Meet 360Science &

alteryx360

Customer Data
Integration

Unify Match
Merge Suppress

CRM Data
Lead Matching

Multi-buyer
Analysis

Contact Data
Blending

Customer
Segmentation

Cross-Channel
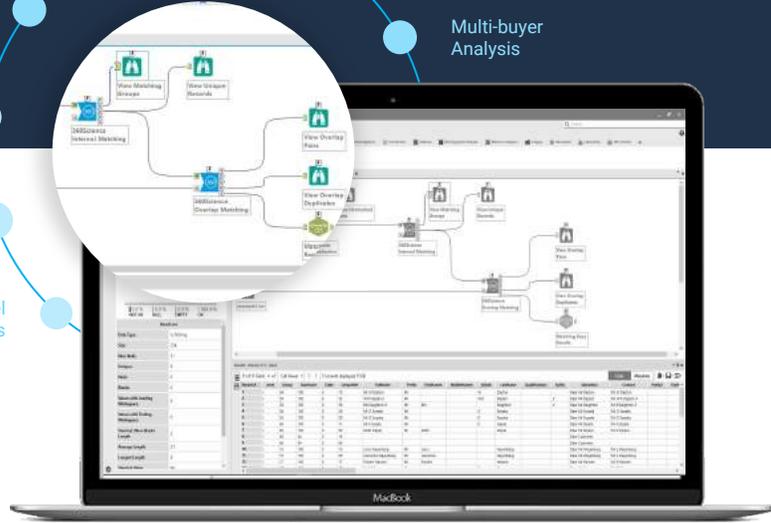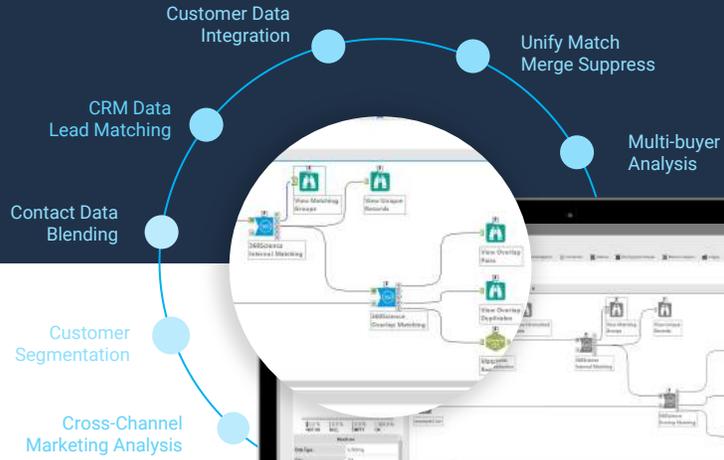Marketing Analysis

360Science Customer Data Matching Workbench for the Alteryx® Platform

The world's most advanced matching engine for customer data applications.

What is 360Science for Alteryx?

It's an integration between Alteryx and 360Science that makes matching and unifying contact data faster, easier and a lot more accurate!

Alteryx 'Traditional' matching

Alteryx is a fantastic platform, but let's face it, trying to match and unify contact data in it isn't easy – as a matter of fact it's downright hard!

