



# Master Data Management: Aligning Data, Process, and Governance

Donna Burbank  
Global Data Strategy, Ltd.  
March 28, 2024





# Informatica MDM & 360 SaaS Applications

## Redefining Modern MDM

Khoi Hoang

VP, Community of Practice and Technical Go-to-Market

Where data  
& AI come to 



# Simple

Quick

AI-Powered

Scalable

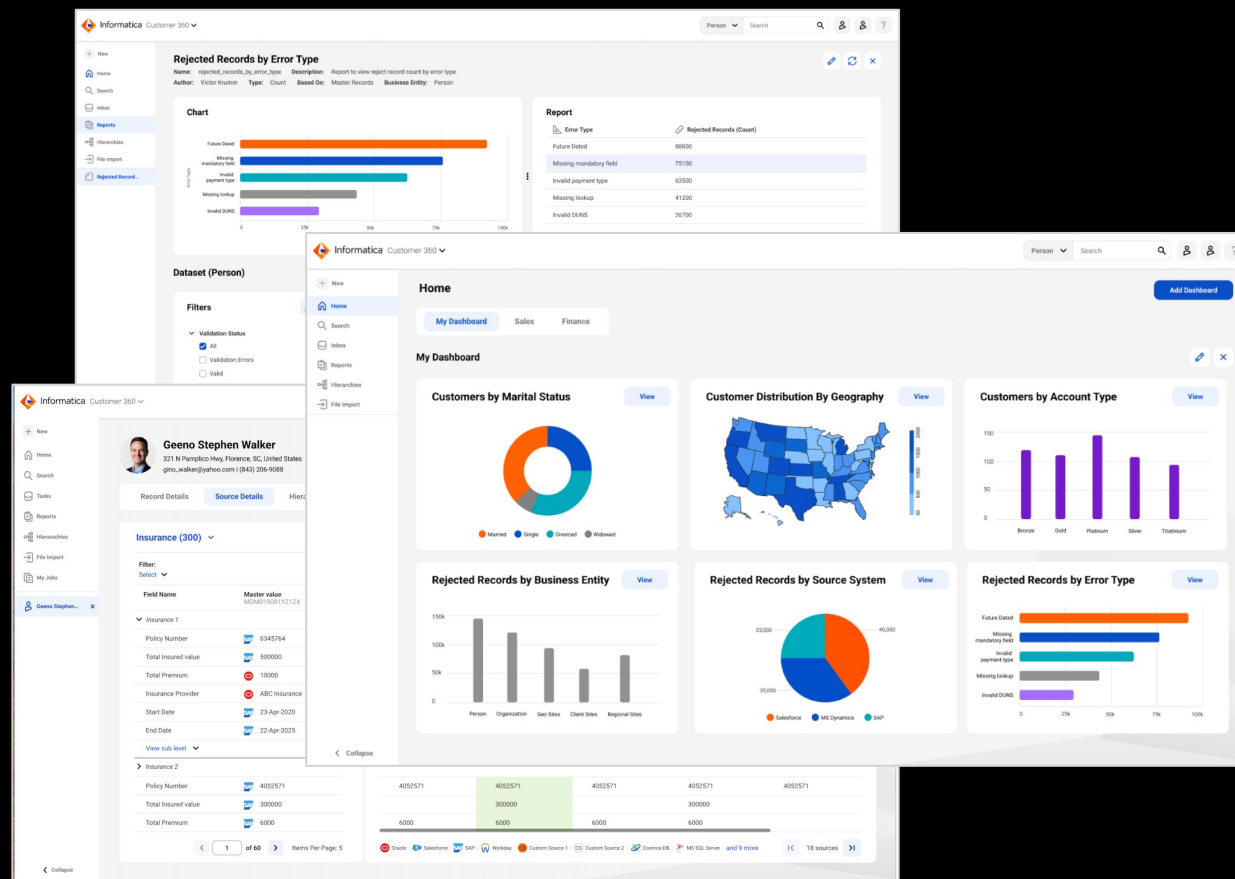
All-in-One

Simple

Up to **85%** increase in efficiency with ready-to-use applications

Dashboards and visualizations in **minutes**

Intuitive **AI** Enabled processes and low/no code configuration





Simple



Quick

AI-Powered

Scalable

All-in-One

Quick

Great Clips®

Live in  
14 weeks

 BURTON

Live in  
14 weeks

 GE Digital

Live in  
16 weeks

UBER

Live in  
16 weeks

**Configure MDM in days** and perform complex configuration and stewardship tasks in minutes with CLAIRE® copilot

**Simple**

**Quick**



**AI-Powered**

**Scalable**

**All-in-One**

AI-Powered

# CLAIRE<sup>®</sup>-Powered Intelligence

## Intelligent MDM SaaS

Every Domain of Master Data

**ALL-IN-ONE CAPABILITIES**

**CLAIRE<sup>®</sup>**

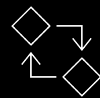
AI-Powered Metadata Intelligence & Automation



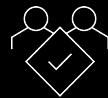
Identity Matching



Product Matching



Schema Mapping



Rule Recommendation



Dataset Recommendations



Data Anomaly Detection



Data Set Similarity



Glossary Association



Entity Extraction



Data Domain Inference

Cloud Data Integration

Cloud Data Quality

Cloud Application Integration

Data Catalog

Cloud Platform Services

Identity Service

Session Service

Federated Repository Service

Secrets Management

Configuration Management

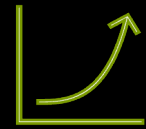
Connectivity

Connect to All Systems Containing or Needed Master Data

**Simple**

**Quick**

**AI-Powered**



**Scalable**

**All-in-One**





# Elevating personalized guest experiences

Scalable

## Challenges:

- Guest data at this Global Hotel Brand is extremely fragmented across brand-owned facilities and franchise properties.
- Inability to confidently identify known and unknown guests across multiple booking channels like its web site, Expedia, Travelocity, and Kayak, as well as its loyalty program.
- Third-party booking channels disintermediate of the hotel brand from the primary guest data.

## Solution:

- Applied a common approach and data strategy using Informatica MDM to create a foundation to scale in any direction for **300M+ customer, supplier, reference, location and property records**.
- MDM is used for authoring data by creating a taxonomy that can feed ML and other technologies to identify what features/capabilities allow the company to gain attention from customers and understand what drives the purchase.

## Results:

- Impacting customer satisfaction and market share through personalized services, guest recognition and reward, improved marketing, and deeper customer insights.

**86** of Fortune 100 companies trust us

**86T** cloud transactions per month

**250+** intelligent data services

**Simple**

**Quick**

**AI-Powered**

**Scalable**

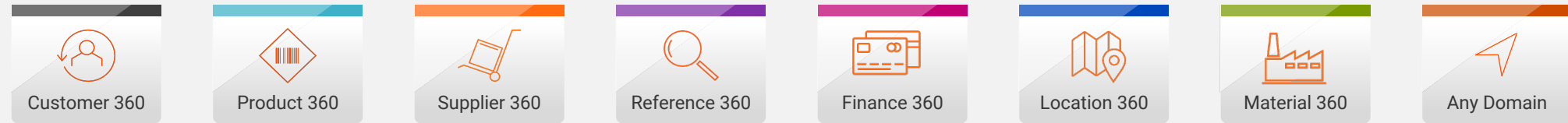


**All-in-One**

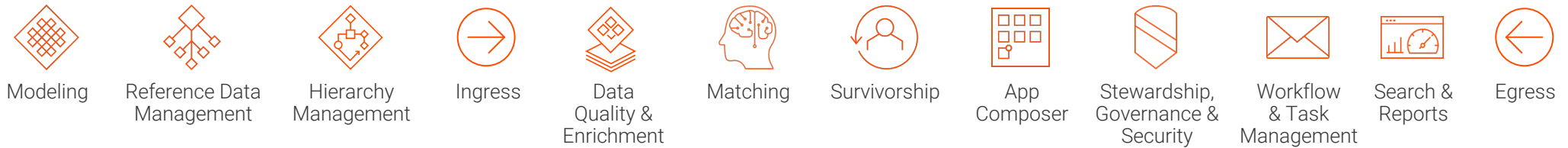
All-in-One

# Intelligent MDM & 360 Applications

Extensible Preconfigured Domain, Industry and Integration Content with Custom Domain Capabilities



## All-in-One MDM Services



← SHARED IDMC MICROSERVICES →

# CLAIRE<sup>®</sup>

Cloud Data Integration

Cloud Data Quality

Cloud Application Integration

Data Catalog

Intelligent Data Management  
Cloud Services

Identity Service

Session Service

Federated Repository Service

Secrets Management

Configuration Management

## Connectivity

10K+ METADATA-AWARE CONNECTORS

**Where data  
& AI come to**



**Informatica®**

# Semarchy Data Platform

*Transforming your data from chaos to confidence*



# Insights from Real-World MDM Implementations

Survey results from EMA Research (Dec 2023) | N=102 Decision Makers, all industries and sizes

59%

use **more than 1 MDM** solution, the average is 2.24/company

#1

way to overcome challenges with MDM is **vendor support**

94%

reported **some or significant improvement** for most metrics

[Get the Webinar Replay](#)

# Semarchy's Key Differentiator: Our Successful Outcomes



We know the industry is crowded with technology promises that don't deliver – we actually do

## Singular focus on ensuring successful data initiatives

**Most Recommended MDM Solution in Last 12 Months (100%)**

Gartner  
Peer Insights.

**Highest Rated MDM Solution for Customer Support (4.9)**

Gartner  
Peer Insights.

