

Extraction of Governed Data Domains at Enterprise Scale

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Agenda

- Importance of Governed Data Domains
- Overview of Master and Reference Data
- MDM Market Awareness
- The Data You Have
- Case Study: Implementation of EnterWorks for Governed Data Domains
- About D3Clarity and Precisely





Solving for Governed Data Domains

Objective

- Complete re-definition of the financial planning process for an energy organization
- Replace and curate all inconsistent reference and master data with defined, managed, and consistent versions in EnterWorks
- Original estimate was for 12 months

Stats

- Over 2,000 individual plans to capture
- Over 300 General Ledger Accounts
- Multiple (5+) separate instances
- Over 200 separate master and reference data dimensions were discovered, modeled, mapped, and placed under management



Importance of Governed Data Domains



- It is important in today's business environment that your data **truly and accurately** describes the environment in which you operate.
- **Business leaders** are increasingly dependent on data to make informed decisions and need to be provided with the best tools to do their jobs (in this case, data).
- This data is referred to as "Domains." Common examples would be:
 - Customer, Product, Organization, but could also be Vendor, Asset, Employee, etc.
- Basically, how you trade, what you trade, and who you trade with, etc.
- *Consistency and Quality:*
 - This data IS used inside every operational system
 - Preserving consistency across **ALL** your systems is therefore of paramount importance since you want them all to refer to the **same environment**
 - Understanding and measuring the quality of this data makes it possible for this data to be **trusted** appropriately
- Cost of Inconsistency: (Horror stories and anecdotes abound)
 - Inconsistent data leads to errors, inefficiencies, and increased operational costs
 - Ambiguity in this data causes decisions to be second-guessed, expensive remediation not only of data but also process failure or business missteps
 - Data inconsistencies can result in redundant efforts, rework, and missed opportunities
 - Investing in this data reduces the cost of inconsistency, promotes efficiency, and increases trust not only in the data but also in the decisions based on the data





Master Data

Your master data embodies these domains and adds definition and substance to the entities that truly describe your business.

- Intent
 - Describes your environment and the world in which you operate
 - Encapsulates all the workflows and processes that ensure that this data is **fit for purpose**

Reference Data

Reference data is a supporting player in this space and offers **consistency** in your business's behavior.

- The adjectives to master data's nouns
- Consistent sizes for your shirts, and colors for your socks
- Intent
 - Systematic organization and maintenance of foundational data elements that provide context and meaning to operational data.
 - Curation of reference data sets, such as codes, classifications, and standards, to ensure consistency, accuracy, and accessibility throughout an organization.

Data fuels the entire business

Finance & Legal HR & Operations Information Technology Product & Engineering Sales & Marketing Fulfillment & Support



#1 priority: data-driven business decisions

2023 Data Integrity Trends & Insights Report

Innovation alleviates the tension

Common initiatives for moving the business forward

Modernization	Artificial Intelligence
Automation	Data Democratization
Cloud Adoption	Analytics & BI
Risk & Compliance	Efficiency & Optimization

Trusted data is foundational to successful AI, automation, and other critical business initiatives

Solving data challenges across industries

FINANCIAL SERVICES	INSURANCE	тегсо
Evaluate branch locations, target	Examine risk to quickly price policies	Manage network coverage and grow
marketing, and manage financial	and capture business, manage claims,	customer base with personalized
crimes and compliance	and detect fraud	marketing and service
PUBLIC SECTOR	RETAIL & REAL ESTATE	MANUFACTURING & CPG
Plan and optimize public services,	Analyze locations, understand	Optimize delivery and supply chains,
manage safety, and respond to	customer demographics, and segment	manage product information, and
emergencies	audiences for marketing	analyze pricing



The Data You Have



- What are the steps for extracting governed data domains?
 - Processes and standards are embedded in the systems and the data of the organization
 - Often, this data must be understood and extracted from the systems that are running the business
- Extracting governed data domains involves identifying, defining, and documenting the critical data entities and attributes within an organization that require governance.
 - Data Discovery and Profiling
 - Find it. Understand it.
 - Data Mapping and Modeling
 - How does it relate and manifest in all the relevant areas?
 - Data Cleansing and Enrichment
 - Is it as "clean" as it should be? What would make it more **fit for purpose**?