The decisions as to which algorithms to chose, or matchcode is best, is a complex process of experimenting with matching models and various algorithm, and using a library of additional data sets and regular expressions to normalize, standardize, clean and prepare data - in order to create 'matchleys'.
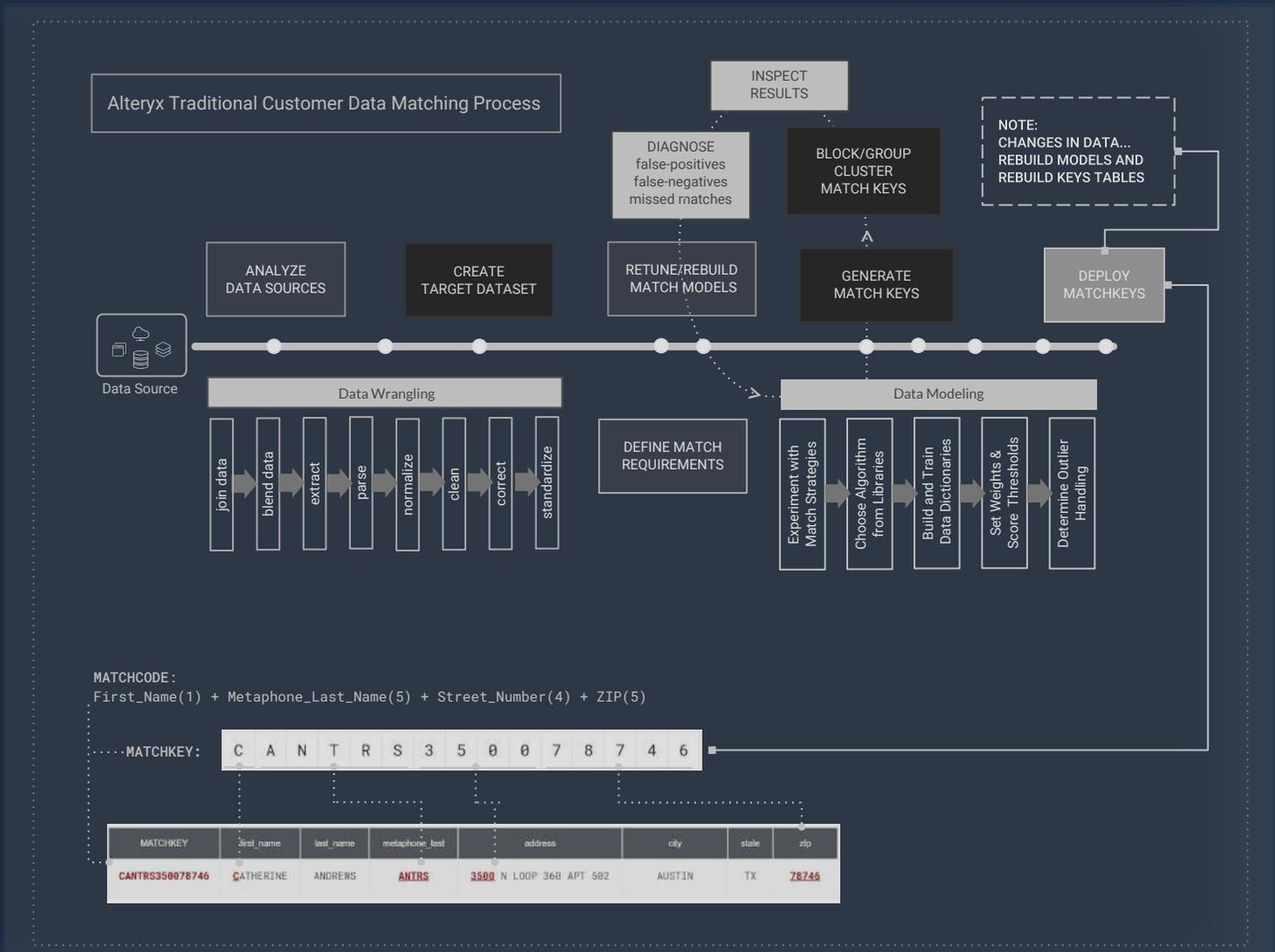
The problem is CRM and customer data is unique - and matching people data is more complex than other form of data matching.