**Fully Functioning MDM Solution in 12 Weeks to Deliver Results**

## Expertise & resources with a commitment to ensure successful implementations

### Customer Success Organization

100%

of customers met their implementation goal by leveraging our Expert Services (2023)

184

MDM expansion projects successfully completed with customized Success Plans (2023)

1T+

Consolidated master records that clients trust us to manage with **~2.8B golden records in prod**

### [NEW] Acceleration Toolkit

- > **MDM Business Case Accelerator:** build business case with research-backed ROI and capability assessment tools
- > **Accelerator Models:** pre-built models/apps
- > **AccelerateMDM:** experience “day in life” app with their real data, workflow and use cases (~2-4 weeks)
- > **Rapid Delivery Blueprint:** deploy your first MDM guide
- > **AccelerateAI:** explore R&D AI capabilities + roadmap

# The Data Platform Solving All Enterprise Data Needs

Start with any data capability → scale with the data platform

## Semarchy Data Platform

Differentiators



**Integrated Solutions**



**Open Connectivity**



**Dynamic Flexibility**



**Complexity Adaptation**



**Seamless Scalability**

*On-Prem, Cloud, Hybrid, SaaS (2024.Q4)*

*SaaS*

*On-Prem, Cloud, Hybrid*

Modules

### Data Management

NEW

### Data Intelligence

### Data Integration

Capabilities

Master Data Management

Data Catalog

Data Governance

Data Quality

Data Integration

Data Connectors

Outcomes

**Trust Your Data.**

**Leverage Your Data.**

**Orchestrate Your Data.**

Features

Rapidly generate no-code data apps to manage golden data across any domain

Collaboratively govern & improve data from assets to initiatives with activated metadata

Easily design and deploy low-code, high-performance data pipelines anywhere

# About Semarchy

Focus on delivering successful business outcomes

No-code data product tool delivers bespoke applications

Easy-to-use UI/UX designed for business users

MDM expertise with Accelerator Toolkit to ensure successful outcomes

Semarchy recognized as a Customer's Choice in the 2024 Gartner® Peer Insights™ Voice of the Customer for Master Data Management Solutions Report.



Gartner



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**Thank you!**

Visit [www.semarchy.com](http://www.semarchy.com) for more information.



# Donna Burbank



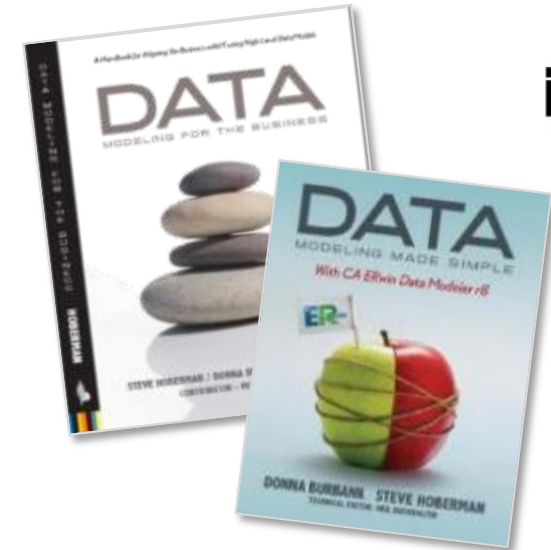
Donna is a recognized industry expert in data management with over 25 years of experience in data strategy, data governance, data modeling, metadata management, and enterprise architecture. Her background is multi-faceted across consulting, product development, product management, brand strategy, marketing, and business leadership.

She is currently the Managing Director at Global Data Strategy, Ltd., an international data management consulting company that specializes in the alignment of business drivers with data-centric technology.

In past roles, she has served in key brand strategy and product management roles for several of the leading data management products in the market.

As an active contributor to the data management community, she is a long time DAMA International member, contributor to the DMBOK 2.0, Past President and Advisor to the DAMA Rocky Mountain chapter, and was awarded the Excellence in Data Management Award from DAMA International.

She has worked with dozens of Fortune 500 companies worldwide in the Americas, Europe, Asia, and Africa and speaks regularly at industry conferences. She has co-authored several books and is a regular contributor to industry publications. She can be reached at [donna.burbank@globaldatastrategy.com](mailto:donna.burbank@globaldatastrategy.com)  
Donna is based in Boulder, Colorado, US.



# DATAVERSITY Data Architecture Strategies

## This Year's Lineup

- **January** Emerging Trends in Data Architecture – What's the Next Big Thing?
- **February** Building a Data Strategy - Practical Steps for Aligning with Business Goals
- **March** Master Data Management - Aligning Data, Process, and Governance
- **April** How do Data Governance & Data Architecture Support Each Other?
- **May** The Role of the Chief Data Officer (CDO) in Business Transformation
- **June** What Does It Mean to be a Data-Driven Organization?
- **July** Data Architect vs. Data Engineer vs. Data Scientist – Making Sense of Roles in Today's Data-Centric Organization
- **August** Data Quality Best Practices (with Nigel Turner)
- **September** Best Practices in Metadata Management
- **October** Enterprise Architecture vs. Data Architecture
- **December** The Business Benefits of Data Modeling



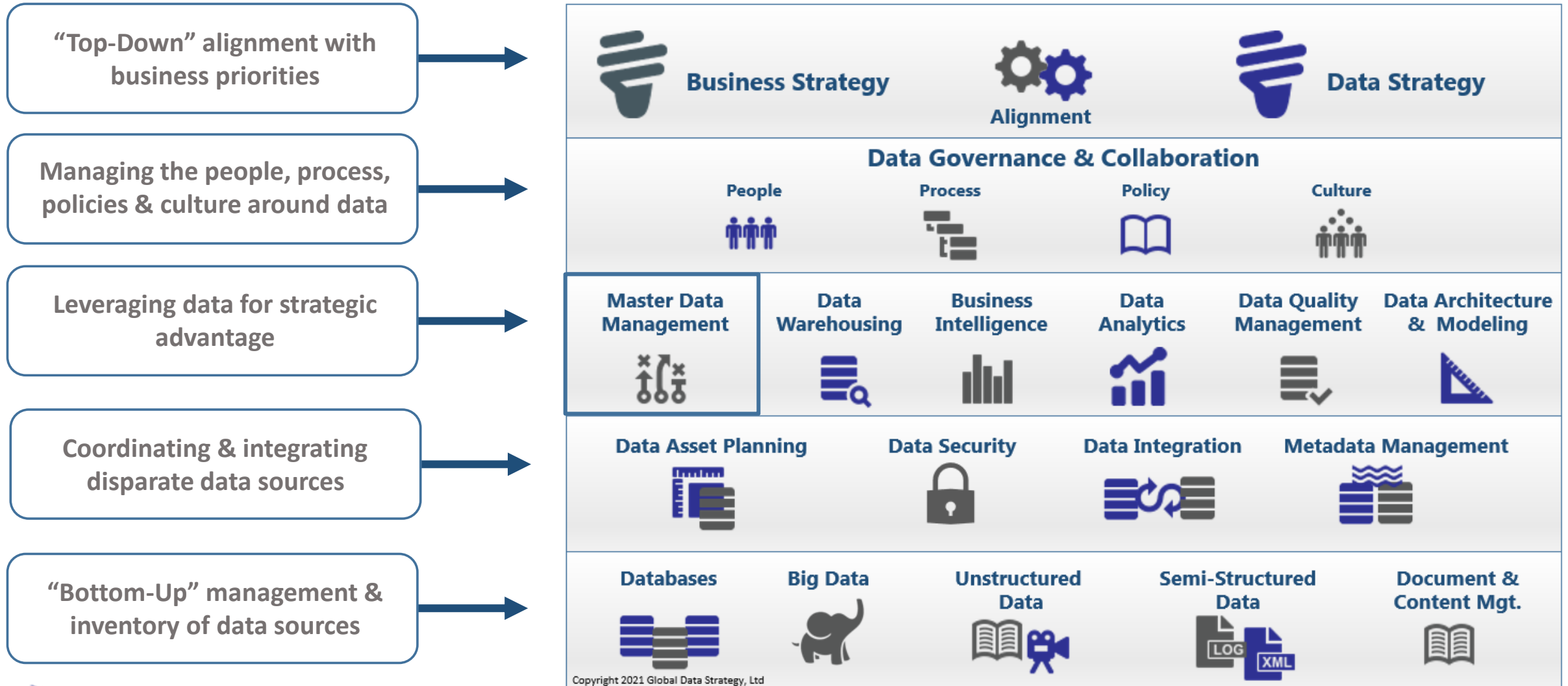
# What We'll Cover Today

- Master Data Management (MDM) provides organizations with an **accurate and comprehensive view of business-critical data** such as Customers, Products, Vendors, and more.
- While mastering these key data areas can be a complex task, **the value of doing so can be tremendous** – from real-time operational integration to data warehousing & analytic reporting.
- This webinar provides **practical strategies for gaining value from your MDM initiative**, while at the same time assuring a solid architectural and governance foundation that will ensure long-term, enterprise-wide success.



