



# DATA GOVERNANCE AND MASTER DATA MANAGEMENT CONFERENCE EUROPE

11 - 14 March 2024 | London, UK

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in the event mobile app\****





## Case Study: Replacing our MDM, a Practical Guide

A detailed look at the lessons we learned as we worked to replace our master data management systems in recent years.



March 12, 2024

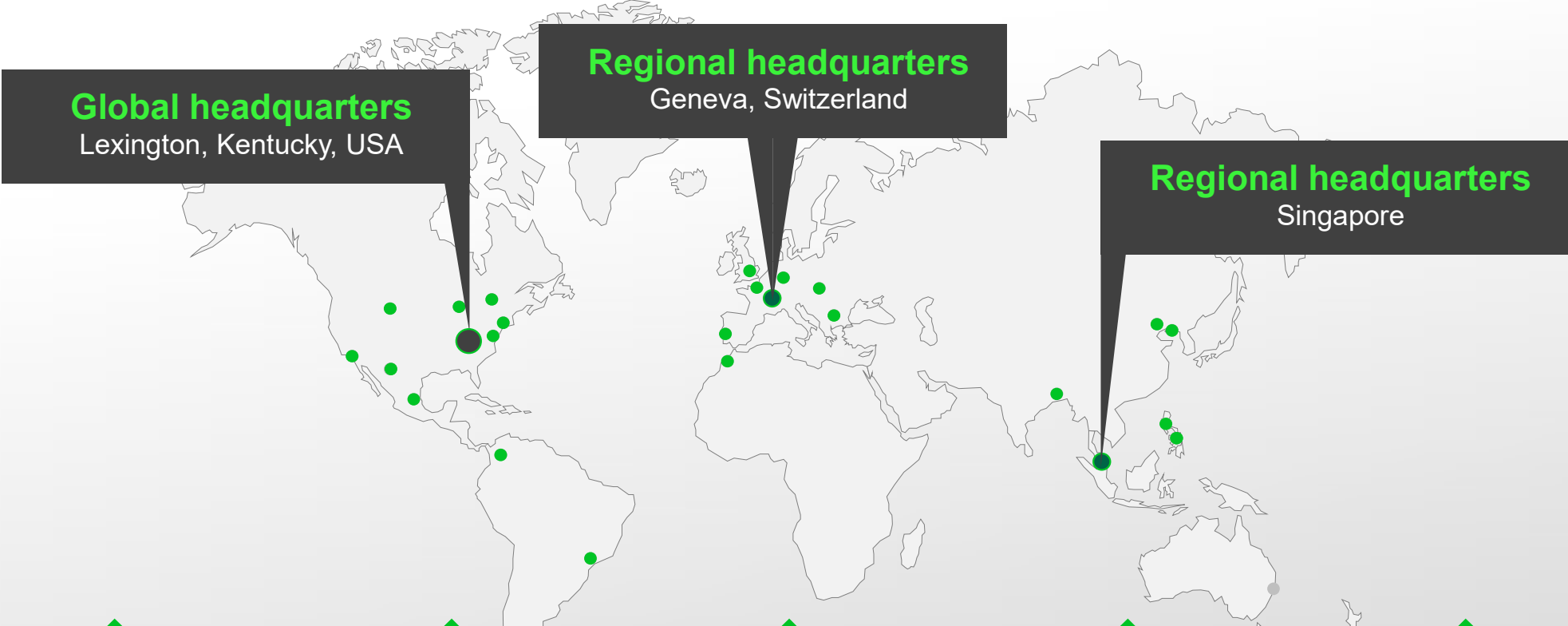
# Key Takeaways of Today's Session



- Learn what steps to take before implementing a new master data management system.
- See the criteria we used to analyze which MDM solution to choose.
- How to address user concerns and managing them through the change curve.
- Understand the time and resources needed for the success of the project.
- Hear how we defined the criteria of a successful implementation and how we scored at the end.

