best when first-party data is readily available.

### 2. Probabilistic Identity Resolution

This approach analyzes a variety of customer data points to estimate the statistical likelihood that two identities are the same customer. While statistical connections aren't as definitive as authenticated IDs, they can be extremely helpful when first-party data is limited.

In order to maximize results, Treasure Data's enterprise CDP is able to support both approaches to identity resolution, depending on the marketer's needs. Our pioneering work with sophisticated algorithms delivers accurate identity unification at scale, while minimizing the number of direct comparisons needed.

As you can see in Figure 2, data unification is a key component of the Treasure Data Customer Data Platform (CDP), a marketing technology that facilitates the collection, unification, analysis, and activation of customer data. Customer identity resolution is the primary goal of the unification process, which includes sophisticated algorithms to match identities, automated identity graph creation, and continuous updates as your customers continue to engage.

As calls for data unification and customer identity resolution are heard by C-level executives, more enterprise organizations are poised to implement such projects. [KPMG International's 2017 Global CEO Outlook](#) revealed that 38 percent of CEOs are planning to make significant investments in data and analytics (D&A) and digital infrastructure over the next three years. According to the survey:

- ✦ 56% of CEOs are concerned about the integrity of their data
- ✦ 45% believe that the depth of their customer insight is hindered by a lack of quality data
- ✦ 36% say they can't make data-driven decisions until they invest significantly in data quality

A [joint study conducted by Treasure Data and Forbes Insights](#) recently found that a majority of organizations are turning to enterprise CDPs to solve these issues. A total of 78% of responding companies either have, or are developing, dedicated CDP environments in their marketing departments.

## The Arm Treasure Data Difference: Don't Try this at the Office

Most enterprise IT departments don't have the resources or expertise required to develop a customer identity resolution solution on their own. In-house solutions can be further complicated if third-party data integration is needed.

Given our experience with enterprise customers with sophisticated identity resolution needs, we understand the components required for successful customer profile creation:

- ✦ The breadth of identifiers needed for effective identity resolution, including 1st- and 3rd-party IDs (cookies, devices, mobile, apps, account, email, household, etc.) and identifiers (household, account, person, etc.) you need for your business
- ✦ The amount of data needed to uniquely identify relevant targets
- ✦ The scale and processing frequency needed to keep customer profiles updated
- ✦ The level of accuracy and relevant algorithms needed to resolve an identity
- ✦ The regulatory and privacy implications of identity resolution

These factors combine to determine a solution that will deliver the best results. And as soon as the solution requirements are established, Treasure Data can provide the tools you need for fast implementation and real-time updating. With our enterprise CDP, you'll always know that you have the right amount of information about your customers to stay relevant through personalization.

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# Customer Use Cases — From Better Targeting to Increased Revenue

With complete, optimized profiles of every customer in place, marketers put themselves in a great position to improve the customer experience. Here are just a few examples of how Treasure Data's sophisticated approach to customer identity resolution through its enterprise CDP has helped clients achieve better business outcomes:



## **Global Beverage Leader Improves Marketing Efficiency**

One of the world's largest beer companies wanted to reduce its marketing and advertising spend — and generate more than \$100 billion in revenue — by transforming its approach to personalized, micro-segmented marketing on a massive scale. The first thing Treasure Data did was clean up millions of incomplete and duplicate customer profiles and consolidate data from nine different systems and 110 websites. With complete, detailed consumer profiles and granular segments for creating personalized ads, emails, and instant messages, the company was on track to meeting its desired conversion rates and cutting its advertising costs by 36 percent.



## **Subaru Sends the Right Messages to the Right People at the Right Time**

With customer data scattered across different systems and channels, Subaru's marketing team had limited ability to drive timely, relevant promotions to customers during the buying cycle. Treasure Data's data scientists worked with the automaker to consolidate data from MySubaru loyalty program offers, dealership visits, service histories, campaign engagement, social media interactions, and advertising impressions and click-throughs under unique customer identifiers, so individual customers could be tracked across systems throughout their buying journey. In addition to improving personalization, the marketing team was able to create more accurate predictive models and increase order rates based on specific customer information shared with dealerships. Data unification and customer identity resolution resulted in a four-fold boost in new ad campaign performance and up to 15% order rate increases from promotional campaigns.



## **Oil & Gas Industry Publisher Uses Real-Time Customer Behavior for Better Connections**

Since 1973, this company has been the global energy industry's comprehensive source for news, data, and analysis. The company plays many different roles: publisher, consultant, event organizer, online content developer, researcher, digital mapping specialist, and veteran industry observer. To capture more lifetime value from every customer and increase revenue, the company's digital operations team called on Treasure Data. Through data unification and customer identity resolution, we helped the company understand who their customers were, what they're doing across multiple websites, events, and other channels, and which content is the most popular. Because the digital operations can now track individual customer behavior in real time and link it to a customer profile, they're able to personalize communications based on articles viewed, event registrations, and other specifications.





### About Arm Treasure Data

Arm Treasure Data translates millions of touchpoints into buyers journeys for remarkable customer experiences (CX).

We eliminate CX complexity and provide deep, relevant data. Marketers discover buying signals and unify individual profiles flexibly for unique meaning depending on the business. And, they personalize with tools that produce precise segments for maximum results.

### See How Arm Treasure Data Boosts Sales and Customer Lifetime Value

Let us show you how our Customer Data Platform (CDP) helps companies like yours transform millions of data points into profitable customer experiences.

[Request a demo today](#)

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