Conventional algorithms are specifically written and narrowly designed to solve for explicit patterns of difference in data, and you're expected to know, analyze and pick the right one. Yet when applied to contact data conventional algorithms and matchkeys exhibit exceptionally high tendencies to miss potential duplicates and they return a high number of false matches!
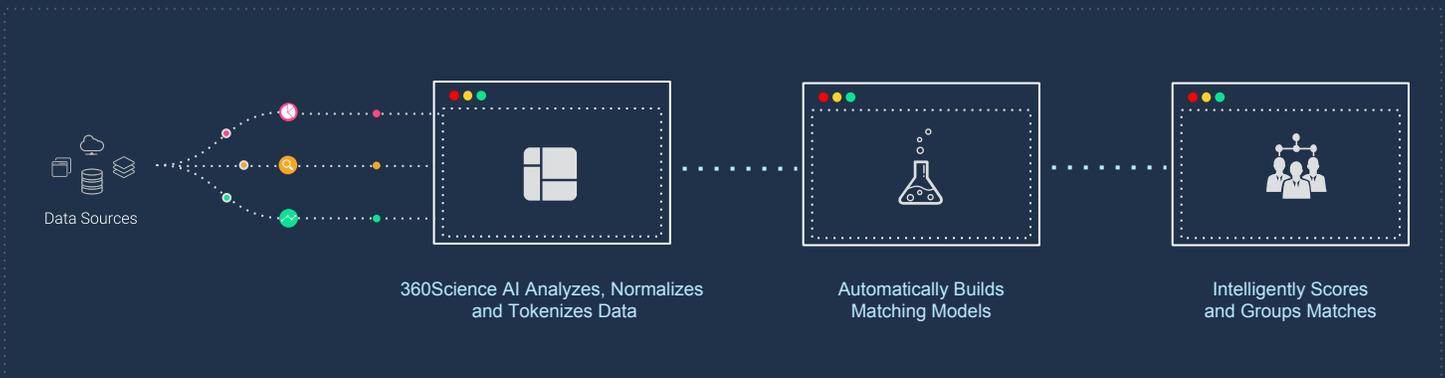
It's a process that doesn't fully account for the realities of customer data. It doesn't work for efficiency and it doesn't work at scale.

Meet the world's most advanced matching engine built for customer data applications

360Science is very different than Alteryx's simple library of fuzzy algorithms and regular expressions. Our team of engineers, data scientists and developers have created AND perfected the industry's most accurate and effective contact data matching engine.

We eliminated the complexity, difficulty, and uncertainty of Alteryx's traditional matching processes, and enable users of all skill levels – to easily build and deploy highly accurate contact data matching models with greater accuracy and in a fraction of the time of Alteryx's conventional fuzzy matching methods.

Data Sources

360Science AI Analyzes, Normalizes and Tokenizes Data

Automatically Builds Matching Models

Intelligently Scores and Groups Matches

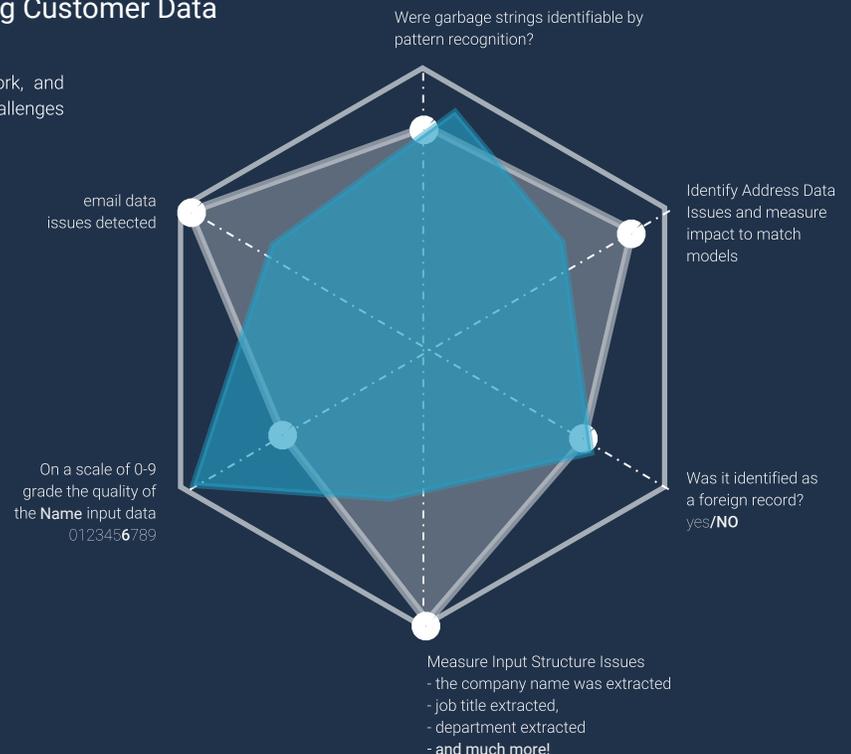## 360Science is the Smartest Route to Unifying Customer Data

We completely reimagined how contact data matching should work, and created a new matching engine - built from the ground up for the challenges of working with customer data.

