MDM before, now and in the future

Henrik Liliendahl

+ Data Quality and Master Data Management (MDM) specialist, consultant, advisor

+ +30 years in the game

+ Conducted Data Quality and MDM projects for a variety of organizations as Dun & Bradstreet, Experian; Thomas Cook; Avis; Marks & Spencer; University of Bristol; Wolseley; Takeda; Sanistål

+ Active in the social media realm around data quality and MDM as a blogger and moderator of several LinkedIn groups

Main topics:

- Short: What is master data? – Master data domains – Master data entities
- Main: The MDM evolution – from mutation of CDI and PIM to being essential to big data
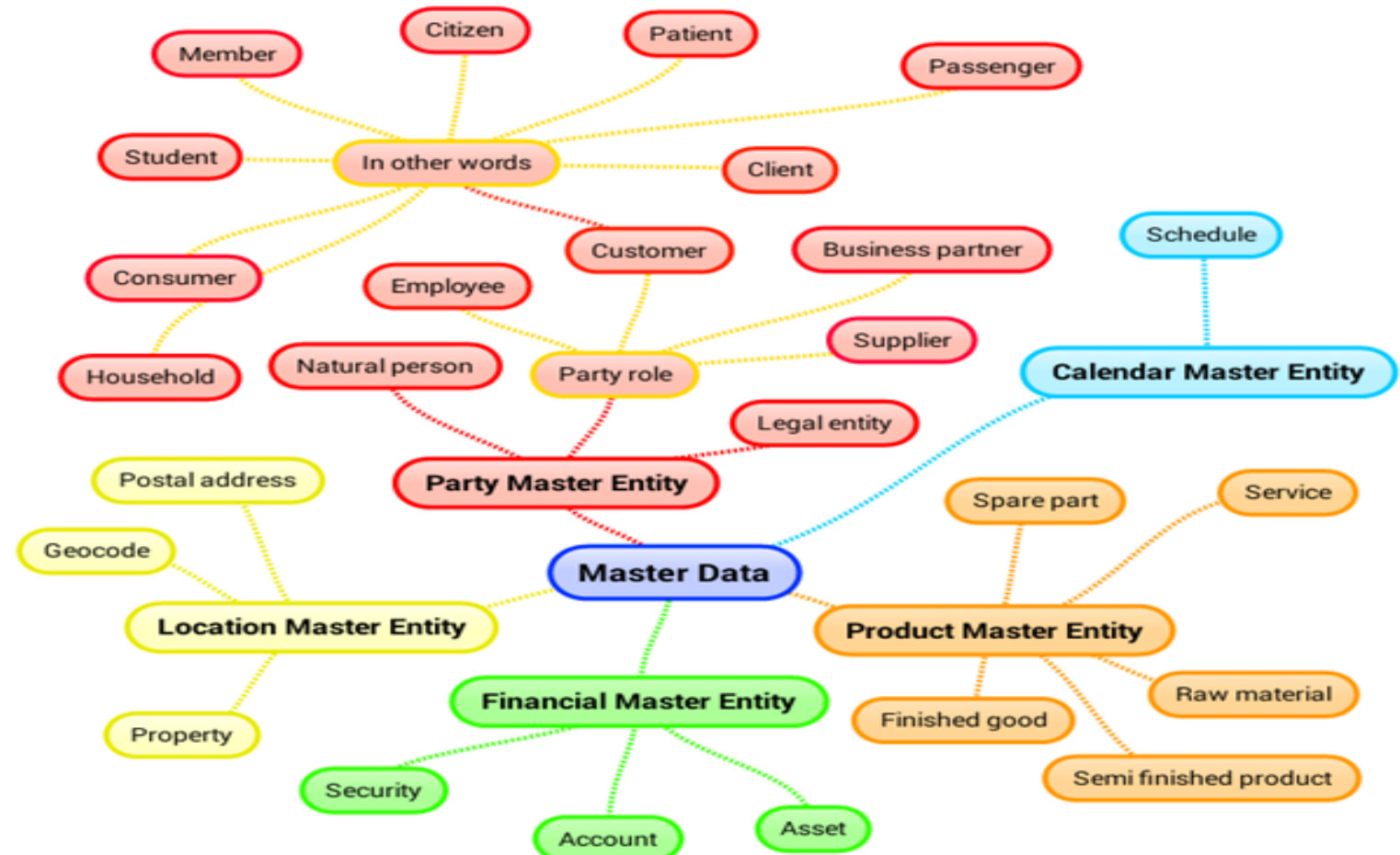- Final: Styles – products –programmes