- Data Modeling Features
 - Involves defining the structure and relationships between data elements.
 - Identifies how data entities relate to each other and how they are organized within the system.
 - Aligns with the functions and processes of the business, reflecting how data supports business operations.
- Mapping Data Sources to Governed Domains
 - Involves establishing precise connections between data models and specific business functions or processes.
 - Identifies how different manifestations of data objects align with the data model and serve specific business functions.
- Example: Entity-Relationship Diagram



Consistency and Purpose

- Fit for Purpose
 - Data must be fit for its intended purpose, aligning with business requirements and objectives.
 - Ensures that the data accurately represents the information it is intended to describe.
- Consistency
 - Consistency is key to effective data management, ensuring uniformity and standardization across systems and processes.
 - Utilizing the same defined domain across systems promotes consistency and coherence in data interpretation.
- Case Study
 - Focuses on establishing and enforcing expected standards for data quality and consistency.
 - Includes:
 - Extracting and rationalizing standardized data domains and attributes
 - Implementing data validation rules and quality checks
 - Ensuring your data is fit for purpose
 - Globally align your data standardizations

Previous Financial Process





On-Premises

• Collection of spreadsheets

- Manual data entry
- Reconciling data plans against data actuals was error-prone and timeconsuming







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EnterWorks Result



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Recap: Solving for Governed Data Domains



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Business Outcome: Model Based Development

- Bring all planning dimensions into EnterWorks as master and reference data.
 - Single source of truth for all reference and master data.
- Automate, Automate, Automate.
- Eliminated manual use of spreadsheets with a curated system.
- Generate objects in EnterWorks in 30 minutes :
 - Domain repositories (200+)
 - User interface across dimensions (200+)
 - Attributes (2000+)
 - Data Items (10000+)
 - Reference lookups for foreign keys across repositories (75+)
 - Hierarchies from repository data for reference
 - Code sets where appropriate

Delivered in 6 weeks

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Dave Wilkinson */		100
Execute		1490 1874
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sql vanchar :="";		2000 1900
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drop table if exists Temptbl; create temporary table Temptbl (nID int, path		
<pre>insert into TempTbl values (0,'DA^_X',null), (1,'LA^_X',null),(2,'AA^_J')</pre>		,39
while (N < 6) do		
select np.patt, np.fpattern into str, fst		
sql := (select listagg('alter table "' from INFORMATION SCHEMA.COLUMNS c	c.TABLE_SCHEMA '"."' c.TABLE_NAME '" alter column "' c.COLUMN_NAME	<pre>E[]'" set not null',';')</pre>
where c.TABLE_CATALOG='PLANNING_STEW	RDSHIP_ANALYTICS' and c.TABLE_SCHEMA='P_S_ADAPTIVE_DATAMODEL' '^' and upper(c.COLUMM_NAME) = upper(right(c.TABLE_NAME_len(c.TABLE_NAME)	ME)-(len(:str)-2)) '_Code')
<pre>if (len (sql)>0) then sql:='begin ' sql '; end;'; execute immediate sql; end if;</pre>		
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<pre>if (len (sql)>0) then sql:='begin ' sql '; end;'; execute immediate sql; end if;</pre>		
end if;		
N:-N+1:		
end while;		



#Create profile
body = ew_profile
body["name"] = f'ap_{repoName}'
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r = ew.createProfile(body)
if r is not None:
 ew_profileId = r["profileId"
 print(ew_profileId)

#Create AttrTab
body - ew_attrTab
body["name"] = 'DM3_General_Tab'
body["name#liang"]["en"]=body["name"]
body["profileId"] = ew_profileId

r = ew.createAttributeTab(body)
if r is not None:
 ew_attrTabId = r["attrTabId"]
 print(ew_attrTabId)

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if r is not None:
 ew_attrGroupId = r["attrGroupId"]
 print(ew_attrGroupId)

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About D3Clarity



Who We Are: Experts in data intelligence, data management, and high-scale data platforms.

What We Do:

- Data Architecture
- Enterprise Data Strategy
- Machine Learning
- Data Governance
- Master Data Management
- Cloud Migration
- Cloud Security
- Managed Services
- Cloud Operations & Automation
- Digital Transformation

TRUSTED: 150+ successful projects across 13 different industries

EXPERIENCED: 20+ years of data consulting experience; full-service partner in data management, data governance, and cloud engineering

RECOGNIZED: Identified by Gartner as 1 of the 18 major MDM External Services Providers in the latest MDM Market Guides and achieves consistently high ratings on Peer Insights

VALUED: Attaches great value to long-term relationships

FLEXIBLE: Large enough to deliver – yet small enough to go fast

OUTCOME: Oriented for both strategy and implementation execution

Let's Talk

- info@d3clarity.com
- <u>D3Clarity.com/home/podcast</u>
- 512-790-3282



The leader in data integrity

Our software, data enrichment products and strategic services deliver accuracy, consistency, and context in your data, powering confident decisions.



Brands you trust, trust us YORK amazon **₩ RBS** Kelloggis **M**estpac TRAVELERS **E**∕∕onMobil VISA **BARCLAYS** (\land) Ŧ MERCK (Fannie Mae TRUIST HH 🔆 Cigna Costco L'OCCITANE EN PROVENCE Bank D



Prepare for the Journey

- Flexible, interoperable SaaS services
- Runs where data lives on-premises or in the cloud
- Business-friendly user experience with Aldriven suggestions
- Unique in the market in its breadth of capabilities
- Common foundation with shared data catalog connects all capabilities

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Data Integration





Data

Governance



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Thank you for your time.



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