# A little about Lexmark....

A global leader



Primary development centres

Manufacturing facilities

Shared services centres

Support centres

Major field sales presence



# A little about me...

- <https://www.linkedin.com/in/kristineball/>



**Kris Ball** ✓

Data Governance Manager at Lexmark

Nyon, Vaud, Switzerland · [Contact info](#)

Lexmark Lexmark

Lexmark



- Data Governance Manager**  
Lexmark · Full-time
- Lexmark**  
Full-time · 24 yrs 8 mos
  - Data Governance Manager**  
Jan 2019 - Present · 5 yrs 2 mos  
Geneva, Switzerland · Hybrid
  - Business Intelligence Lead**  
Nov 2011 - Jan 2019 · 7 yrs 3 mos  
Geneva, Switzerland · On-site  

Led the Business Intelligence team focused on building new solutions for the Finance group. We worked BW, HANA models, Business Objects and more.
  - Financial Planning and Analysis Specialist**  
Sep 2010 - Nov 2011 · 1 yr 3 mos  
Singapore, Singapore · On-site  

International assignment in Singapore to assist the FP&A team of Asia Pacific division define new reporting solutions.
  - Financial Planning and Analysis Specialist**  
Jul 2009 - Aug 2010 · 1 yr 2 mos  
Geneva, Switzerland · On-site  

International assignment in Geneva to support the FP&A team for the EMEA division on their reporting n
  - Financial Planning and Analysis Specialist**  
Jan 2006 - Jul 2009 · 3 yrs 7 mos  
Lexington, Kentucky, United States · On-site
  - Accounting Analyst**  
Jul 1999 - Dec 2005 · 6 yrs 6 mos  
Lexington, Kentucky, United States · On-site