Questions: Fire away

Supplier
BigDataProduct
DataGovernance
Customer

CDI
MDM Party
PIM
Cloud SelfService

Master data is the consistent and uniform set of identifiers and extended attributes that describes the core entities of the enterprise
(Source: Gartner)

MDM – Master Data Management – the evolution

➢ Before: Single domains for a specific purpose

  ➢ Customer Data Integration (CDI)

  ➢ Product Information Management (PIM)

➢ Now: Multi-domain Master Data Management for several purposes

➢ In the future:

  ➢ External collaboration

  ➢ Incremental adoption of cloud

  ➢ Encompassing big data
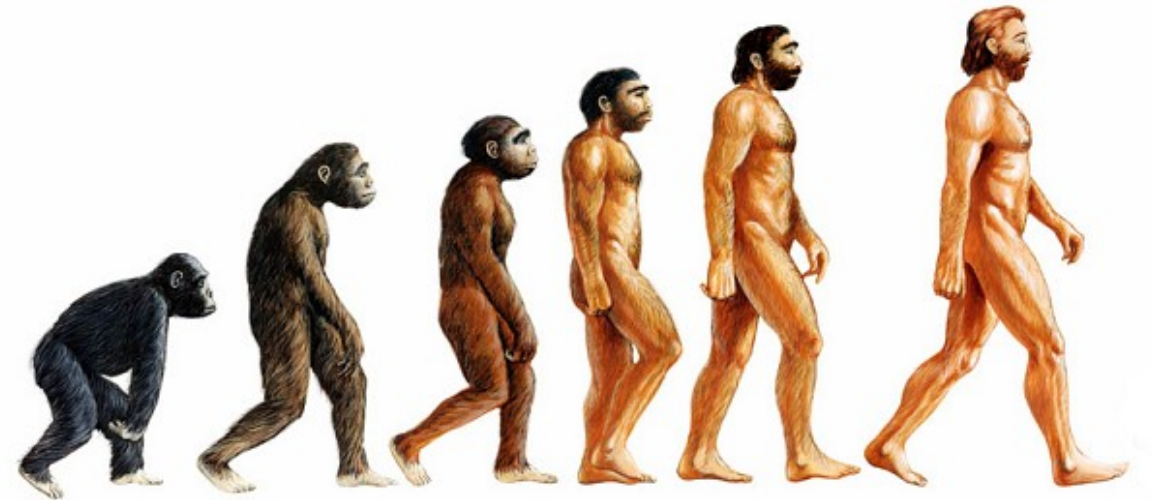
MDM before, now and in the future

PIM – Product
Information
Management

PLM – Product
Lifecycle
Management

MDM	Product	Party
Sell-side	Re-sell goods = finished products	Customer Master Data Management (CDI)
Buy-side	Re-sell goods / raw materials / spare parts / supplies	Supplier Master Data Management