# Master Data is Part of a Wider Data Strategy

A Successful Data Strategy links Business Goals with Technology Solutions



# What is Master Data?

## Definition

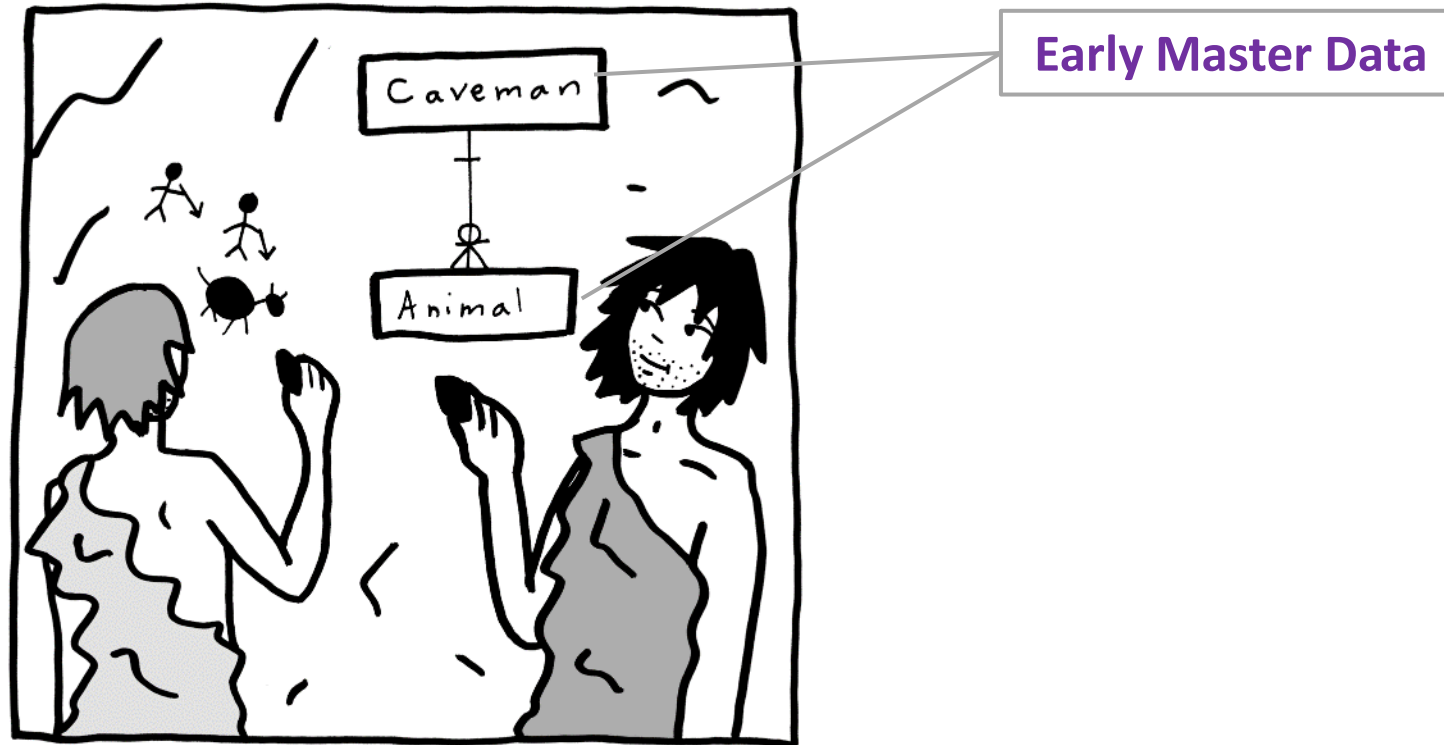
- **Master Data** is the consistent and uniform set of identifiers and extended attributes that describes **the core entities of the enterprise** including customers, prospects, citizens, suppliers, sites, hierarchies and chart of accounts (*sic*).
- **Master data management (MDM)** is a technology-enabled discipline in which business and IT work together to ensure the uniformity, accuracy, stewardship, semantic consistency and accountability of the enterprise's official shared master data assets.

- Source Gartner



# Master Data

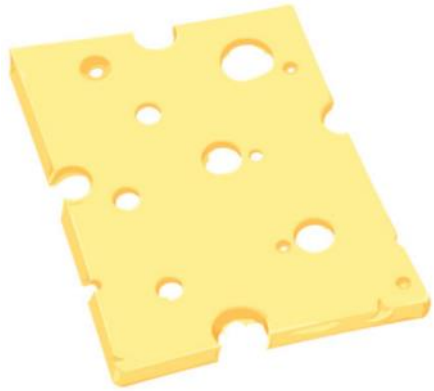
Master Data is often the most critical data of the organization – and the most intuitive for business users to grasp.



From *Data Modeling for the Business* by Hoberman, Burbank, Bradley, Technics Publications, 2009

# What is Master Data?

## Real-world examples



The \$1M cheese slice



The \$2M baby bottle



The “dead” living organism



Which Dr. Smith is credentialed for heart surgery?



Which Michael Jones is the high-net worth customer?



How do we define Regions, Markets, Locations, Catchments, Sites, etc.?

# What is Master Data?

## Real-world examples



# Understanding Your Customer

A 360 Degree View through Data



Occupation = Ski Instructor



Address = Pontresina, Switzerland



Purchased €500 in outdoor gear in 2015



Member of Loyalty Program since 2010



**Stefan Krauss**  
Age = 31



100% of purchases online



Top Finisher in Engadin Ski Marathon 2010-2015



Prefers Text Message



# Understanding Your Customer

## A 360 Degree View through Data



Occupation = Banker



Address = Zurich, Switzerland



Purchased €3.500 in outdoor gear in 2019



Member of Loyalty Program since 1990



Stefan Krauss  
Age = 62



75% of spending is while on holiday



Football Fan

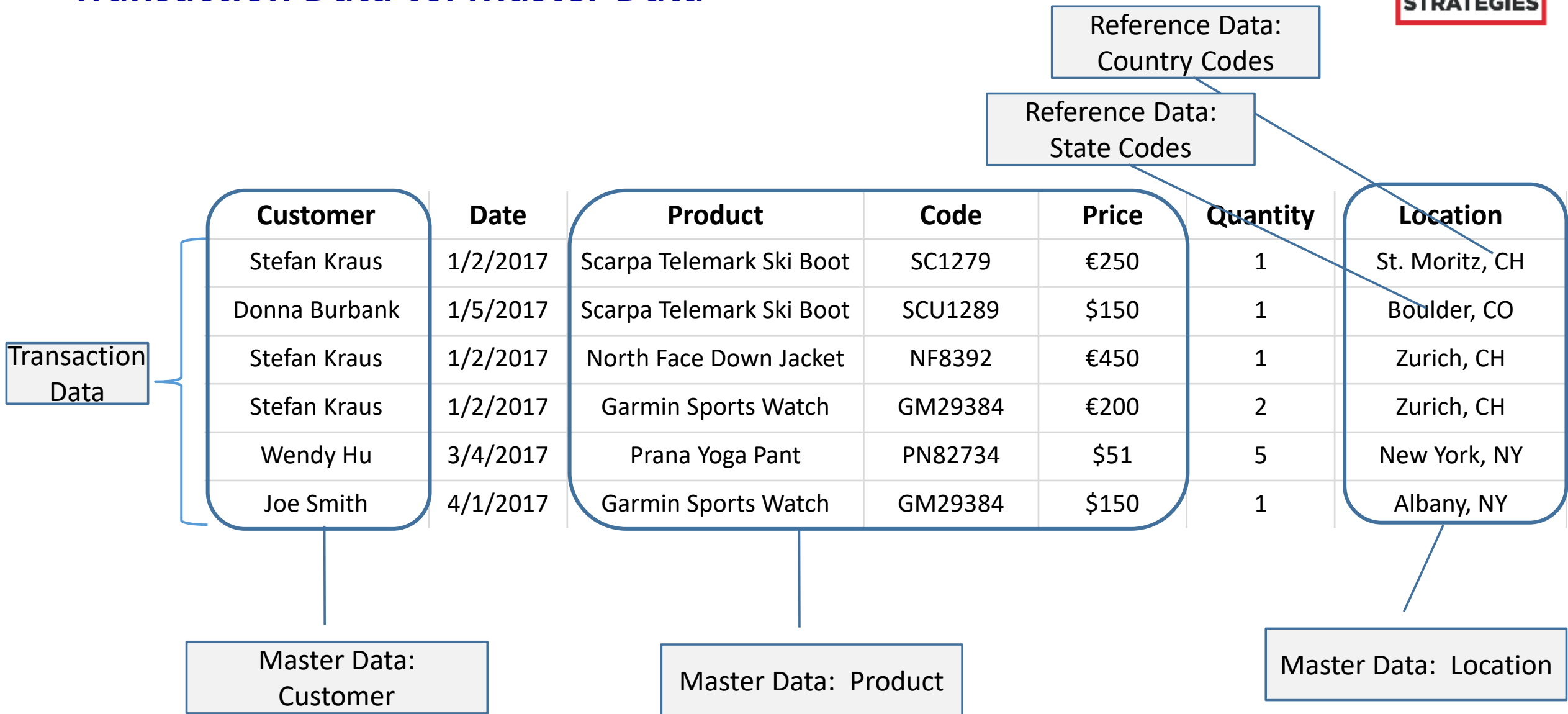


Prefers Physical Mail



100% of spending in store

# Transaction Data vs. Master Data



# What is Master Data? What is Reference Data?

One person's **Master Data** is another person's **Reference Data**...



## Master Data



How do we define Regions, Markets, Locations, Catchments, Sites, etc.?

VS.

## Reference Data

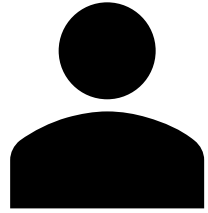
Address Line 1
Address Line 2
City
State



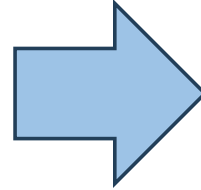
AL
AK
AR
AZ
CA
CO
..etc.



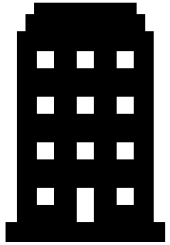
# Can't We Just Simplify Things?