The 360Science engine performs an analysis to better understand the data in each contact record.

The AI looks at patterns in the data, the nature and position of words, classifies word types, creates word associations, and identifies where there is poorly formatted, or has incomplete or uncertain information. It provides a description of the data that informs the engine of the trustworthiness of the record. Each result feeds the engine values that are used to measure the quality of every record.

Later during the match scoring stage when record 'A' is compared to record 'B' this logic helps the engine understand how the data was input, what the overall quality of that input was, what types of issues were identified, and then… how to grade suspect matching records.

This 'qualitative' logic feeds the scoring engine in order to achieve results that mimic human decisioning.

Were garbage strings identifiable by pattern recognition?

email data issues detected

On a scale of 0-9 grade the quality of the **Name** input data
0123456789

Identify Address Data Issues and measure impact to match models

Was it identified as a foreign record?
yes/**NO**

Measure Input Structure Issues
- the company name was extracted
- job title extracted,
- department extracted
- and much more!

The Result

A customer data matching engine that delivers performance, simplicity, and accuracy that is not possible to achieve with the native fuzzy match tools found in today's Data Quality, Data Integration, Analytics and MDM platforms. The Engine seamlessly matches data in different formats, and processes data that has not been corrected, normalized or standardized. It doesn't even require different data sources to be blended into a common format or a target database!

- tolerant to wide variations in customer data.
- not be reliant on data standardization, correction and manipulation prior to matching.
- scoring logic light-years beyond what you find in traditional solutions
- easily processes multiple data sources with disparate structures
- simultaneously run different matching models (e.g Individual, Household, etc.)
- Significantly more accurate

Handles Poor Data and Different Data Structures

Because one methodology cannot be relied on exclusively to deal with all variations found in a typical database, 360Science uses multiple algorithms and lexicons to ensure that all types of difference are detected, taking a 3-dimensional view of the data, and never relying on any single item of data being correct or consistent!
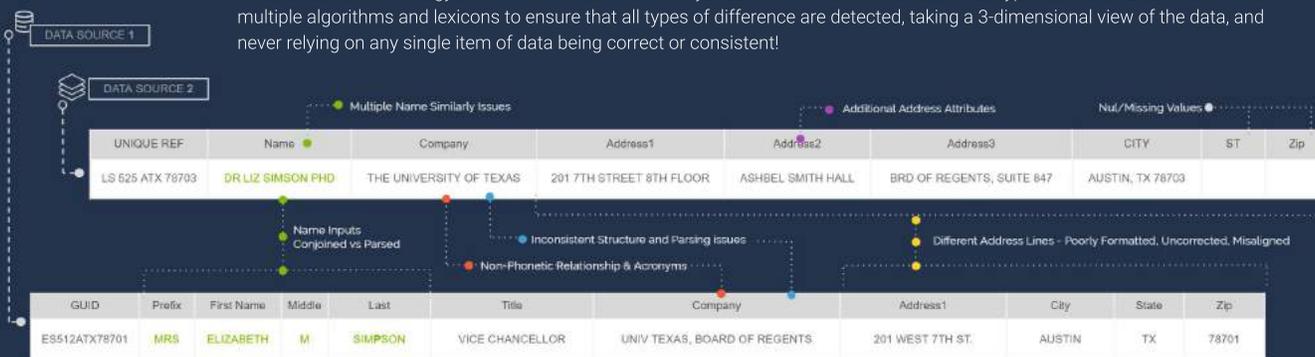
Automatically Normalizes Contact Data

Just because the Engine doesn't require extraction, transformation or normalization to process data - doesn't mean it can't do it!

It's a highly capable extraction and parsing engine explicitly built for dealing with the issues and nuance found in working with 'contact' data The Engine analyzes each contact record, intelligently determines the input structure, and correctly extracts and parses the values.