CRM – Customer
Relationship
Management

ERP – Enterprise
Ressource
Planning

New! Upstream prevention

Downstream Data Cleansing

First Time Right

Top 5 reasons for downstream cleansing

- Upstream prevention wasn't done
- New purposes show up
- Dealing with external born data
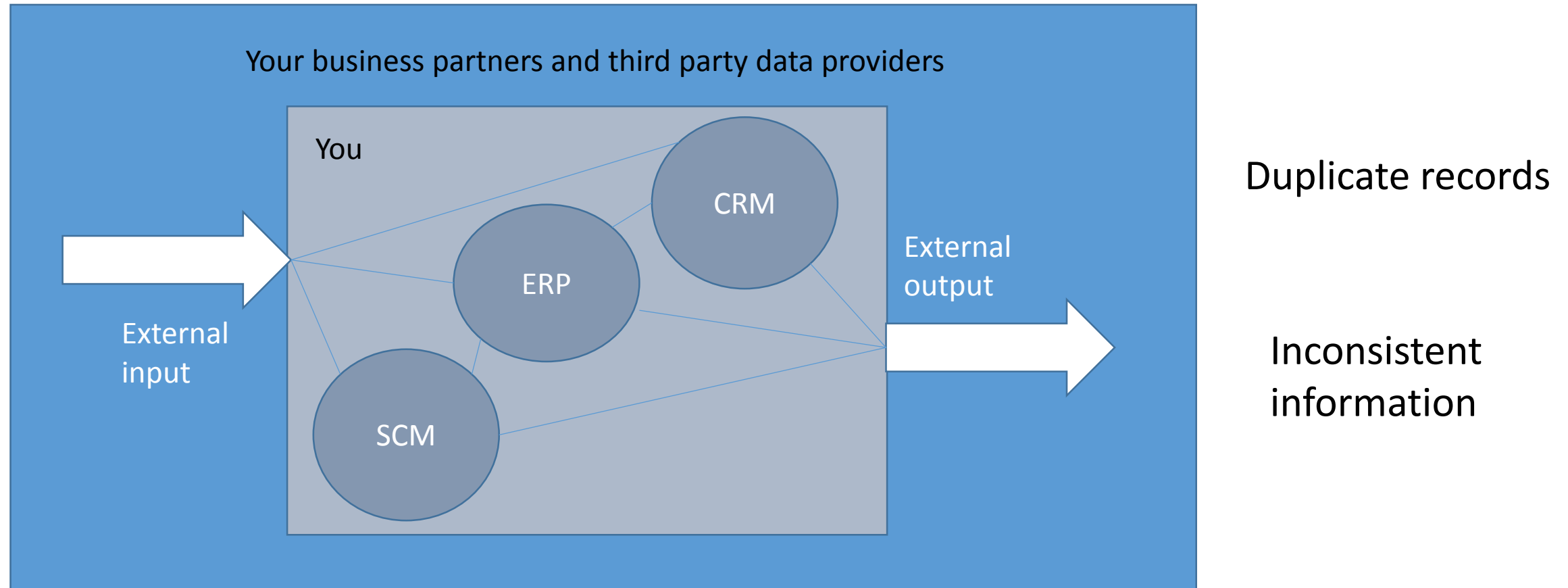- Merger/acquisitions
- Migrations

Data Quality dimensions in a multi-domain MDM world

MDM before, now and in the future
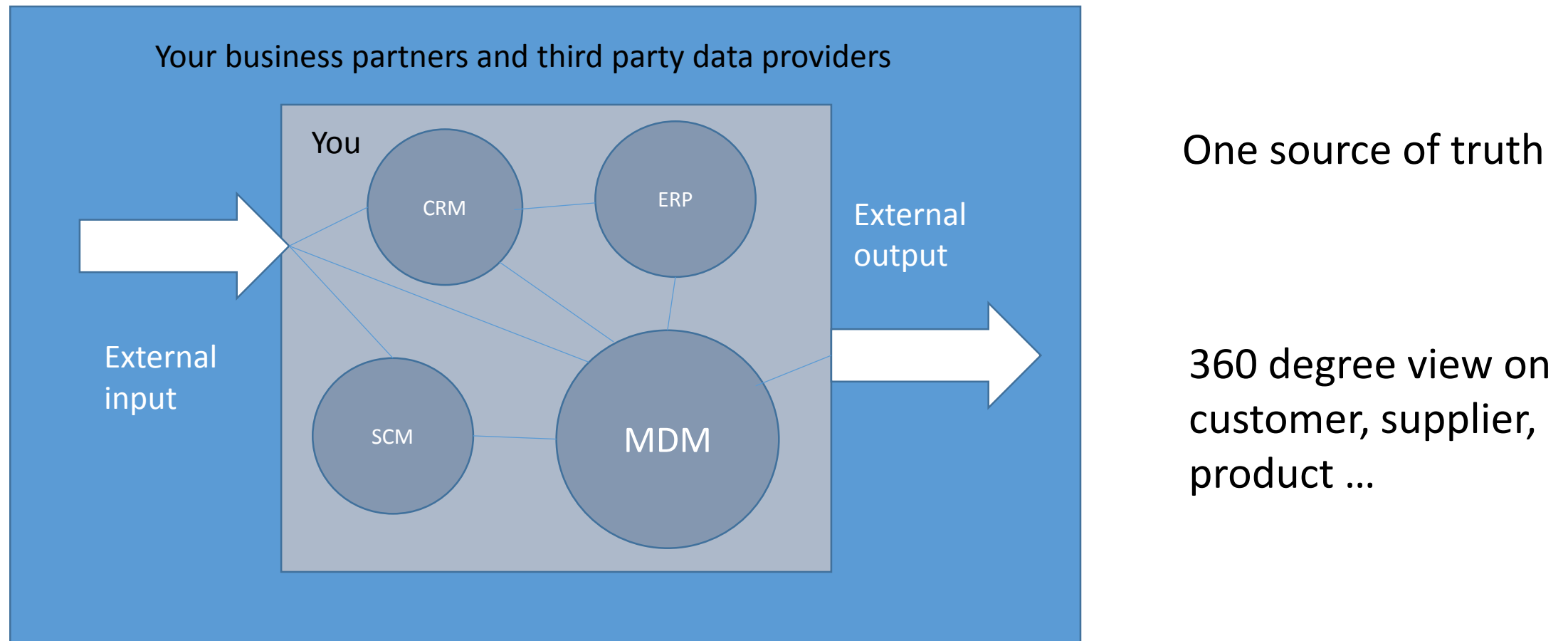
"MDM" without a MDM platform

