The MIT 2008 Information Quality Industry Symposium

Rapid Corporate Growth and Information

Steve Sarsfield, Trillium Software

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Agenda

- How Companies Grow
- The Data Components of Company Value
- Effects of Rogue Data Quality Processes
- Sorting Out a Large Company's Problems
  - Cleansing and Matching
  - Domain Specific Knowledge
  - Platform Unification

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How Companies Grow

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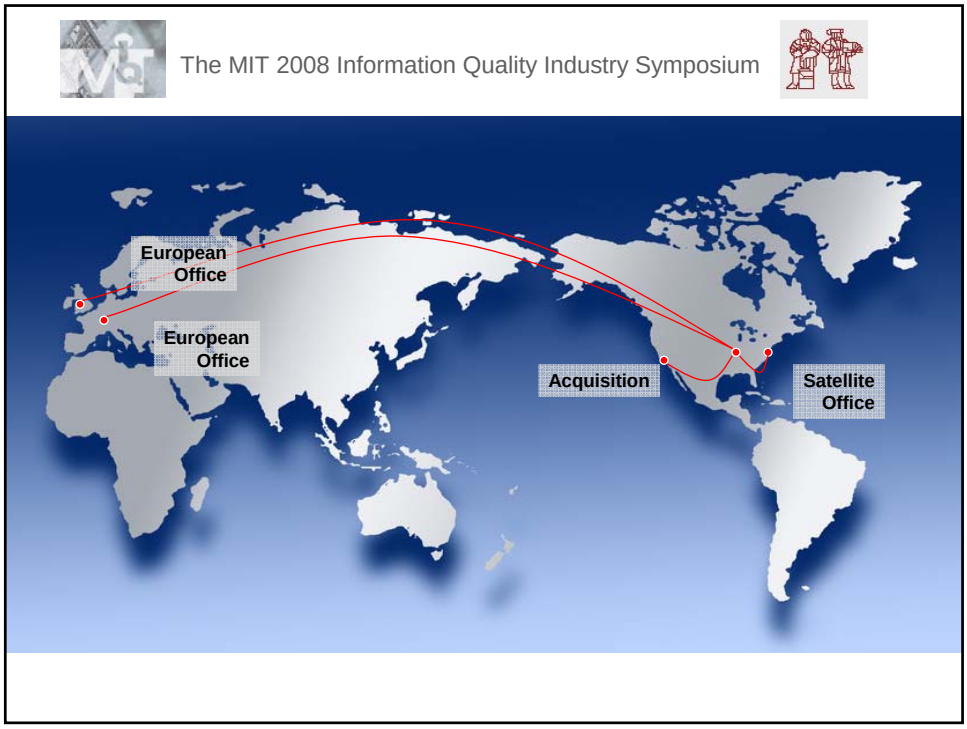
