Practical Applications of Reference Master Data Management

Use Cases in Financial Services Enterprises

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Jim leads both the Enterprise Data Governance team and the Enterprise Data Architecture team at TD Ameritrade. Jim is responsible for developing, executing and managing the strategy for these two areas of the firm. He is also responsible for the delivery of Data Governance, Data Architecture, Master Data Management, Data Modeling, Data Quality, and Metadata Management at TD Ameritrade. As the Director of Enterprise Data Management, Jim ensures that the design of strategic solutions will improve the data environment and analytical capabilities across the business functions to enable TD Ameritrade to achieve its goal of providing a superior client experience. Throughout his career working at market leading organizations in the Information & Delivery Services and Financial Services industries, Jim has emphasized the importance of treating data as a corporate asset. Jim is recognized as an expert in the field of data architecture as a result of his extensive international experience leading through the design of large-scale global data solutions.
Laura Hahn leads the Enterprise Data Governance program and team, which includes implementing Data Governance, Data Quality, Reference Master Data and Metadata services against business priorities. She coaches and facilitates cross-functional teams of business leaders in setting data policy, establishing data quality standards, managing data assets, and identifying win-win solutions to data problems. Prior to her current position, Laura held several roles at Target Corporation within the Target.com eCommerce business spanning accounting, large financial data initiatives, datawarehousing and business intelligence. Eventually, Laura established a data management team, and under her leadership, the new team provided centralized data quality, data solutions, and data governance services across all eCommerce data, including operational, transactional, item/product, clickstream, and financial/metrics. She is a change agent and collaborative thought leader on how to manage shared data assets and how to implement key industry practices in a practical, value-add manner. Laura has a BA in Accounting from Augsburg College and has previously held Certified Public Accountant (CPA) status.
Reference Master Data – What is it?

How to Spot Reference Master Data

Q: Laura, where are you from?

A: All could be correct. But imagine…….
...if data entry procedures and systems allow this much variability.
...if you give people freedom to answer in any way they choose.
How do you plug this information into your business processes?

Which is correct?

Minneapolis, MN
Mpls, MN
Minneapolis Mongolia
Jersey City, New Jersey

Trick: Any time you see information that is intuitively part of a list and you can guess other values in the list and their format....
It’s probably reference data.
Reference Master Data – What is it?

Why Reference Master Data Management?
There are hundreds of code values and lists across the firm that should be consistent. When these lists get out of sync with each other or out of date, we lose data quality, business processes slow down, and the data becomes harder to use downstream.

What is Reference Master Data Management?
Management of reference data values includes:
- Documented decision making about values and content
- Ensuring reuse, consistency, and therefore quality of transactions that use those values
- Accountability for updating values in a timely and compliant manner

Who is Involved?
- The Business: most Reference Master Data is business-owned. Provide them with the guidelines and mechanism for managing reference data
- Application Development: connect consuming applications to the Reference Master Data central repository to ensure systems have the up-to-date values from the business owners
- Data Modelers: influence design to promote use of Reference Master Data
- Architecture and Middleware: establish consumption patterns and structures for future projects to follow
Financial Services Use Cases: External Reference Master Data

In the financial services industry, we are often adjusting to accommodate or comply with external standards, including published lists of reference master data.

Which should we use? What if they conflict? What if we disagree?
Financial Services Use Cases: Managing External Reference Master Data Examples

YOU can determine how you want to manage these external standards with a few simple principles.

Use Case #1: Multiple versions of Country

“There is only one list of all the countries in the world, right?” Wrong.

Between our regulators, mailing rooms, marketers, and compliance teams, everybody has their interpretation of which land masses equate to a country. The geopolitical world is complicated.


Use Case #2: Standard file formats and codes

“Our files and codes are special.” No, they are not.

You exchange files with another organization. You have been using a custom-built file format for years. Your partner now wants to apply standards, same as everyone else.

Reference Master Data: the partner’s code values, ISO code values
When managing Reference Master Data, you must establish:

- Ownership should reside with the business
- Untangling decision-making may result in dividing the data
  - Example: Countries used for mail; countries used for compliance
- Set owners up with a few guiding principles
- Use Case #1: Consider how you would assign ownership of various country lists

Clear accountability and ownership are critical to having Reference Master Data work effectively for you.
Best Practices Applied to Use Cases: Untangle Decisions and Processes

External Source
- USPS
- TIC
- ISO
- GENC
- OFAC
- WSC

Internal Capture
- CLIENT ADDRESS

Use Case #1
- Sending Mail
- CIP Compliance
- Account Opening
- OFAC Restriction
- SEC Reporting
- Foreign Classification

Business Process
Remember: Untangle the decisions first. Mailing and Physical are different!
Establish each use case, the proper source, where it’s stored, and how it’s used.
Once the decisions and uses are identified, look for overlap.

Mail Operations must be aware of the impact to Marketing

The country list for physical address needs cross-referencing for three external sources

Account Opening procedures need to apply different countries for different data elements captured
Best Practices Applied to Use Cases: Automating External Updates

Use Case #2: DTC updates their message status codes

HEY! Something changed!

Many Data Stewards don’t want to robotically check for updates.

We are exploring a few ways to handle external updates. Depending on your organization, you can use any ETL tool to load files into EBX5 and decide what action follows.

With EBX5, you can add Java classes to:
- Update your internal scheme copy
- Trigger an email to the Data Steward
- Trigger the workflow for your internal scheme to begin
Best Practices Applied to Use Cases: Keep Your Distance

It is possible to Automate Everything! Let’s think about that....

Use Case #2: DTC updates their message status codes

Reference Master Data Hub

A single list within the Hub is updated with new values

System 1
System 2
System 3

The values automatically propagate out to your firm’s consuming systems
Best Practices Applied to Use Cases: Keep Your Distance (continued)

Automation may introduce risk if you don’t fully understand impact.

Use Case #2: DTC updates their message status codes

Reference Master Data Hub

Automate the updates
• No direct consumption
• Trigger steward review

DTC Values

Our Firm Values

Steward Review
• Anticipate downstream impact
• Confirm agreement with the change
• Use workflow to update internal list
• Time the update
• Alert consumers, if necessary

System 1
System 2
System 3
Managing external schemes can be tricky but with a few key standards in place, it’s entirely possible.

- Establish clear accountability
- Identify the decisions that will be made
- Entrust smart stewards who understand the business and technical implications of changing reference master data values
- Automate intelligently to make it easy for your stewards
- Put separation in place to force decisions, if needed
- Make sure you understand your sources and how your company uses them
Contact Details

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Questions?