Smart Data Tokenization

With 360Science you're NOT locked into your MatchCode! Finding matches, grouping and scoring are completely independent of the keys.

The Engine creates 1:1 key values (**Tokens**) for each attribute of the party data. It creates Tokens for data objects, e.g. a full address spanning one or multiple lines of address in the data. It creates tokens using linguistic methods, AND phonetic methods, AND lexicons to derive codes that are extremely tolerant to variations in the data.

The engine **'automatically'** identifies and strips out noise words (such as 'of' & 'the'). AND It creates relationships between words like ('inc' & 'incorporated' and 'cars' & 'motors'). AND the tokens account for miskeyed data. AND the token accounts for the consonant sounds, AND the vowel sounds, AND the stressed syllables in the name. Notice these are all AND statements, not OR.

The result - The 360Science matching engine matches customers within and across data sources, and can seamlessly identify individual level, household level, and business level matches, as well as custom configurations - all in one routine. For Data Scientists, Data Analysts and business intelligence applications, this means you can a analyze different dimensions of your data on the fly.

Engine processes
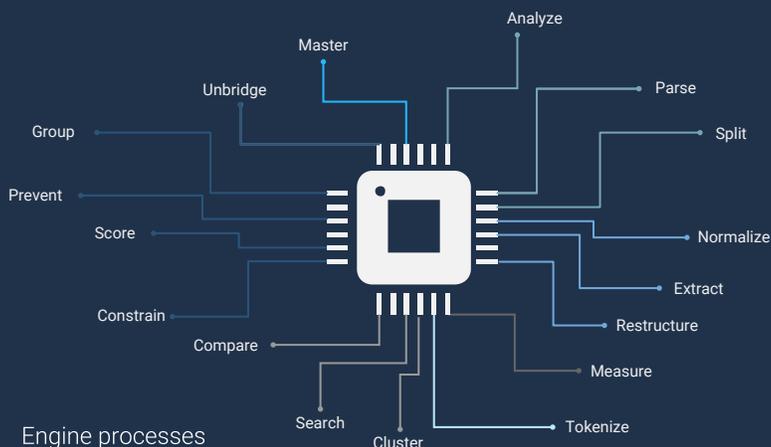
Granular Scoring Logic

The Engine is significantly more accurate, because it's tolerant to variations in the data and can score the granular differences in inputs.

The 'qualitative' analysis performed during Key-Generation provides a description of the data that informs the engine of the trustworthiness of the record. Each returned result feeds the engine a value that is used to measure the quality of the record. When record 'A' is compared to record 'B' this logic helps the engine understand how the data was input, what the overall quality of that input was, what types of issues were identified, and then how to grade the match.

It doesn't require addresses to be validated, standardized or corrected prior to matching. It treats multiple address lines as an object. This makes 360Science Matching Engine ideal for applications involving fraud detection or international data where address data is expected to be poorly formatted and uncorrectable.

You can also instruct the 360 Matching Engine to identify "Automatic False-Positives" or "Automatic Positive Matches" when selected data elements do or do not match. You can even weight individual attributes positively or negatively - creating matching and unmatching probabilities that will increase or decrease the composite score. #gamechanging

360°Science

Some of the world's best companies already use 360Science

COMCAST

Nestlé

Virgin australia

Nutrisystem®

Google

Fidelity INVESTMENTS

HARVARD BUSINESS SCHOOL

DICK'S SPORTING GOODS

PayPal T10 Networks

Allianz (Ⅲ)

:DatabaseUSA

SAKS FIFTH AVENUE

dun & bradstreet

AutoZone

humann

Chevron Federal Credit Union

Because we fundamentally changed their experience of self service customer data analytics

226%
More Accurate

40X
faster time to insights

0
Data Wrangling

delivered a 226% more accurate match rate on CRM customer data (system integrator)

reduced data matching process times from days and hours to 6 minutes! (marketing service company)

360Science nearly eliminates #datagymnastics and #regexhell (everyone who has used it)

360°Science

Contact Us

tel: 866.332.7132
email: hello@360Science.com
web: www.360science.com
twitter: @360science_HQ