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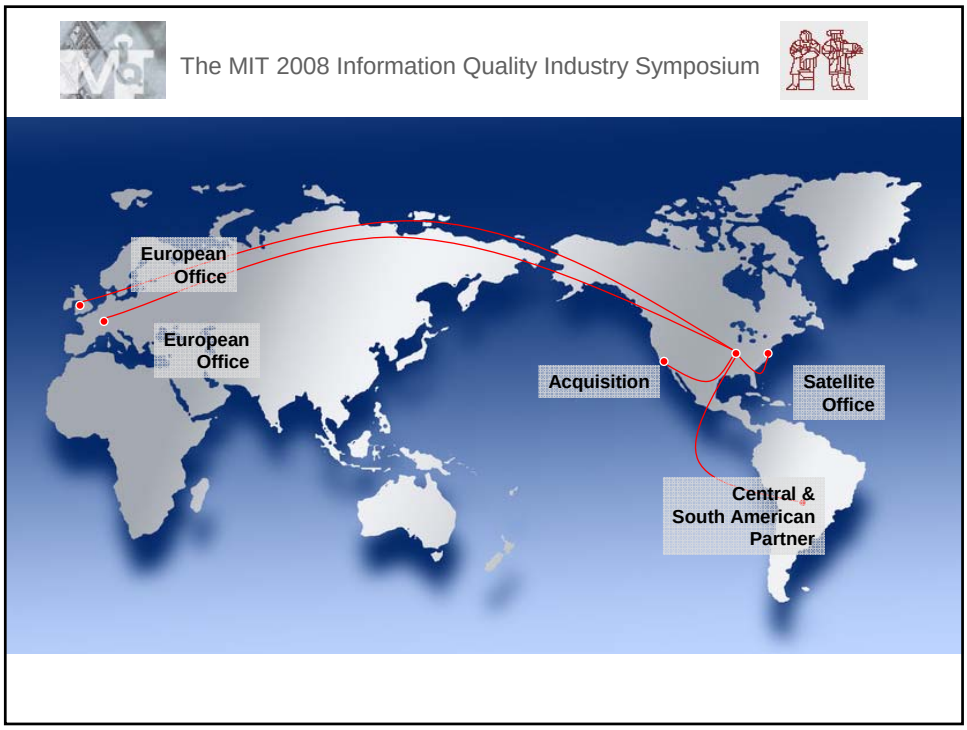
European Office
Acquisition
Satellite Office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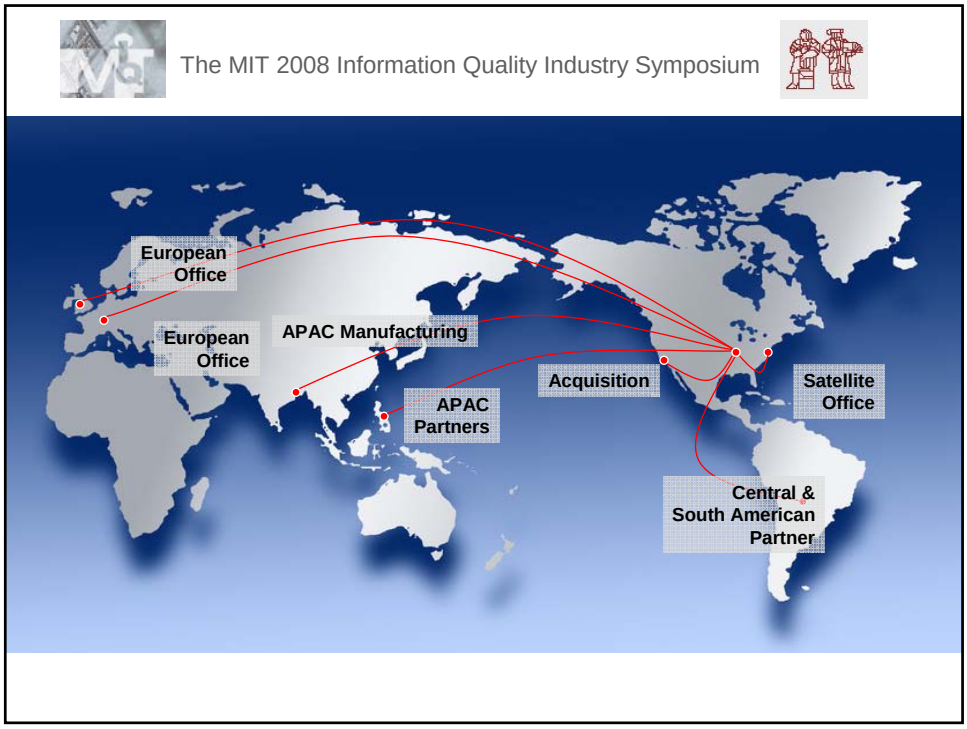
Central & South American Partner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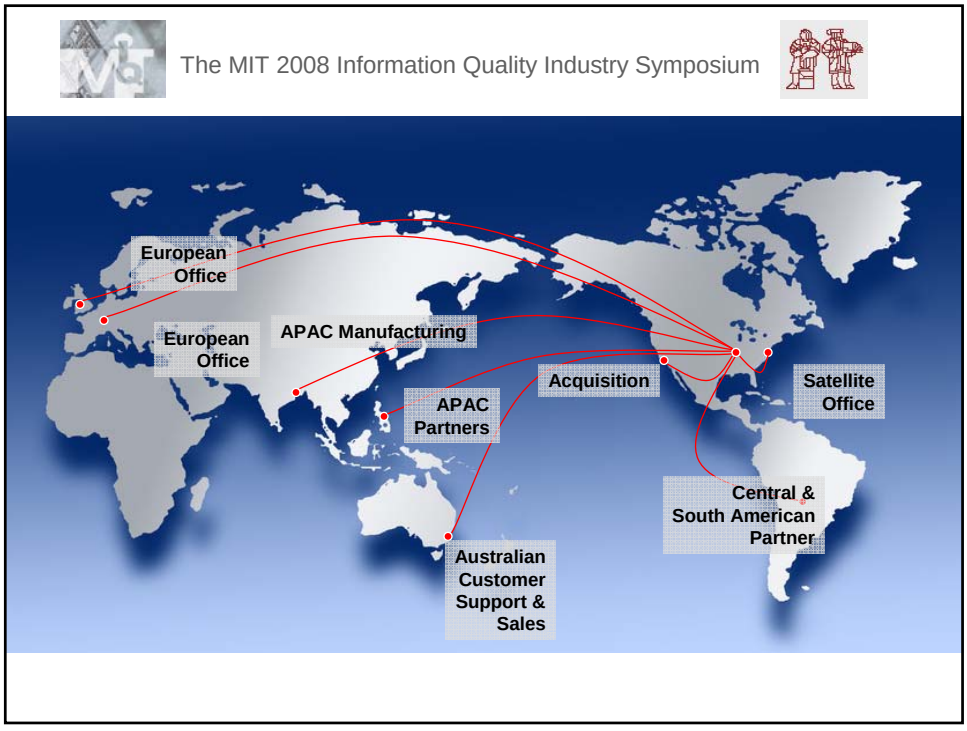
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APAC Partners
Acquisition
Satellite Office
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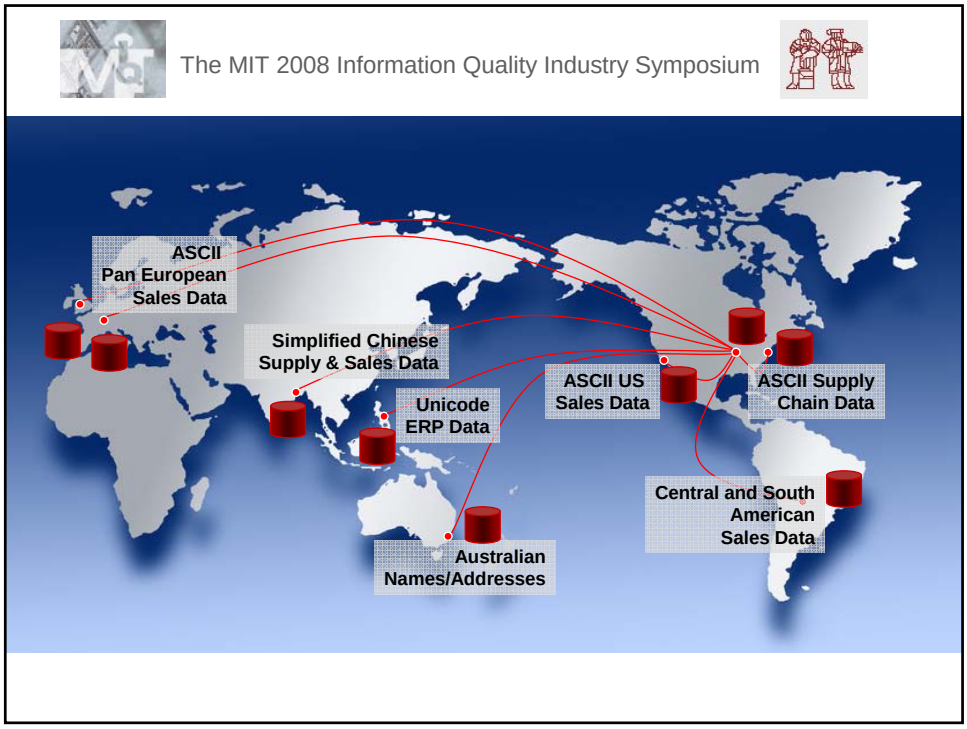