Your business partners and third party data providers

You

CRM

ERP

SCM

External input

External output

Duplicate records

Inconsistent information

MDM with a MDM platform for master data federation

Your business partners and third party data providers

You

CRM

ERP

External
output

External
input

SCM

MDM

One source of truth

360 degree view on
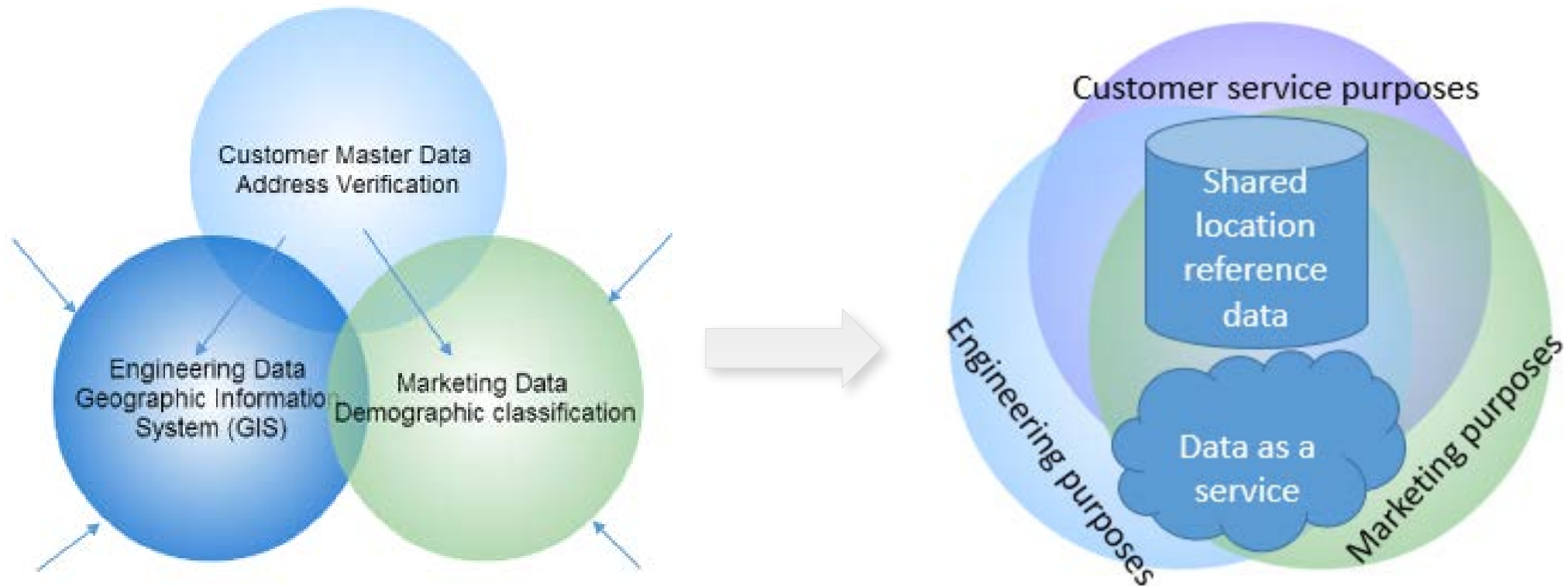customer, supplier,
product ...