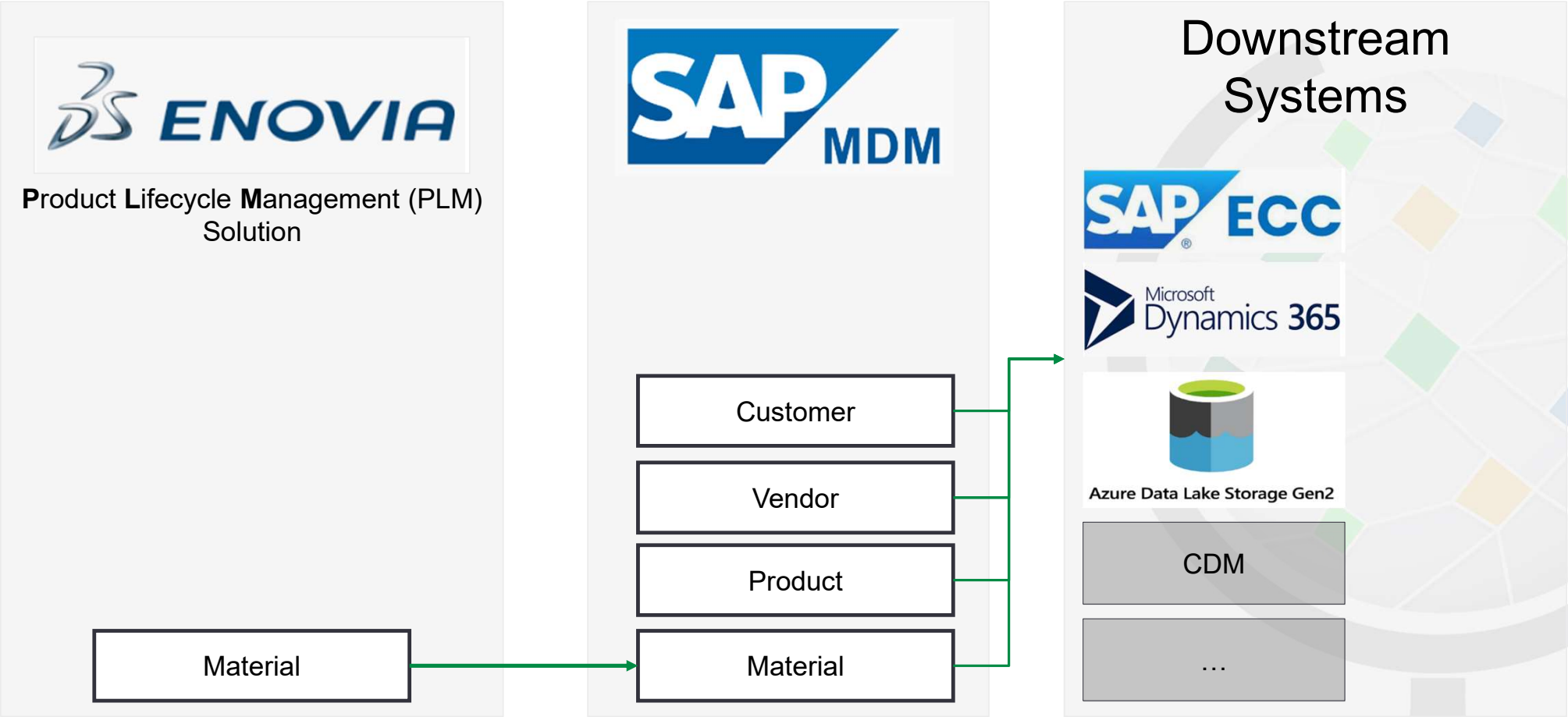


## Our Changing Landscape

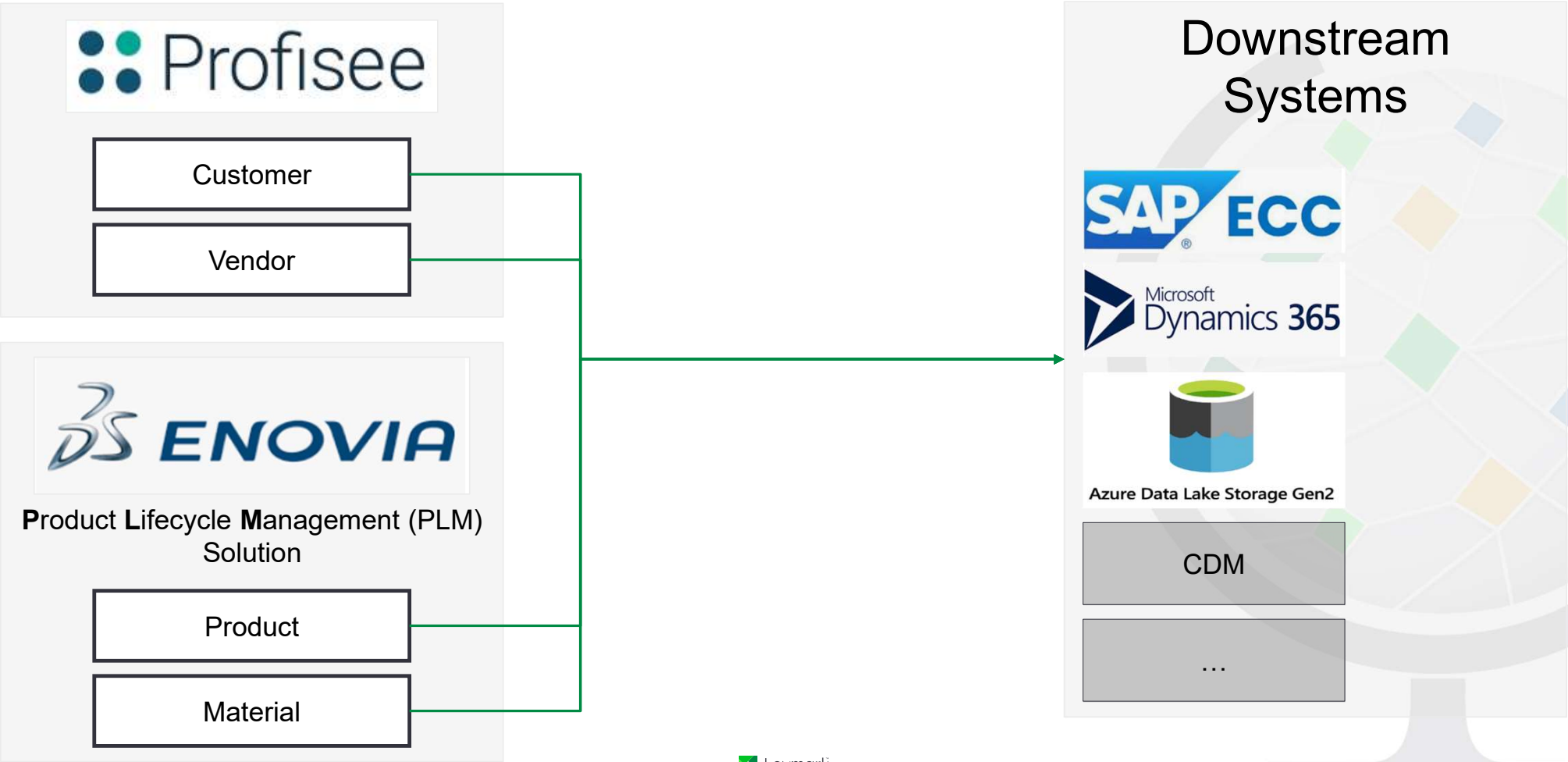
- A recap of the system changes we spearheaded in last years.