Australian Customer Support & Sales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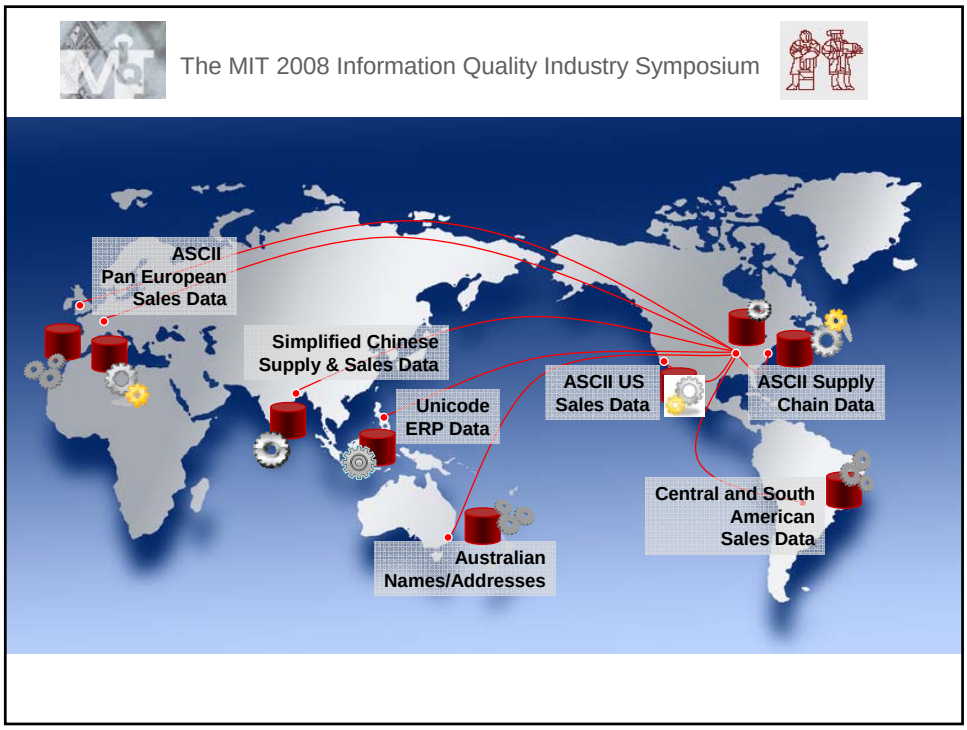
ASCII
Pan European
Sales Data
Simplified Chinese
Supply & Sales Data
Unicode
ERP Data
Australian
Names/Addresses
ASCII US
Sales Data
ASCII Supply
Chain Data
Central and South
American
Sales Data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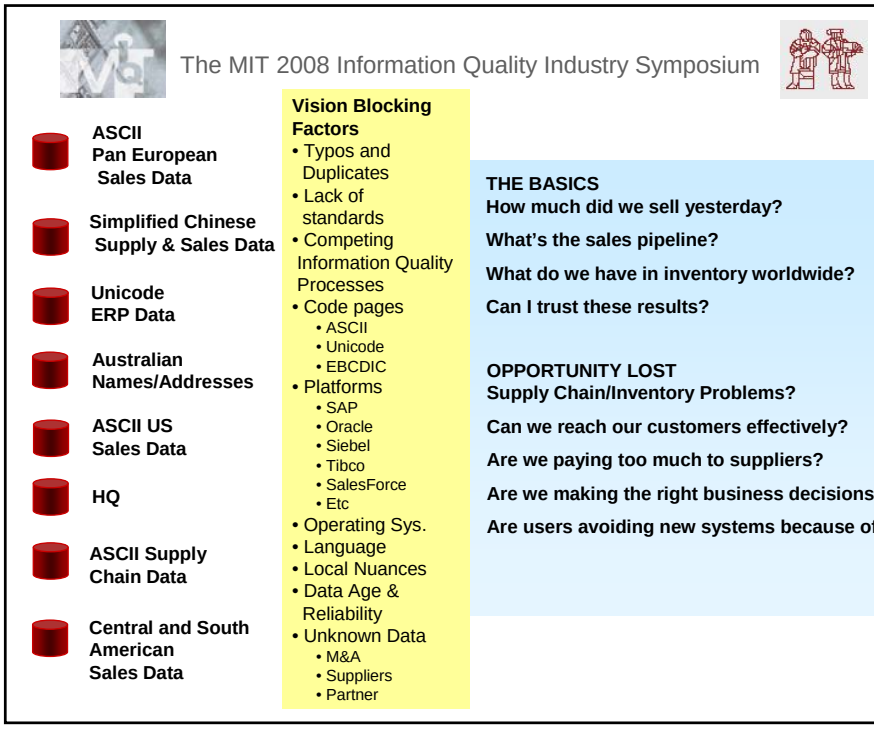
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HQ
ASCII Supply
Chain Data
Central and South
American
Sales Data
Vision Blocking
Factors
• Typos and
Duplicates
• Lack of
standards
• Competing
Information Quality
Processes
• Code pages
• ASCII
• Unicode
• EBCDIC
• Platforms
• SAP
• Oracle
• Siebel
• Tibco
• SalesForce
• Etc
• Operating Sys.
• Language
• Local Nuances
• Data Age &
Reliability
• Unknown Data
• M&A
• Suppliers
• Partner
THE BASICS
How much did we sell yesterday?
What's the sales pipeline?
What do we have in inventory worldwide?
Can I trust these results?
OPPORTUNITY LOST
Supply Chain/Inventory Problems?
Can we reach our customers effectively?
Are we paying too much to suppliers?
Are we making the right business decisions?
Are users avoiding new systems because of data?