MDM with external collaboration
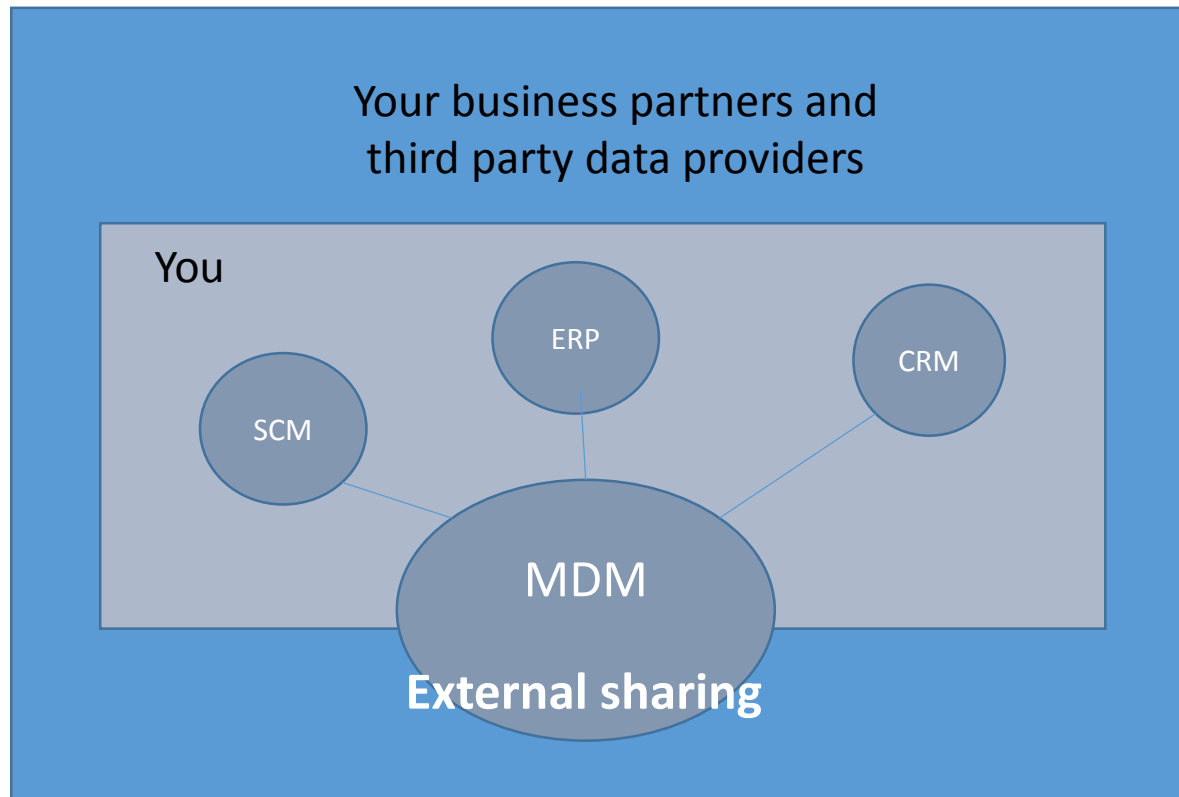
MDM aware applications