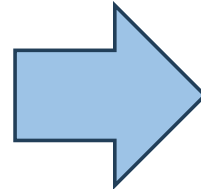
**Person**



**Customer, Employee, Supplier Contact, Patient, Provider, Citizen, etc.**



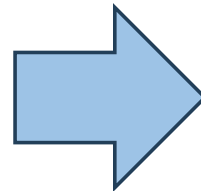
**Legal Entity / Party**



**Customer, Supplier, Partner, Subsidiary, etc.**



**Thing**



**It's all just a big table of stuff, isn't it?**

# What Could Go Wrong?

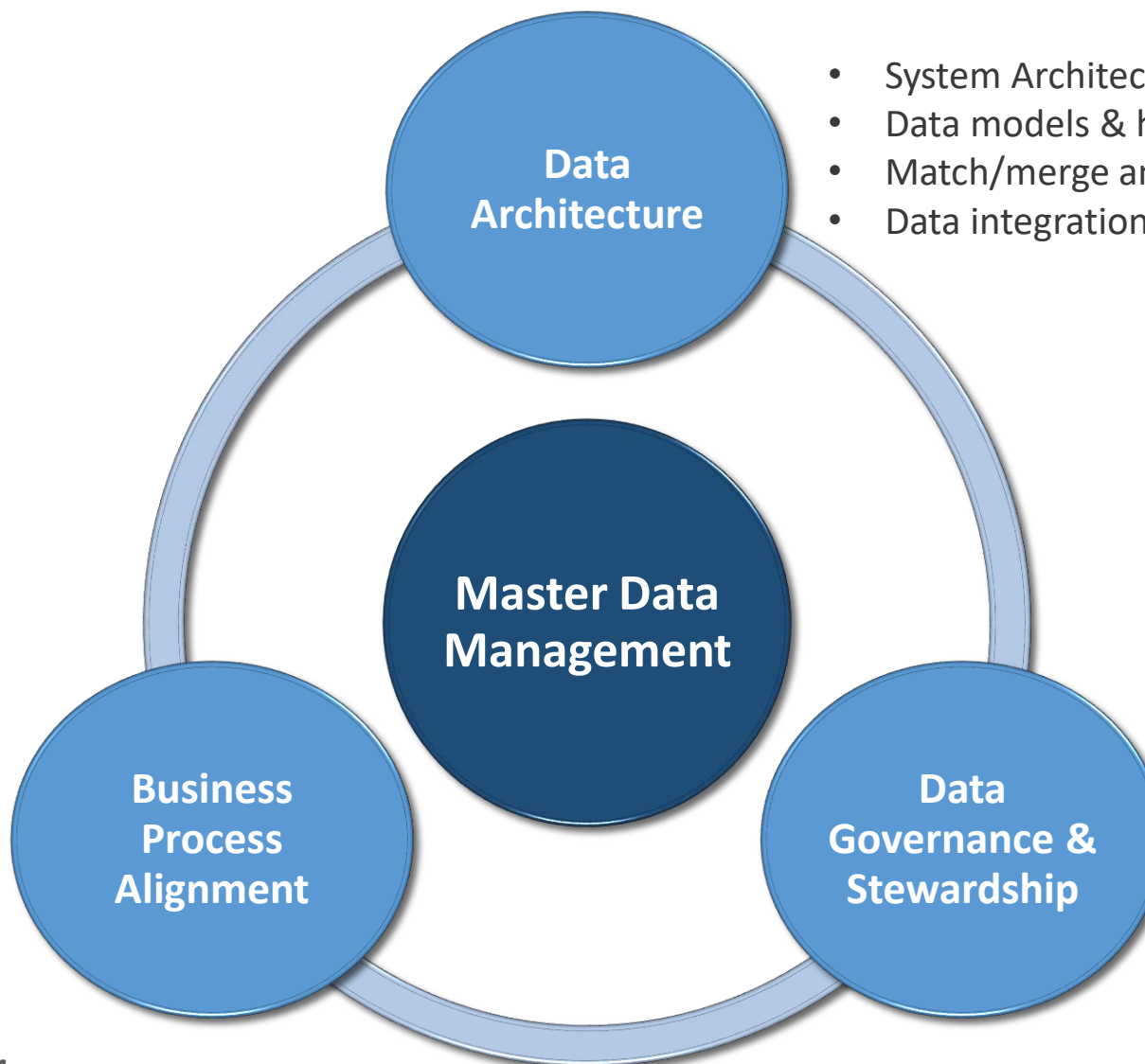
What could go wrong in grouping  
**Customer and Employee Master  
Data as the same?**

**Or Patient and Medical Provider?**

**Or Customer Org and Supplier Org?**



# Successful MDM Combines Data, Process, and Governance



- System Architecture & data flow
- Data models & hierarchies
- Match/merge and survivorship rules
- Data integration & design

- Business process models
- Customer journey maps
- Data mapping to process
- CRUD and usage matrices
- Optimizing business process for data improvement

- Accountability & stewardship
- Business rule validation
- Conflict resolution
- Business Prioritization

# Governance & Business Process for MDM

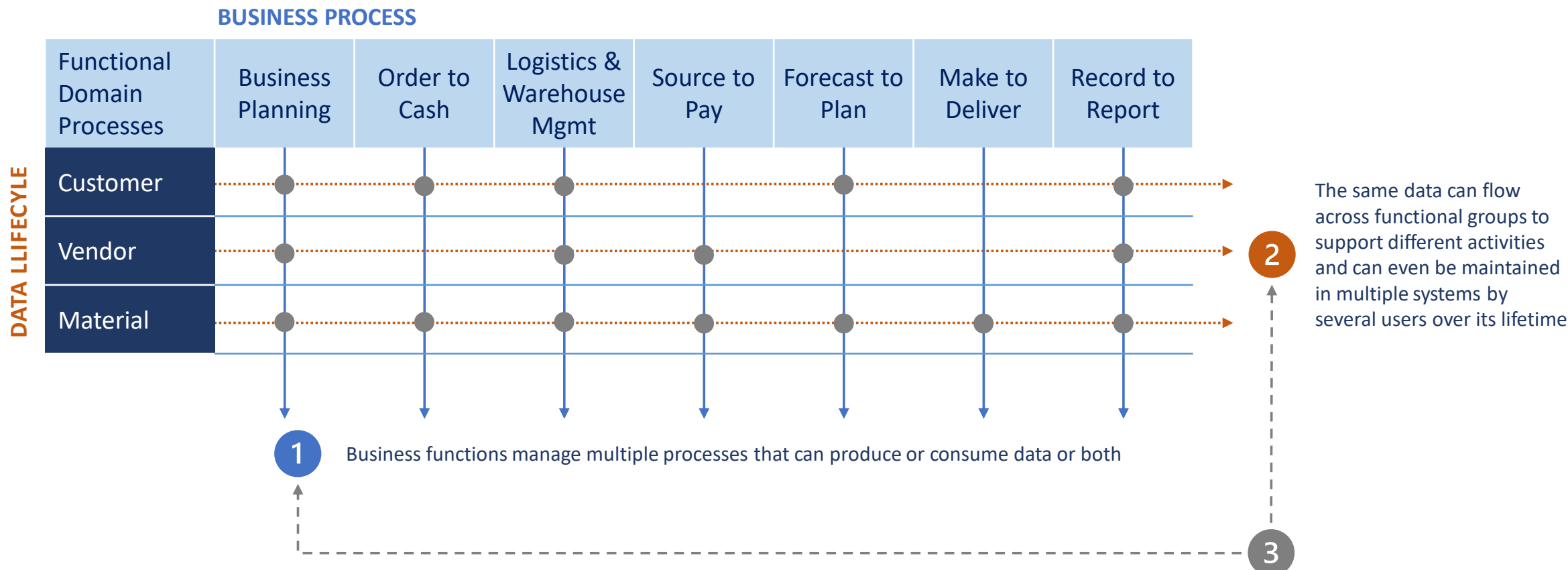
- While the implementation of the hub and population strategies is complex, **more complex is understanding the business processes and governance processes** around the populating and publishing systems.
- In fact, the top two reasons for failure of MDM systems cited by the Gartner analyst group<sup>1</sup> are :

Failure of IT to Align With  
**Business Process** Improvements  
 and Document Business Value

Delaying or Mismanaging  
 Information **Governance**  
 Implementation

<sup>1</sup>Top Four Reasons Your MDM Program Will Fail, and How to Avoid Them, Gartner, 2016, ID: G00223675, by Bill O’Kane. Note: The remaining two reasons are: Failure to Manage Initial Master Data Quality & Defining Transactional (Fact) Data as Master Data

# Successful Data Governance Requires Alignment of Process & Data



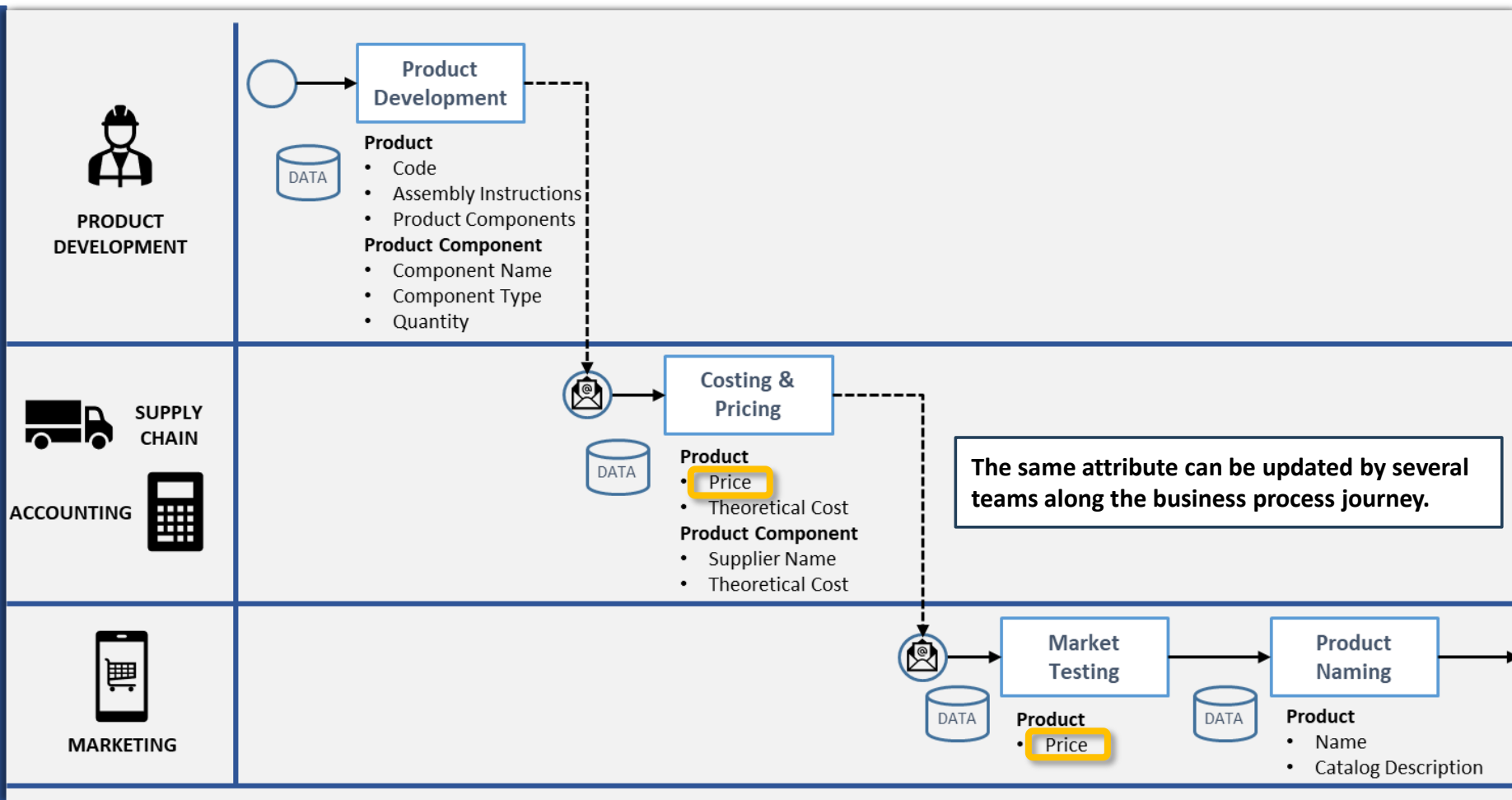
**Each intersection of data and process is a governance requirement for data that is produced or consumed to align WHO – does WHAT – to WHAT - WHEN**