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How Company Value is Measured
• Number of Customers = Customer Data
• Hard Assets = ERP and Supply Chain Data
• Number of Valued Employees = Knowledge Management Data
• Sales Channels = Supplier and Partner Data

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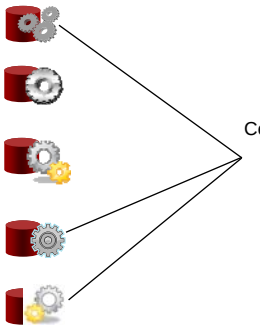
Differences in Data Quality Processes

Ivan Madar
75 Calle del Norte
Sedona, AZ 86336



Certain Solutions can't understand this street address.

No BLVD, ST, RD, AVE

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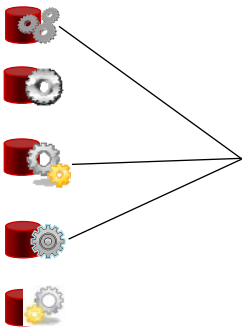
Differences in Data Quality Processes

Debra Shaw
203 Old Meadow Drive
Leave at front door
Greensburg, PA 15601



Certain solutions can't handle delivery info intermingled with name and address.

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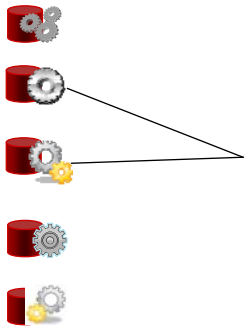
Differences in Data Quality Processes

Gary Wright
C/O Allstate Insurance
1466 S Potomac St
Hagerstown, MD 21740



Certain Solutions
Can't handle the C/O

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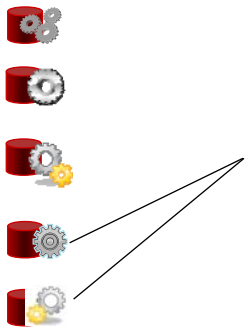
Differences in Data Quality Processes

Marilyn E Vogt
N105W21040 Parkland
Colgate, WI 53017



Certain Solutions
Can't handle a number and letter-rich address such as this.

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Differences in Data Quality Processes

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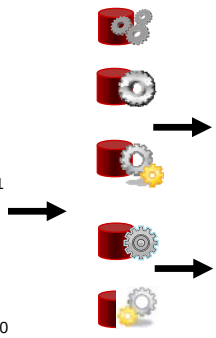

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Dirty Data Strategy

Clean the Rivers

- Real-time cleansing of incoming data

Clean the Lake

- Batch cleansing of existing data

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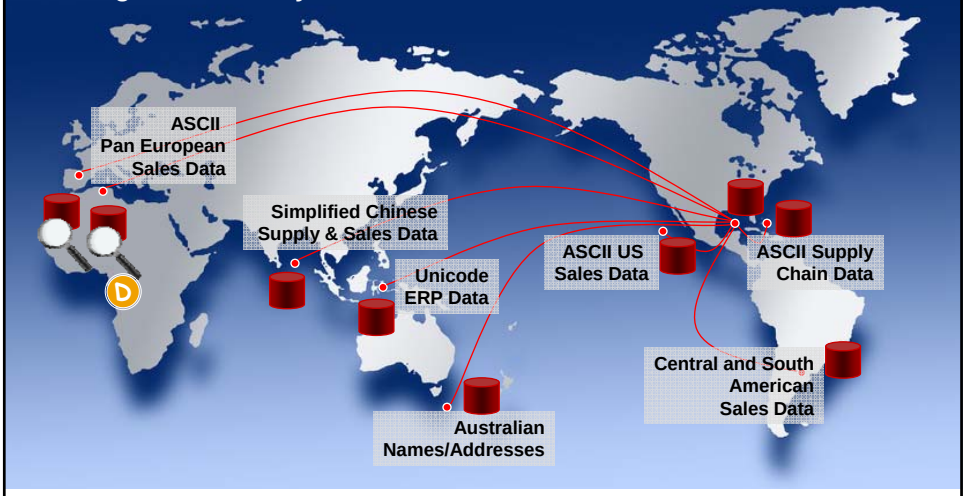
Starting Point: Analysis