One place of truth / trust

360 degree view on business partners

Governed customer and supplier self-service

Master and reference data sharing in the location domain

Customer / party domain example: iDQ™

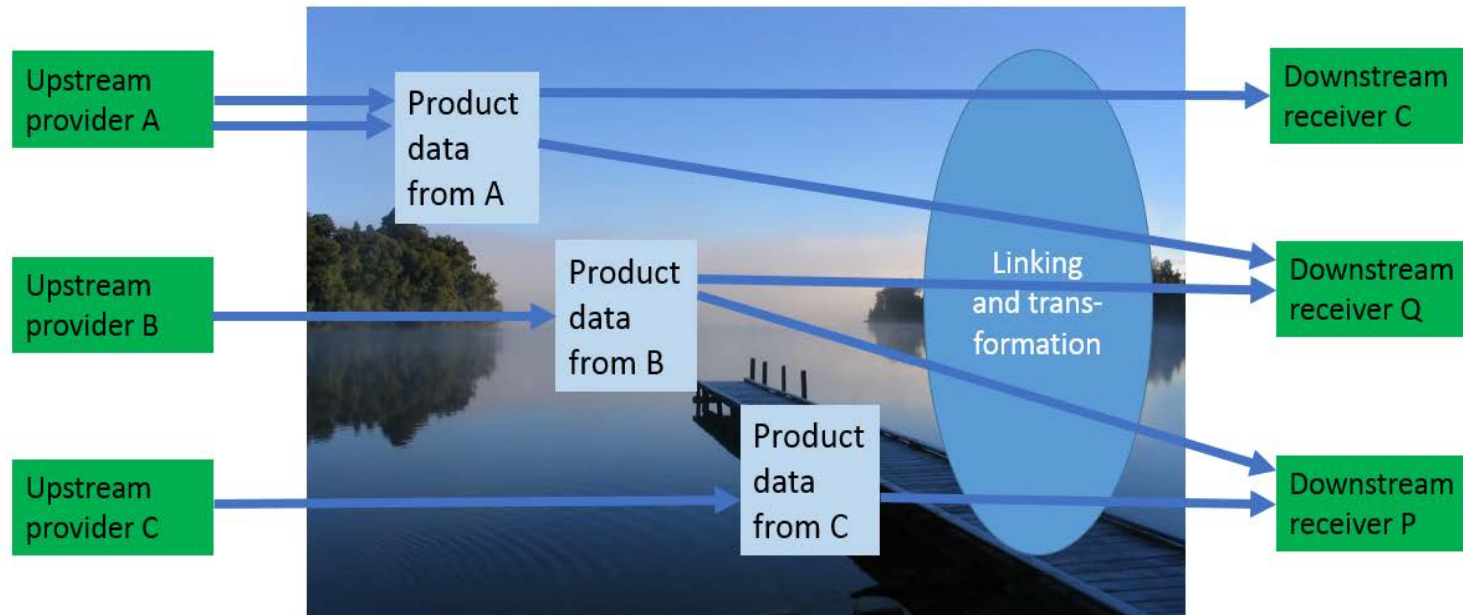Mash-up of internal master data and external reference data

