

What is Referential Matching™?

A complete guide to this groundbreaking identity matching approach

What is customer matching?

Customer matching is what enables financial services organizations to link a customer's records together — even when those records are in different places. While customer data matching can happen across organizations, it is typically talked about in the context of a single organization linking each person's data across its many facilities and technology systems.



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Why is customer matching important?

Inaccurate customer data matching has far reaching consequences throughout an enterprise. It impacts:

Customer experience – 89% of U.S. executives believe that inaccurate data undermines a positive customer experience and impacts the ability to personalize customer interactions.¹

Business performance – 95% of executives indicate that poor data undermines business performance, resulting in inefficiencies and wasted costs due to duplicate records creating extra processing and duplicate customer communication.¹

Strategic objectives – 70% of organizations report that they do not have direct control over data that they need to impact strategic objectives because one-third of their data is inaccurate.¹

Customer Service and Marketing Strategy – 92% of businesses say that there are multiple views of one customer across their business and see ineffective linkage as the main barrier to excellent customer service and cross-channel marketing strategies.¹

Missed Sales Opportunities – Inaccurate customer matching leads to poor targeting. Incomplete data leads to a lack of understanding of the full customer journey and can result in wasted marketing efforts, such as attempting to sell a customer a product they already have.¹

Business and labor efficiency – 65% of IT professionals report their main priority is securing the business. Wrangling data is taking IT teams away from their main job and businesses are feeling the effect of this stretched resource, with 56% of businesses feeling that IT does not fully understand

¹ Global Data Management Benchmark Report, 2018

How does customer data matching actually happen?

Customer matching is achieved by technologies, people, and processes. For example, it is essential that systems look for an existing record for a customer in order to prevent a duplicate from being created. But if a duplicate record is created anyway (for example, if the system can't find an existing record for a customer who has changed her last name and address after a recent marriage), then it is essential that the organization has technologies and processes in place to discover that a duplicate has been created and to correct it.

The foundational technologies that match and link all of a customer's data together are called master data management (MDM) tools. Customer matching solutions help MDMs deliver on the promise of customer 360 by automatically linking all of a customer's data across the system and flagging any duplicate records that may have been created.

How do customer matching technologies work?

All customer matching technologies use fundamentally the same approach.

Conventional customer matching technologies use algorithms to compare the demographic data (name, address, birthdate, etc.) from two customer records to determine if those records belong to the same person—in other words, if they match. If the

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demographic data is the same or very close, the technology determines that the records match.

The most basic of these algorithms are called “deterministic” algorithms, and they look for a perfect match between each data element in order to determine that two records belong to the same person.

The most sophisticated matching algorithms are called “probabilistic” algorithms, and they use statistics, weights, thresholds, rules, and complicated math to calculate the probability that two records belong to the same person. Because of this, probabilistic algorithms can overcome minor data errors like misspelled names and mistyped birthdates, and they can understand that two records with the last name “Rumpelstiltskin” are more likely to belong to the same person than two with the last name “Smith.”

Deterministic Algorithms

Look for a perfect match between each data element to determine if two records are the same.

Probabilistic Algorithms

Use complicated math to calculate the probability that two records are the same.

What is wrong with existing customer matching technologies?

Even the most sophisticated probabilistic algorithms found in popular customer matching technologies have been around in one form or another since the 1970s, and they have seen little innovation since then. Because of this, they are struggling in today’s increasingly complex digital ecosystem—where there is much more customer data, which must be linked across increasingly larger organizations, that must use this data to provide much more value and cost-savings.



Consider these matches that no MPI or EMPI technology could ever make:

Out-of-date data — An existing record contains a customer’s old address and maiden name, and a newly created duplicate contains that same customer’s current address and married name.



Sparse data — A marketing record that contains very sparse demographic data for a customer, such as just the person’s name.



Different data attributes — One record from an organization contains a customer’s name, address, and SSN, while a record from a different location contains that customer’s name, phonenumber, and birthdate.

How is Verato Referential Matching® different?

Verato Referential Matching is a completely different approach to customer matching technology. Rather than directly comparing the demographic data from two customer records to see if they match, Verato Referential Matching instead matches the demographic data from each record to a comprehensive, continuously-updated, and highly-curated reference database of identities. The database contains identities spanning the entire U.S. population, and each identity contains a complete profile of demographic data spanning a 30-year history. The reference database is essentially a pre-built answer key for all demographic data.

By matching records to a reference database instead of to each other, Verato Referential Matching can make matches that deterministic and probabilistic algorithms could never make — even customer records containing demographic data that is out-of-date, incomplete, incorrect, or different.

Importantly, Verato Referential Matching isn't simply a better algorithm. It is a completely new, patented approach that is a quantum leap more accurate than existing matching technologies. It represents the next generation of customer matching technology. (

Just as importantly, Verato Referential Matching technology is a foundational part of a comprehensive, end-to-end identity data management platform that allows organizations to connect, identify, enrich, manage, and activate person and organization data in one cloud-native software-as-a service (SaaS) solution. It is flexible, cost-effective, highly scalable, secured in cloud infrastructures, and requires no extensive tuning and configuration.

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How can Referential Matching be used?

Referential Matching is typically deployed in four ways:

1

Benchmark evaluation

Organizations can gain a benchmark evaluation of their MDM technology using a cloud-based Referential Matching service. This evaluation will give the organization insight into how many duplicate records are in the MDM, and how many matches the MDM has missed. It can also give insight into what kinds of data issues are causing the duplicate records and missed matches to occur.

2

Automated improvement

Organizations can “plug in” a cloud-based Referential Matching service into their MDM to improve that technology’s customer matching accuracy and reduce its duplicate records. For example, a Referential Matching service could automatically find and resolve an MDMs duplicate records and missed matches—even the toughest matches that the MDM has flagged as “potential duplicate records” requiring manual review. Such plug-ins work with any technology system from any vendor, including IBM, Oracle, TIBCO, Informatica, Reltio, and others.

3

Referential matching for MDM

Organizations can deploy a cloud-based customer matching tool that uses Referential Matching to achieve the highest levels of matching accuracy across the organization’s many systems, and other facilities.

4

Inter-organizational interoperability

Referential Matching technology is the only customer matching technology that allows organizations to automatically discover common customers they share with each other, because each organization’s customers are matched to the same set of universal and unique reference identities. Because of this, it is also the only customer matching technology that can be used as a “cross-reference” for each organization’s unique customer identifiers—allowing organization’s to discover common customer’s even across different systems.



Verato, the identity experts for better data management, enables smarter growth, improved efficiency, and actionable analytics by solving the problem that drives everything else – knowing who is who. Only the Verato, next generation cloud-native identity platform enables interoperability across an increasingly complex digital ecosystem with unprecedented accuracy, ease, and time-to-value. With an enterprise-wide single source of truth for identity, Verato ensures that you get identity right from the start.

For more information, visit verato.com.

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