● = indicates this process requires and/or contributes a subset of attributes for a given data domain

# Business Process Model

Operational view of key data dependencies in core business processes

- Process models are a helpful tool for describing core business processes.
- “Swim lanes” outline organizational considerations
- Data can be mapped to key business processes to understand creation & usage of information.



# CRUD Matrix – Showing Data Usage

Create, Read, Update, Delete

	Product Development	Supply Chain Accounting	Marketing	Finance
<b>Product SKU</b>	C	R	R	R
<b>Product Name</b>	C		U,D	
<b>Product Price</b>		C	U	R
<b>Product Weight</b>	C		R	
<b>Etc.</b>				

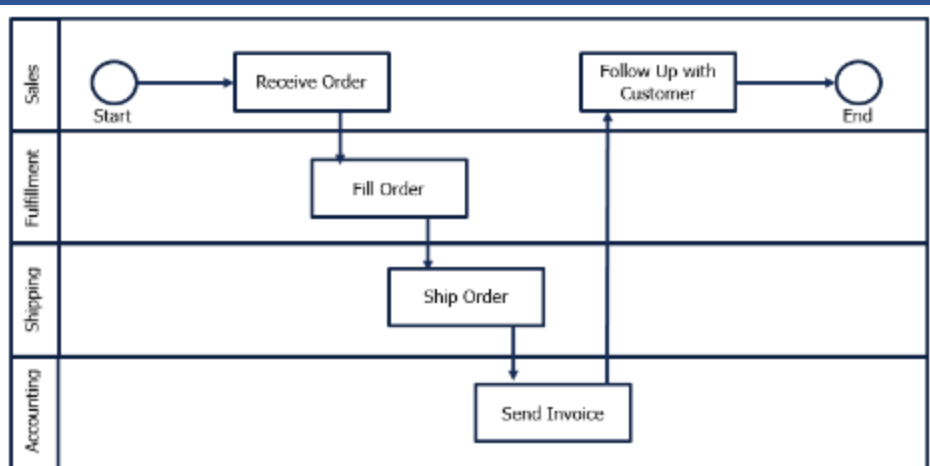
- CRUD Matrices shows where data is Created, Read, Updated or Deleted across the various areas of the organization.
- They can be created by department, by system/application, etc.
- This can be a helpful tool in data governance & data quality.



# Process Models & CRUD Matrices Fit Well Together

- Understanding business process is critical to Master Data & related Data Governance
  - Who is using data?
  - How is it used in business processes?
  - Are there redundancies, conflicts, etc.?

Business Process Model



CRUD Matrix

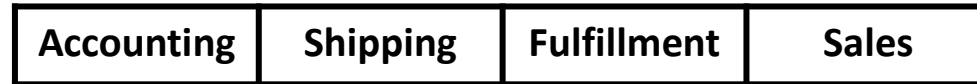
	Customer Name	Order Number	Account Number	Invoice Number	Product Name
Receive Customer Order	C	C	C, R		R
Fill Order	R,U	R	R,U		R
Ship Order	R	R	R,U		R,U
Send Invoice	R,U	R	R,U	C	

# Aligning Process with Data Governance & Stewardship

- The Swimlane stakeholders typically become the Data Stewards for the data they manage in their day to day business processes.

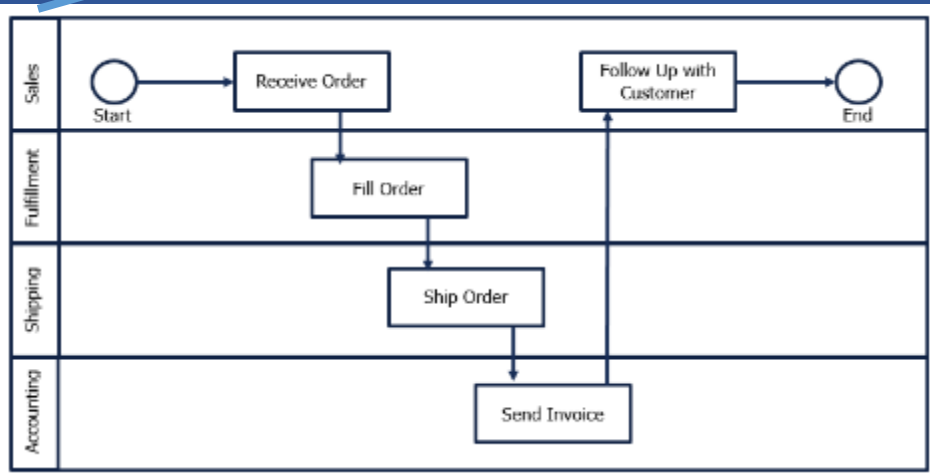


Data Stewards



- Accountable for the Data (C)reated , (U)pdated, and (D)eleted.
- Has a voice/input for the Data being (R)ead.

## Business Process Model



## CRUD Matrix

	Customer Name	Order Number	Account Number	Invoice Number	Product Name
Receive Customer Order	C	C	C, R		R
Fill Order	R,U	R	R,U		R
Ship Order	R	R	R,U		R,U
Send Invoice	R,U	R	R,U	C	

# Sample Data Governance Roles

## Business Data Owner



- Represents the data needs for a particular functional area
- Defines key KPIs & data elements
- Defines key business rules
- Sets Data Quality Metrics & Thresholds

## Business Data Steward



- Responsible for the day-to-day management and quality of data
- Subject Matter Expert (SME) for a given business domain
- Aligns with the Data Owner to support business rules and to align with key KPIs

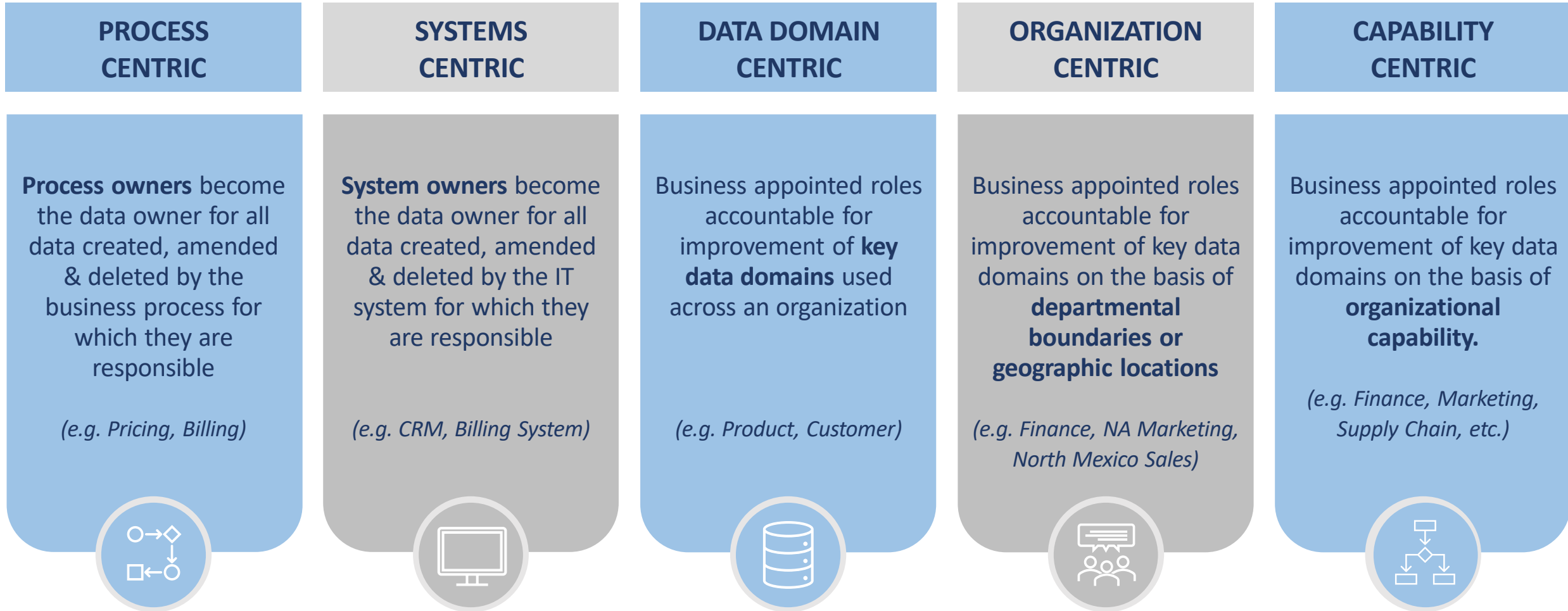
## Technical Data Steward



- Subject matter expert for a given system and its usage (e.g. CRM, ERP, etc.)
- Aligns with Business Data Stewards to ensure technical needs are met