Address and property directories

Business directories

Consumer / citizen directories
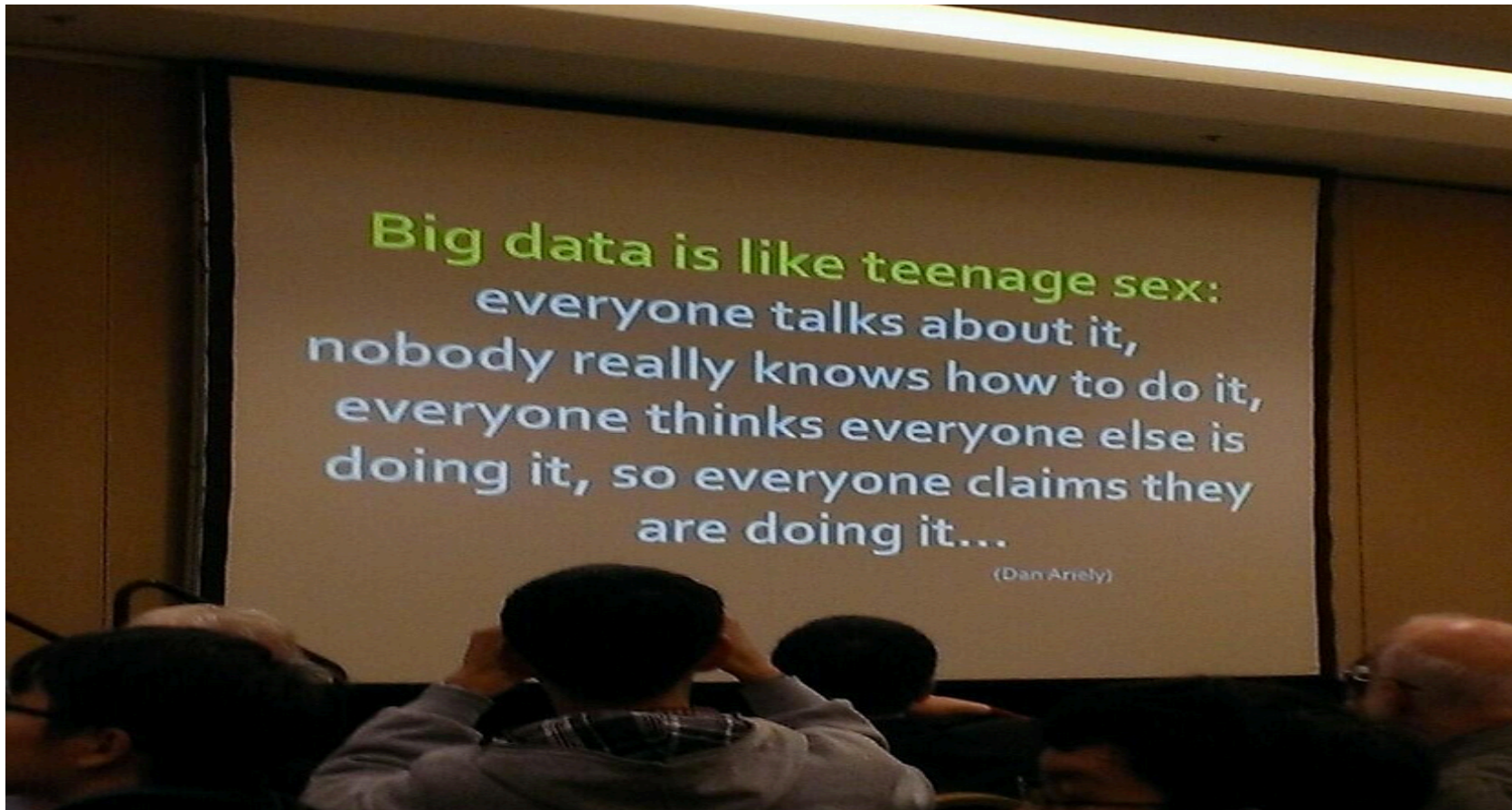
Product domain example: Product Data Lake

Late linking and transformation as in the data lake approach

Opposite to traditional data warehouse thinking

Not perfection (like GS1 /GDSN) but excellence which is better than the ordinary (Excel)
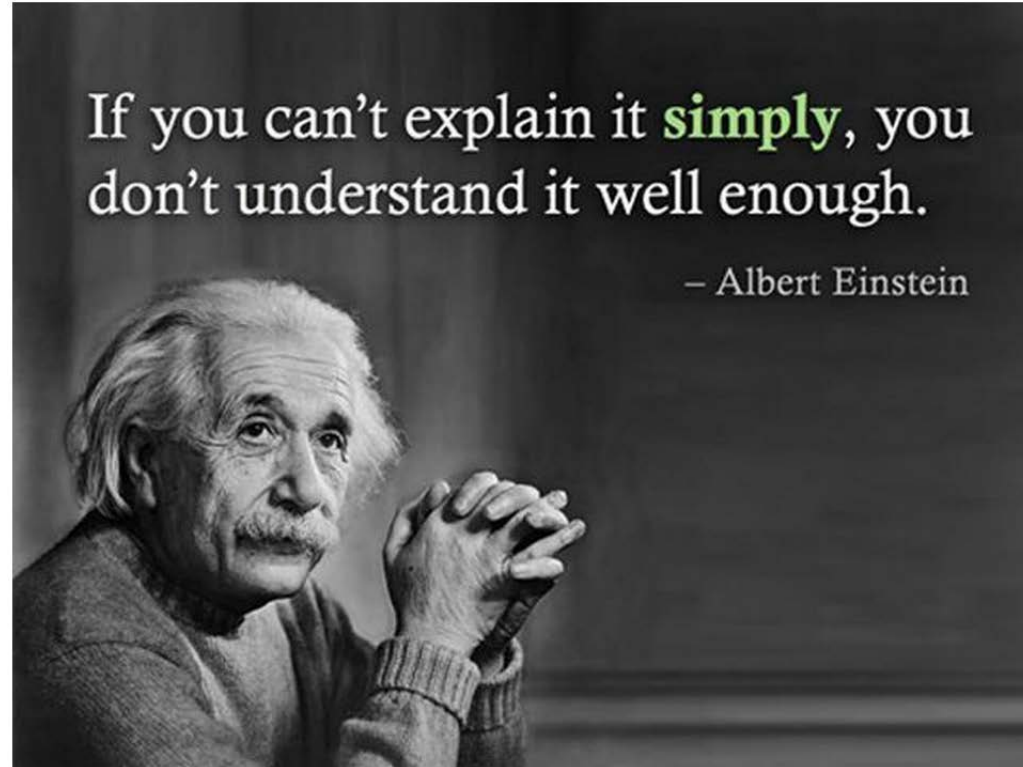
Big data is like teenage sex:
everyone talks about it,
nobody really knows how to do it,
everyone thinks everyone else is
doing it, so everyone claims they
are doing it…