Pick High Value Targets and Identify Business Value of Improved Information Quality

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Cleansing Is Key to Matching

Original Record 1

Name:	Peggy Smith
Address:	345 6th Ave
City:	NY
State:	NY
Zip:	01012
Country:	

Original Record 2

Name:	Margaret Smith
Address:	345 Avenue of the Americas
City	Manhattan
State:	NY
Zip:	1012
Country:	USA

⇩ ⇩

Standardized Record 1

Root First Name:	Margaret
Last Name:	Smith
Address:	345 Ave of the Americas
City:	New York
State:	NY
Post Code:	10012
Country:	USA

Standardized Record 2

Root First Name:	Margaret
Last Name:	Smith
Address:	345 Ave of the Americas
City:	New York
State:	NY
Post Code:	10012
Country:	USA

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Cleanse: Domain-Specific Standardization

How to Repair and Make Sense of Legacy Data

Name1:	Flugtaggen GMBH
Name 2:	rhamer strasse 20
Address:	dus
City/Town:	40489
Post Code:	
Country:	

→

Business Name:	Flugtaggen GMBH
Personal Name:	
Street Name:	Rhamer
Street Type:	Str.
Street Number:	20
City/Town:	Düsseldorf
Post Code:	40489
Country:	DE

Value Added for CRM

- Fully automate data cleansing
- Apply country intelligence (names geographic, etc.)
- Standardize critical data elements
- Context-sensitive data interpretation
- Enrich data (geocoding, etc.)

⇩

Increased accuracy = better business processes & better matching

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Understanding Global Data (Korean)

광주시 오포읍양벌리**94-5**대주파크빌**2**차**207**동 **101**호

Level 1	**Block Number**
Level 2	**Sub-Block Num**
Level 3	**Apt. Number**
Level 4	**House Number**
	Postal Code

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Understanding Global Data (Korean)

Level 1	경기도	Block Number	94
Level 2	광주시	Sub-Block Num	5
Level 3	오포읍	Apt. Number	207
Level 4	양벌리 대주파크빌2차아파트	House Number	101
		Postal Code	464-764

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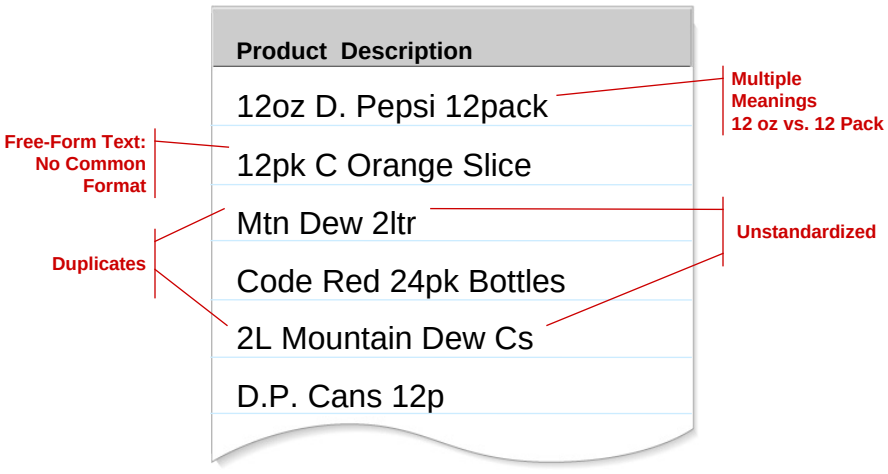
Understanding Product Data



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Identify Attributes/Categories

Product Description	Product	Container Size	Container Type	Packaging
12oz D. Pepsi 12pack	DIET PEPSI	12 OZ	**CANS**	12 PACK
12pk C Orange Slice	ORANGE SLICE	**12 OZ**	CANS	12 PACK
Mtn Dew 2ltr	MOUNTAIN DEW	2 L	**BOTTLES**	**8 CASE**
Code Red 24pk Bottles	CODE RED	**20 OZ**	BOTTLES	24 PACK
2L Mountain Dew Cs	MOUNTAIN DEW	2 L	BOTTLES	**8 CASE**
D.P. Cans 12p	DIET PEPSI	**12 OZ**	CANS	12 PACK

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Key Take-aways

- Big Company = Big DQ Problems
  - Faster Growth = Bigger DQ Problems
- Unified Process for Data Quality is Key
- Domain Coverage is Important
  - Think enterprise solution, not point solution
- First Steps: Data and Metadata Comprehension

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