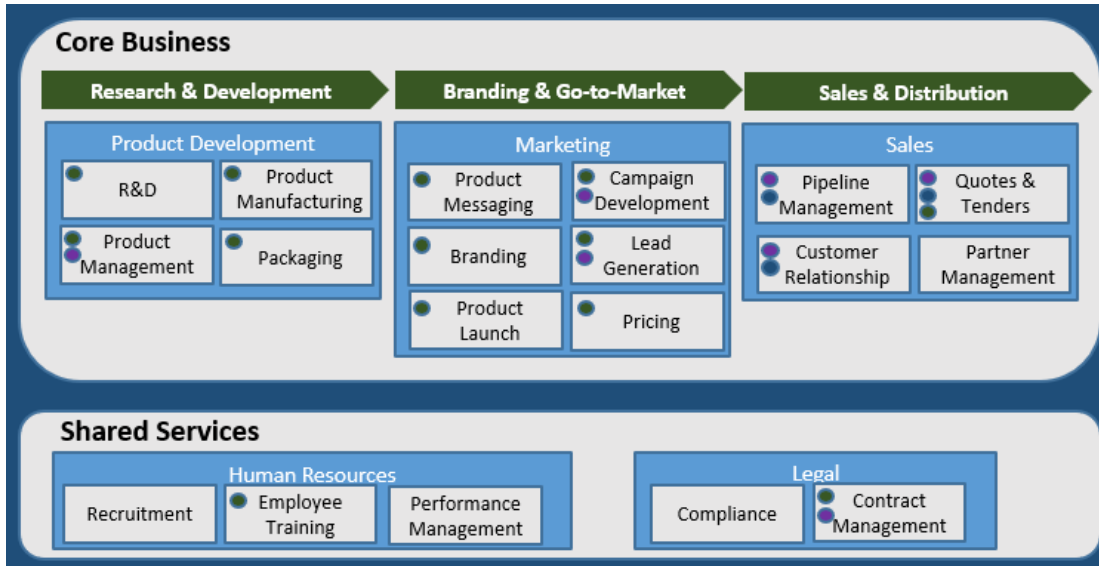
# Models of Data Governance & Stewardship

There are diverse ways to implement data stewardship, unique to each organization.



# Organizational or Capability – Based Approach

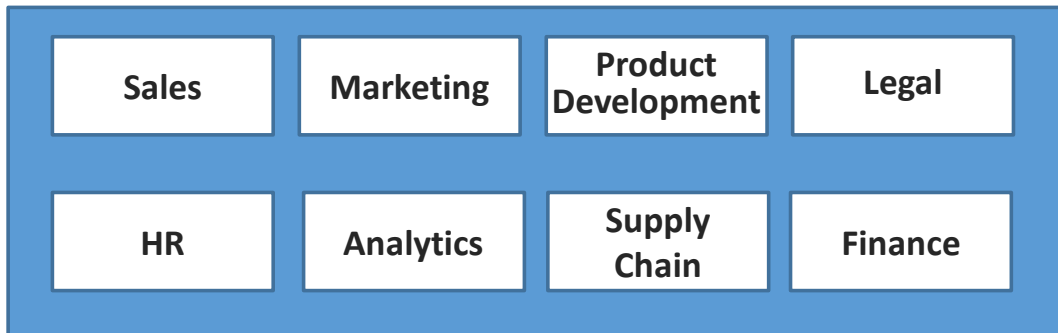
A Comprehensive View of Data Across the Enterprise



An Organization or Capability-centric approach helps gain cross-functional input for data decisions.

Who “owns” Customer, Patient, Student, Product, Ingredient, Component, Brand, etc...?

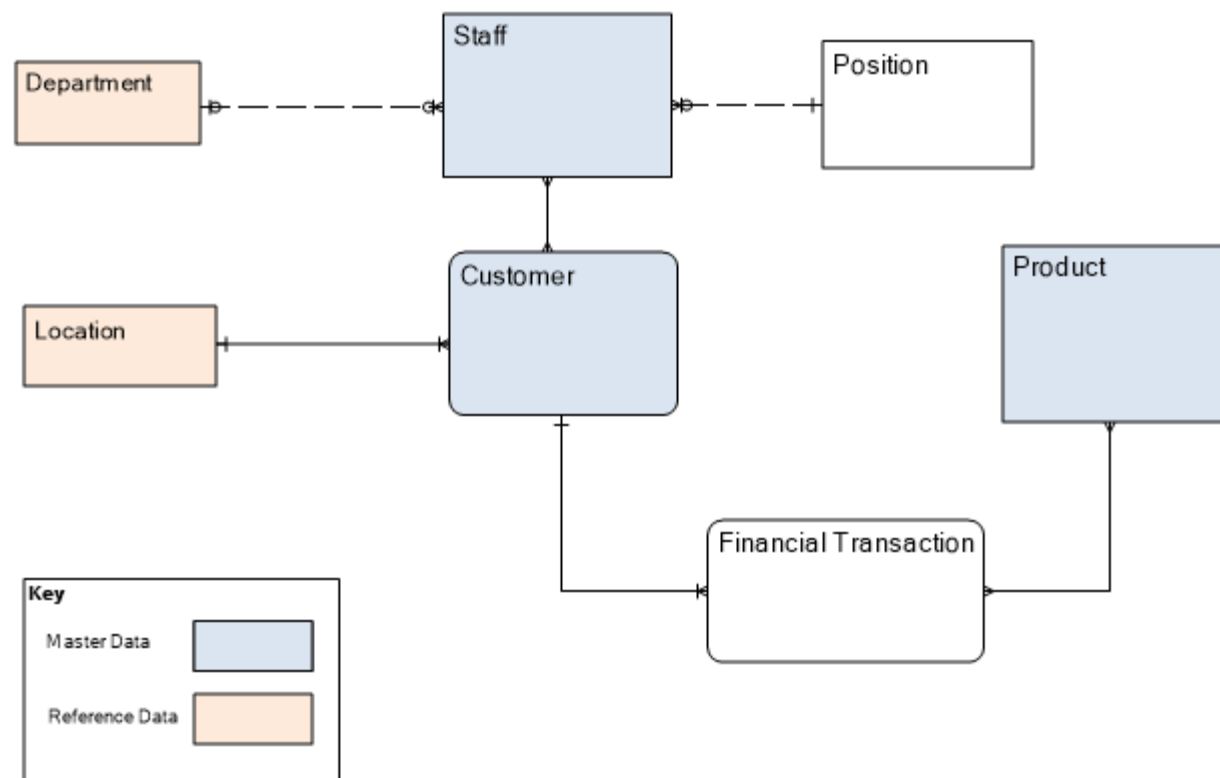
## Data Governance Committee



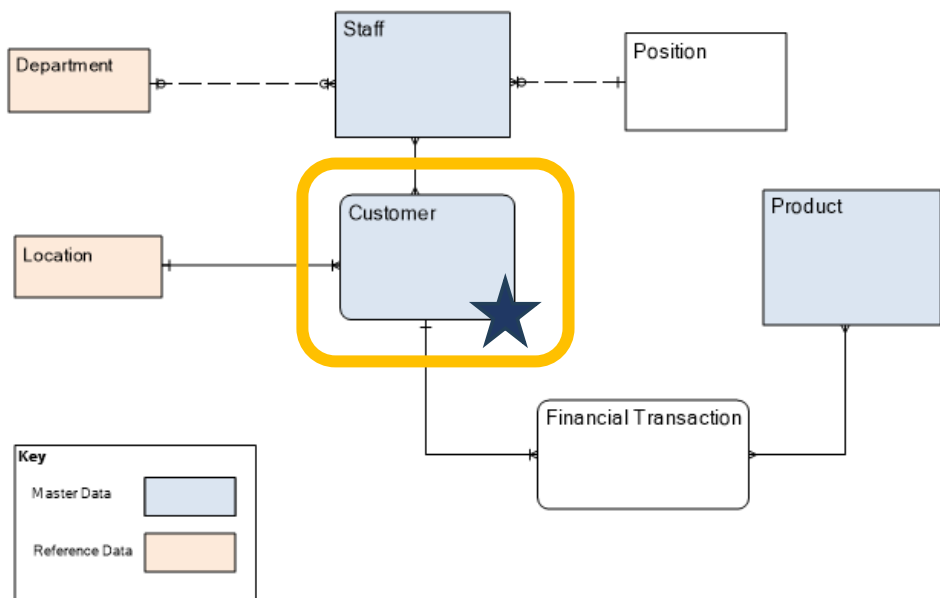
# Conceptual Data Model

## Supporting Data Domain-centric Governance

Conceptual Data Models are helpful tools in identifying key master and reference data domains.



# Identifying Critical Data Elements (CDEs) for Master Data



For each Master Data Domain, critical data elements (attributes) must be identified:

## Customer

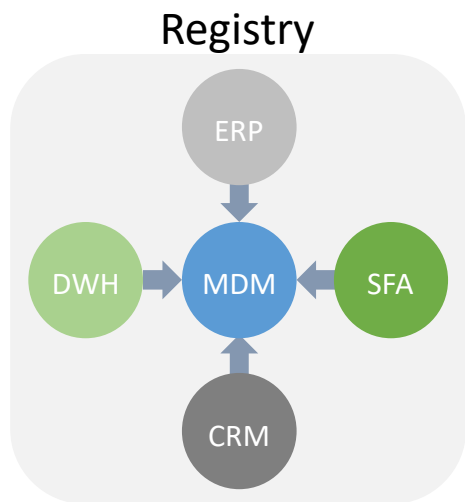
First Name  
Family Name  
Gender  
Date of Birth  
Email Address  
City  
Country  
Etc.

