Reltio Match IQ

Using Machine Learning to Accelerate the Journey to Excellent Data Quality

Matching Data Requires Too Much Time and Effort

Creating a unified and reliable version of your data requires the difficult and tedious task of aligning your various data sources by deduplicating records that match across systems, and then merging matching records into a single source of truth so that no duplicates exist. Creating rules for matching entity records across multiple sources can be time consuming, involving close cooperation between business users (who know which records should be considered a match) and IT or other technical resources (who understand how to configure or code business rules in the MDM system to define the match). Match patterns that are not correctly identified or coded would generate incorrect matches or miss valid matches.

Typically, this is an iterative process. In short, it involves a lot of testing and adjusting matching criteria and configuring or coding—then re-doing it as many times as needed to ensure that all valid matches and only valid matches are identified. The more data sources involved, the longer this can take—can be weeks or even months to get it right. Of course, any time you add a new data source, this needs to be done again.

Data Management implementation teams, data stewards and other business users seek to streamline this process and leverage advanced technologies to minimize the manual time and effort involved. At the same time, they want to ensure high data quality and the flexibility to add new source systems quickly.

Reltio Match IQ Accelerates the Data Matching Process with Machine Learning

Reltio Match IQ uses machine learning (ML) to simplify and accelerate the data matching process. With Reltio Match IQ, business users can easily create a model for matching the records, by simply selecting the entity type and related attributes, without or minimum IT help. They can then train the ML model with the active learning process by reviewing pairs of records and indicating which are a match and which are not. As users confirm the matches, machine learning adjusts the matching model and presents additional record pairs to further refine the model.

Question #15	Record 1	Record 2
Profile **HCP**	Ⓗ Jose Raul Nassar, JAcqTD5	Ⓗ Jose Agustin Nassar, sW8tsT5
First Name	Jose	Jose
Last Name	Nassar	Nassar
Middle Name	Raul	Agustin
▾ Address	▾ Business(+1), Primary - , Address Rank - : 63 Calle Cruz Ortiz Stella S(+1), Humacao, PR	▾ Business(+1), Primary - , Address Rank - : 63 Calle Cruz Ortiz Stella S(+1), Humacao, PR
Address Type	Business / Mailing	Business / Mailing
Address Line 1	63 Calle Cruz Ortiz Stella S / PO Box 9132	63 Calle Cruz Ortiz Stella S / PO Box 9132
City	Humacao	Humacao
State	PR	PR
Zip5	00791 / 00792	00791 / 00792
▾ Identifiers	▾ NPI - 1689678229	▾ NPI - 1417951013
Type	NPI	NPI
ID	1689678229	1417951013

NOT SURE · 👎 NOT A MATCH · 👍 MATCH

After a sufficient number of representative record pairs have been matched or not matched, the user can download and review the match results. The downloaded file shows a sample set of match results and a relevance score for each record pair. The higher the relevance score, the more likely the records match. If needed, the user can retrain the model by answering more questions or even creating an alternate model to compare the matching results.

After the results are satisfactory, the data steward or other user with approval authority can review, approve and publish the model to use with internal and/or external data. The user also provides publishing settings based upon the relevance score range—for example, to define that match pairs with a relevance score of .8 to 1 should be matched and merged.

The end-to-end process, driven and performed by business users, typically takes only a day or two to complete and produces the quality matches customers require.

Data Quality for Trusted Data Foundation

Reltio Match IQ uses machine learning technology to help ensure unified and reliable data across virtually unlimited data sources. The ML matching model, created with active learning using resolutions of suspected matched pairs, can be effectively applied to future match pairs. This provides a consistent way for business users and data stewards to match and merge data for increased quality, reliability, and business value.

Match at the Scale and Speed of Business

Once a matching model is trained, no user interaction is required but the model can be retrained if needed. Because match and merge operations are performed using these models and calculated relevance scores, the process is rapid, consistent and reliable. As the business grows or changes, the models can easily be adjusted to accommodate additional data sources. This enables matching and merging at the scale and speed of business.

Accelerated Time to Value

The streamlined matching process, which does not require IT specialists or coding, enables customers to get up and running faster and with less effort. Typically they can progress from initial subscription to completing their match-and-merge operations in a matter of days. Compare this to the weeks or months required by more traditional approaches. This same process is used to perform matching for new data sources as they are added, providing additional time savings and increased productivity.

Reduced Errors in a Repeatable Process

No definition of matching requirements is needed; instead, users select matched pairs and machine learning creates the models. This greatly reduces the possibility of matching requirements not being correctly identified that might generate incorrect matches or miss valid matches. In addition, because machine learning creates and adjusts the matching model without configuration by IT specialists, coding errors are a thing of the past. This not only reduces errors in the match-and-merge process, but it also saves significant time as it creates a repeatable process. Customers have an option to use both Match IQ and traditional rule-based matching together if needed.

Free Resources for More Meaningful Work

With all the time saved by using Reltio Match IQ, those involved—data owners, data stewards, IT and other business users—will find they have more time available for work that adds value to the business. They can use their time to focus on creating better user experiences, data improvement initiatives or streamlining other processes.

Features

- **Reltio Match IQ** is available as an add-on for various Reltio Connected Data Platform Products.

- **Simple user interface** designed with the business user in mind.

- **Machine-learning-based process** that "understands" matching patterns and creates models based upon the Active Learning performed by business users—no coding required.

- **Creation and testing** of multiple models before publishing the model that produces the most accurate results.

- **Setting match actions** such as auto merge, potential match and custom match actions based upon relevance scoring.

- **Matching** done in real-time or batch mode, and upon internal or external data.

- **Match IQ API** to move approved models from development or test tenants to target tenant (e.g., production) without retraining.

ABOUT RELTIO

Innovative Global 2000 companies trust Reltio to manage their mission-critical data for digital transformation. Reltio Connected Data Platform provides unified, reliable and real-time data to drive hyper-personalization, accelerate real-time operations, and simplify compliance.

Reltio

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