MASTER DATA MANAGEMENT: A DATA MANAGEMENT DISCIPLINE BOOSTED BY GRAPH AND AI TECHNOLOGY

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LEGACY APPROACH TO MDM
CUSTOMER 360 IS ASSEMBLED OUTSIDE MDM, VIA BATCH OPERATIONS
MODERN DATA MANAGEMENT
CUSTOMER 360 IS ASSEMBLED IN MDM, IN REAL TIME

- All transaction + interactional data
- Transactional Data
- Extended Master Data + priority tx/ix data
- Master Data
- MDM
- Data Lake
- DW
- ERP
- CRM
- Web
- Marketing

CUSTOMER 360 IS ASSEMBLED IN MDM, IN REAL TIME
RELTIO: CUSTOMER 360 WITH EXTENDED MASTER DATA

Interactions

Profile

Recommendations

Insights

Relationships

Preferences
AS A CUSTOMER SERVICE AGENT...

Give me these three things:

1. An **accurate, up to date** view of the member’s profile
2. Visibility into the member’s **relationships/influences**
3. Access to the member’s **interactions** and **transactions**

... and I will provide an exceptional member experience
Multi-model Approach
COMPLEX B2B MASTER DATA

**T Joe’s Inc.**
- Billing: 99 Union St, Anywhere, AW 77822
- Main: 442-114-3333

**Jane Doe**
- Home: 499 Sugar St, Nowhere, NW 99888
- Home: 312-888-1111

**John Doe**
- Home: 499 Sugar St, Nowhere, NW 99888
- Mobile: 312-222-2222

**Legal Parent Org**
- T Joe’s Inc.
  - Billing: 11 Main St, Nowhere, NW 99811
  - Main: 312-922-4444

**Contracted Products**
- Wilma’s Manuka Honey 12+ 200g
  - Grade 12+
  - 200 Gram
  - 10.99 GBP

- Bob’s Organic Grass-fed Milk 2l
  - Organic
  - Grass-fed
  - 2 Litre
  - 3.49 GBP

**Contact**
- Jane Doe
  - Home: 499 Sugar St, Nowhere, NW 99888
  - Home: 312-888-1111

- T Joe’s Inc.
  - Shipping: 47 Main St, Nowhere, NW 99822
  - Accts: 312-944-5555
A MODERN, MULTI-MODEL ARCHITECTURE

Graph Database

- HasContact: tp8q23
- HasSpouse: hy2alq
- HasLegalChild: gtu3sz
- HasContractedProd: 6yhjt2
- HasContractedProd: h6bt39

Enterprise Search

<table>
<thead>
<tr>
<th>Name</th>
<th>Address</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jane Doe</td>
<td>{Type: Home A1: 499 Sugar St City: Nowhere State: NW PC: 99888}</td>
<td>{Type: Home Num: 312-888-1111}</td>
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<tr>
<td>John Doe</td>
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<td>{Type: Mobile Num: 312-222-2222}</td>
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<td>Doe</td>
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</table>

NoSQL, Columnar Database

<table>
<thead>
<tr>
<th>Name</th>
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<th>Phone</th>
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<tbody>
<tr>
<td>tp8q23</td>
<td>Name: Jane Doe</td>
<td>Address: {Type: Home A1: 499 Sugar St City: Nowhere State: NW PC: 99888} Phone: {Type: Home Num: 312-888-1111} ...</td>
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<tr>
<td>hy2alq</td>
<td>Name: John Doe</td>
<td>Address: {Type: Home A1: 499 Sugar St City: Nowhere State: NW PC: 99888} Phone: {Type: Mobile Num: 312-222-2222} ...</td>
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<tr>
<td>sfg12x</td>
<td>Name: T Joe’s Inc.</td>
<td>Address: {Type: Billing A1: 99 Union St City: Anywhere State: AW PC: 77822} Phone: {Type: Main Num: 442-114-3333} ...</td>
</tr>
<tr>
<td>gtu3sz</td>
<td>Name: T Joe’s Inc.</td>
<td>Address: {Type: Billing A1: 11 Main St City: Nowhere State: NW PC: 99811} Phone: {Type: Main Num: 312-922-4444} ...</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Address: {Type: Shipping A1: 47 Main St City: Nowhere State: NW PC: 99822} Phone: {Type: Accts Num: 312-944-5555} ...</td>
</tr>
<tr>
<td>6yhjt2</td>
<td>Name: Bob’s Organic Grass-fed Milk 2l</td>
<td>Organic: True Grass-fed: True Size: {Quantity: 2 Unit: Litre} Price: {Price: 3.49 Currency: GBP} ...</td>
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<tr>
<td>h6bt39</td>
<td>Name: Wilma’s Manuka Honey 12+ 200g</td>
<td>Quality: 12+ Size: {Quantity: 200 Unit: Gram} Price: {Price: 10.99 Currency: GBP} ...</td>
</tr>
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Opportunities for AI
ORGANIZE: RECONCILE, UNIFY

Matching and merging effectively pulls Crosswalks together into Profiles in Reltio

Profiles

Crosswalks

Interactions In Reltio

All interactions

Interactions

In Reltio

Profiles
3rd party data can be matched to and enrich Profiles in Reltio

Simple analysis of objects linked via common transactions and interactions can be used to relate Profiles in Reltio

All interactions

Advanced Analytics/ML

3rd Party

POS

Web Cart

Web Browse

Web Purchase

ORGANIZE: ENRICH

INSIGHTS

Relationships

Interactions In Reltio

C

P

L

Profile

ReltioIQ

Simple analysis of objects linked via common transactions and interactions can be used to relate Profiles in Reltio
Deeper analysis of transactions and interactions can be used to enrich Profiles in Reltio with Insights.
The Recommendations and Insights drive ongoing interaction with customers, resulting in measurable behaviour changes.
“Confident” rules result in automatic merging
“Potential” rules result in potential match suggestions, requiring human stewardship (merge, or no-match decisions)

AI Opportunity:
If a particular Potential rule always results in a merge, it should be suggested as being promoted to a “Confident” rule, removing the stewardship

Supervised learning opportunity exists, to profile initial data sets, invite expert user/steward to indicate match/nomatch situations, and to generate an initial ruleset
“Confident” rules result in automatic merging
“Potential” rules result in in potential match suggestions, requiring human stewardship (merge, or no-match decisions)
AI Opportunity:
Records may occasionally be unmerged
If a common “Confident” rule exists across unmerge situations, it should be suggested as being demoted to a “Potential” rule
Customers


Thank you