While there is a bit of art and science to identifying core attributes/CDEs for master data domains, they should be limited to the key information that is (1) critical to describing the domain (2) shared across systems (3) is not transactional data

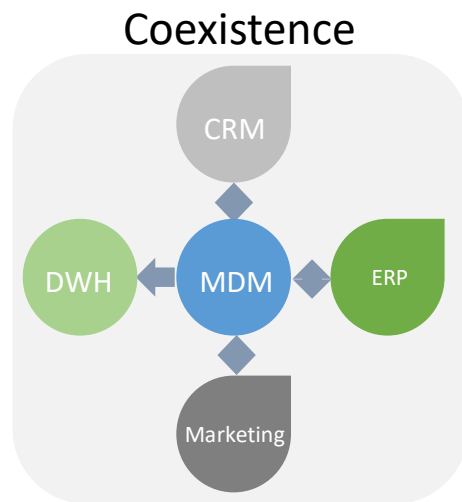


# MDM Implementation Styles

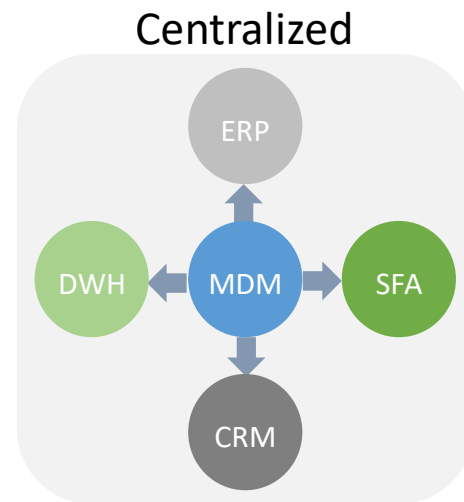
- Organizing for MDM: Defining the Implementation Style



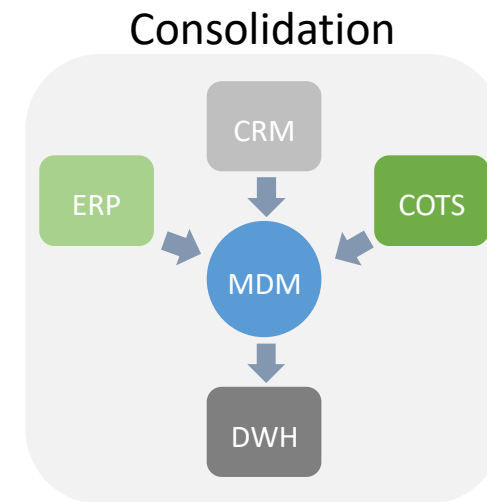
- Provides cross-reference index of source systems IDs
- No physical data consolidation and is often read-only access
- Authoring remains distributed
- Less intrusive



- Consumes source data, de-duplicates, enriches and consolidates view of master data
- Stewardship workflows for data governance and approval orchestration
- Harmonization back to authoring systems
- More intrusive



- Central authoring of master data, enrichment and duplicate prevention
- Acts as System of Record to Support Transactional Activity
- Most intrusive



- Matches and physically stores a consolidated view of master data post transactional events
- Used for reference versus supporting transactional activity
- Authoring remains distributed
- Less intrusive