(Dan Ariely)

There are three kinds of crap:
Crap,
damned crap,
and big data

If you can't explain it **simply**, you don't understand it well enough.

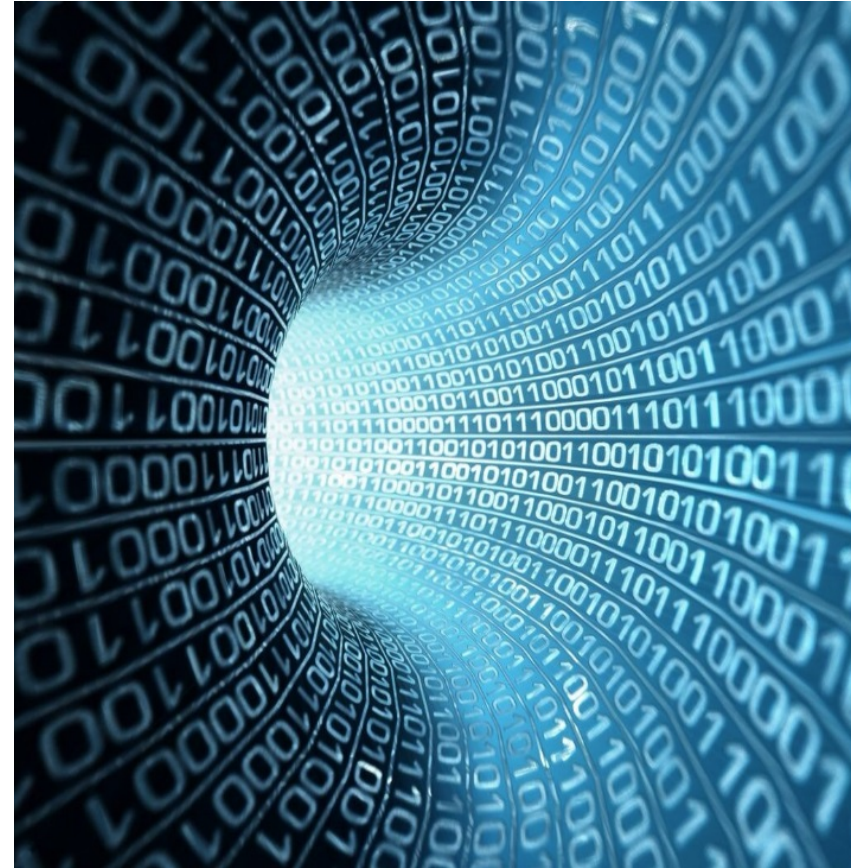– Albert Einstein

Five Flavors of Big Data

- ❖ Social data streams
  - ➤ Social MDM
- ❖ Sensor data
  - ➤ The thing domain
- ❖ Web logs
- ❖ Traditional databases
- ❖ Big reference data

MDM before, now and in the future

Decentralized MDM organization		Centralized MDM organization
Bottom-up data governance	Bimodal data governance	Top-down data governance
Registry implementation style (Gartner) Virtual MDM (IBM)	Coexistence implementation style (Gartner) Hybrid MDM (IBM)	Transaction implementation style (Gartner) Physical MDM (IBM)

MDM before, now and in the future

Figure 1. Magic Quadrant for Master Data Management of Customer Data Solutions

Figure 1. Magic Quadrant for Master Data Management of Product Data Solutions

Multi Domain?

(Source: Gartner)

MDM ~~project~~

MDM programme (not program)

LinkedIn:
- Data Matching Group
- Multi-Domain MDM Group
- Social MDM Group
- Big Data Quality Group

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