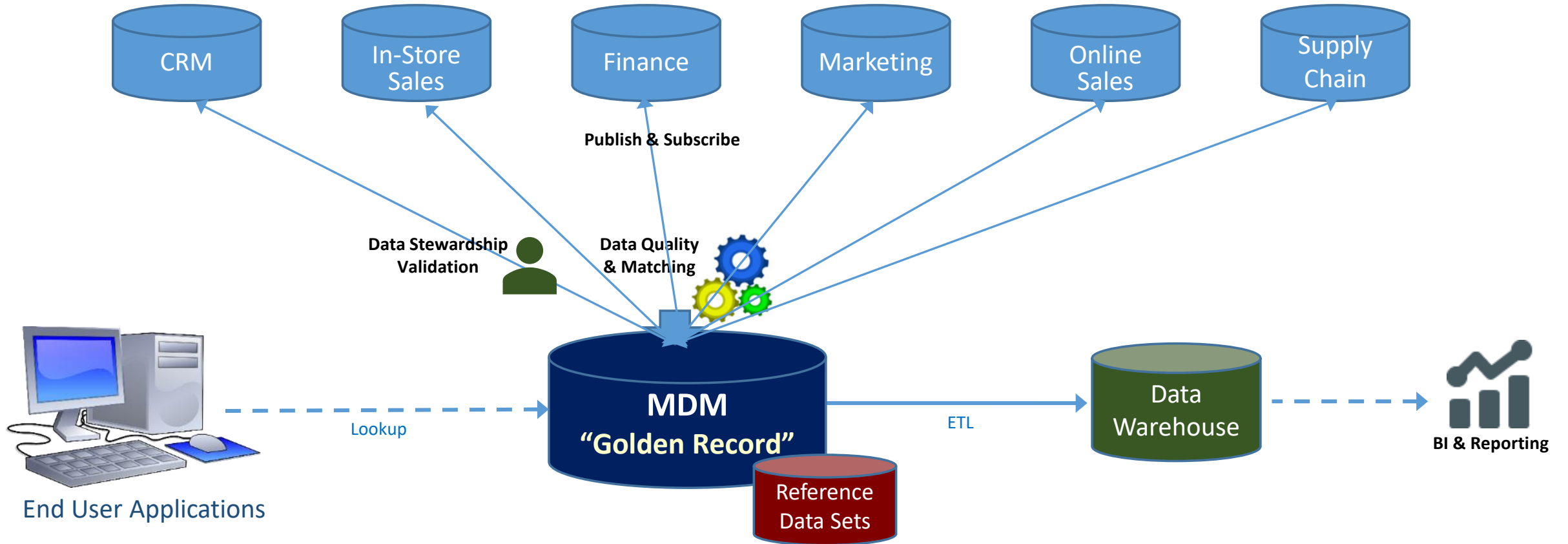


**Operational Focus**



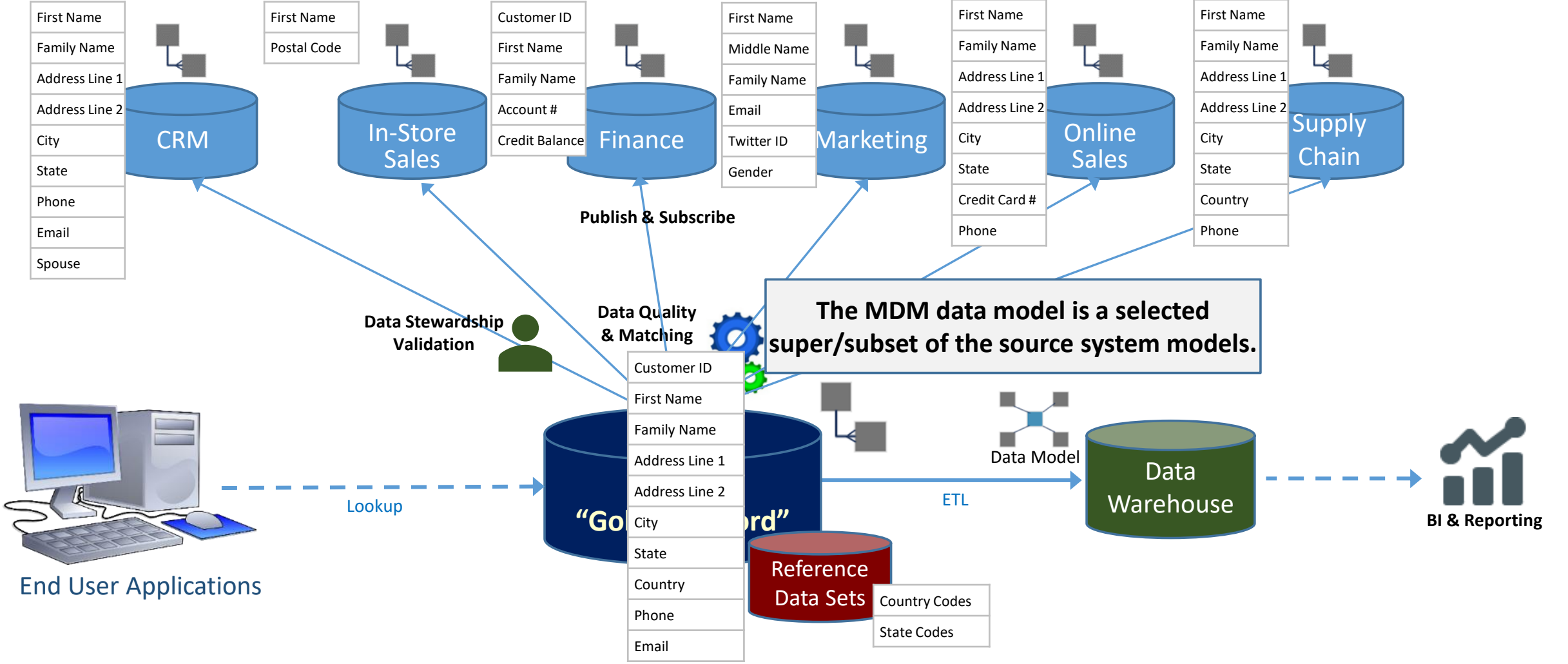
**Analytical Focus**

# Master Data Overview



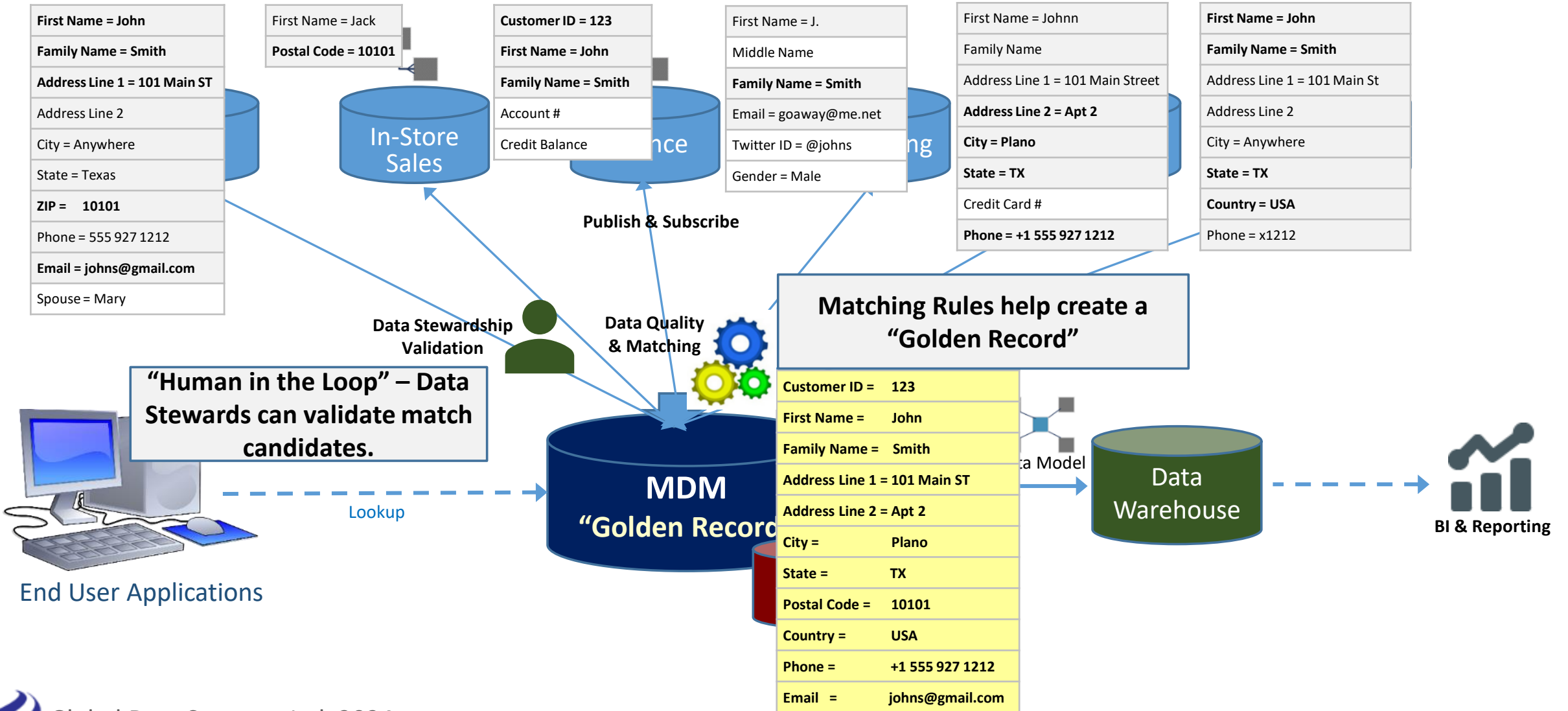
# Master Data Overview

Each system has its own unique functionality and associated data model.



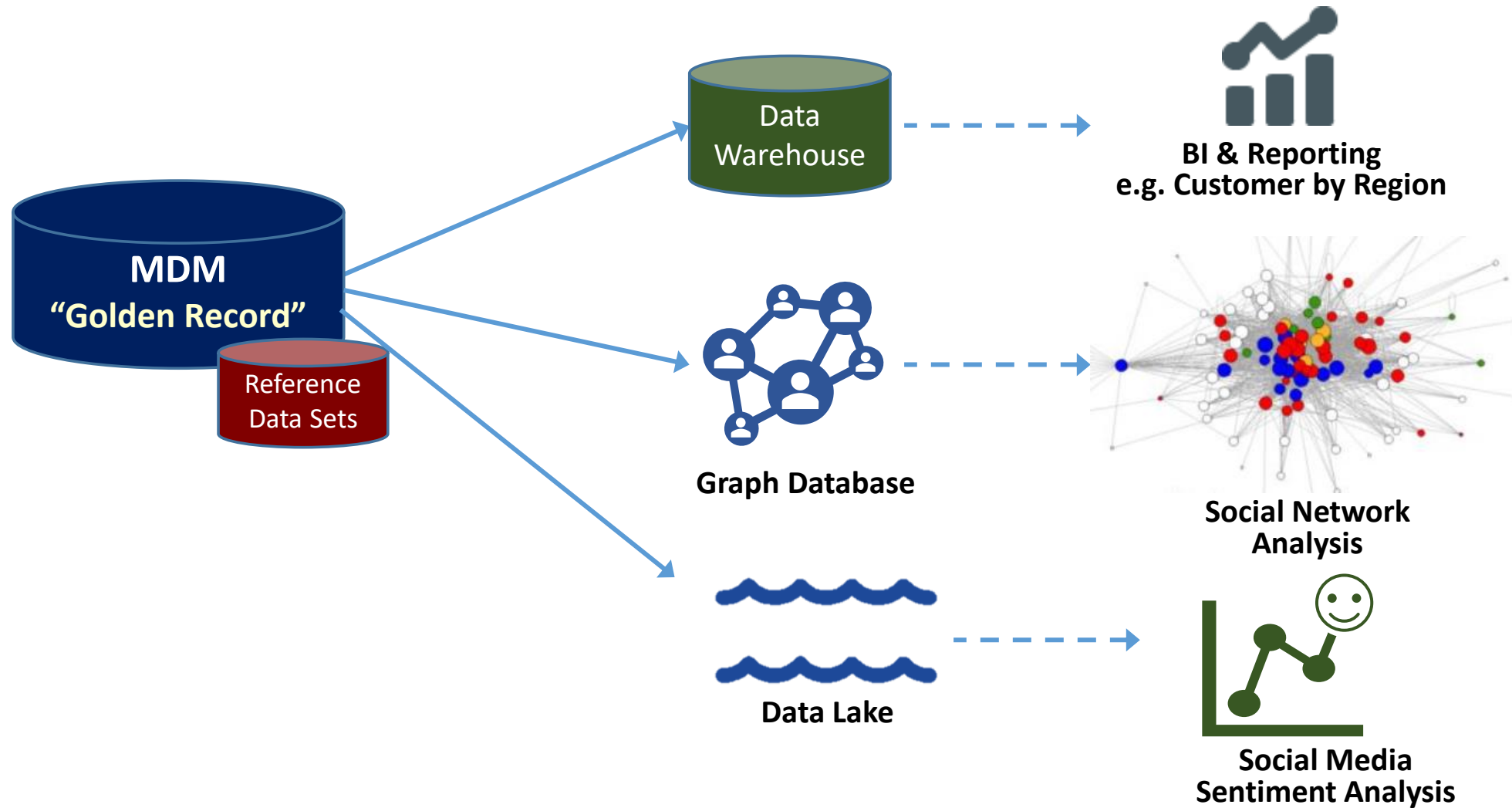
The MDM data model is a selected super/subset of the source system models.

# Master Data Overview



# MDM is not Reporting or Analytics

## -- It can be a Source



# Optimizing Restaurant Revenue through Menu Data

## Managing the Data that Runs the Business

- An international restaurant chain realized through its digital strategy that:
  - While menus are the core product that drives their business...
  - They had little control or visibility over their menu data
  - Menu data was scattered across multiple systems in the organization from supply chain to kitchen prep to marketing, restaurant operations, etc.
- Menu data was consolidated & managed in a central hub:
  - **Master Data Management** created a “single view of menu” for business efficiency & quality control
  - **Data Governance** created the workflow & policies around managing menu data
- Process Models & Data Mappings were critical
  - **Business Process diagrams** to identify the flow of information
  - **CRUD Matrixes** to understand usage, stewardship & ownership

Product Creation & Testing



Menu Display & Marketing



Supply Chain



Point of Sale & Restaurant Operations



- Interest in Master Data Management (MDM) is on the rise as more organizations look to gain a common, consistent source for their core data assets (Customer, Product, Supplier, Employee, etc.)
- Successful MDM is part of a wider data strategy and requires integration with:
  - Data Architecture
  - Business Process Alignment
  - Data Governance & Stewardship
- Getting this combination right can have a positive impact on the success of the business.



# DATAVERSITY Data Architecture Strategies

## This Year's Lineup

- **January** Emerging Trends in Data Architecture – What's the Next Big Thing?
- **February** Building a Data Strategy - Practical Steps for Aligning with Business Goals
- **March** Master Data Management - Aligning Data, Process, and Governance
- **April** How do Data Governance & Data Architecture Support Each Other?
- **May** The Role of the Chief Data Officer (CDO) in Business Transformation
- **June** What Does It Mean to be a Data-Driven Organization?
- **July** Data Architect vs. Data Engineer vs. Data Scientist – Making Sense of Roles in Today's Data-Centric Organization
- **August** Data Quality Best Practices (with Nigel Turner)
- **September** Best Practices in Metadata Management
- **October** Enterprise Architecture vs. Data Architecture
- **December** The Business Benefits of Data Modeling



# Who We Are: Business-Focused Data Strategy

Maximize the Organizational Value of Your Data Investment



In today's business environment, showing **rapid time to value** for any technical investment is critical.

But technology and data can be complex. At Global Data Strategy, **we help demystify technical complexity** to help you:

- Demonstrate the ROI and **business value of data** to your management
- Build a data strategy **at your pace to match your unique culture** and organizational style.
- Create an **actionable roadmap for “quick wins”**, which building towards a long-term scalable architecture.

Global Data Strategy's shares experience from some of the largest international organizations scaled to the pace of your unique team.

Global Data Strategy has worked with organizations globally in the following industries:

Finance · Retail · Social Services · Health Care · Education · Manufacturing  
· Government · Public Utilities · Construction · Media & Entertainment ·  
Insurance .... and more



Thoughts? Ideas?  
**Questions?**