# Our Original Master Data Management Landscape



# Our Landscape Today





“The beginning is the most important part of the work”

- Plato



# Where to start...

- Brainstorm with your team
  - ▶ What do you want out of the new system?
  - ▶ What are pain points you have with existing system?
  - ▶ Sketch out ideas of what it could look like.
- Engage with the users

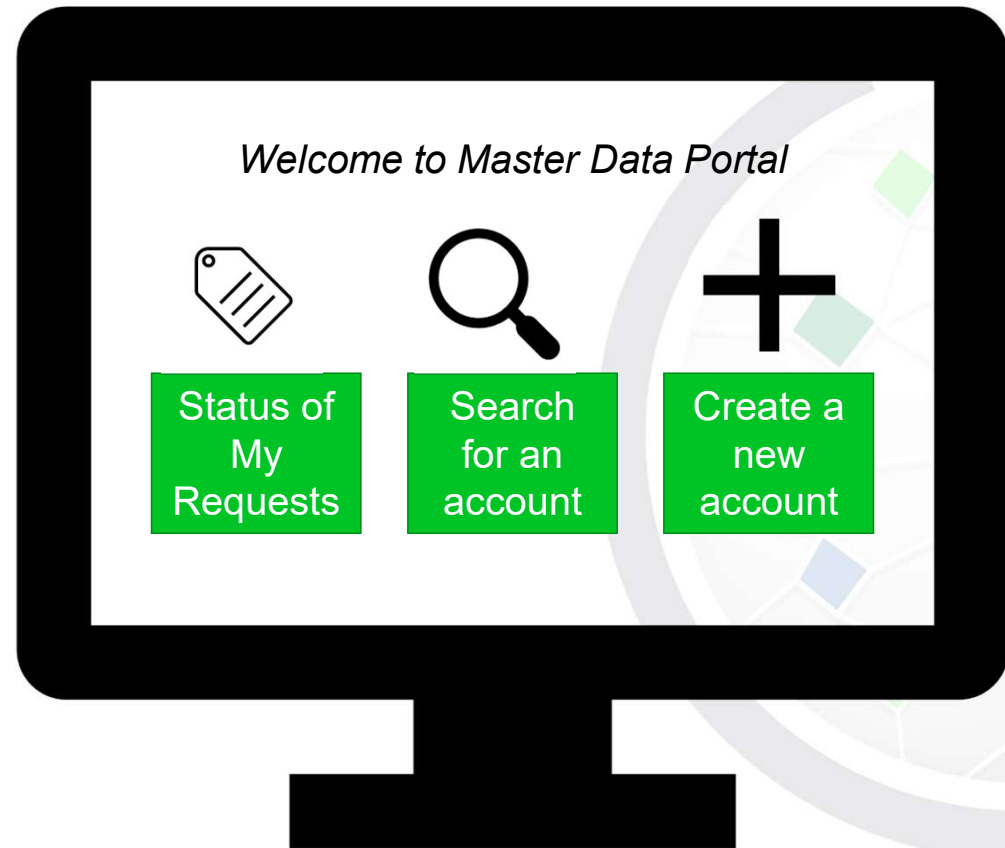
## Wish List

- A simpler design with an intuitive user experience, less clicks to navigate through the information.
- "Tool Tips" to explain fields, why we are asking for it.
- We want to manage all master data and the relationships in this tool, including bill to and ship to. One source of truth. Pushing up/down the statuses between child/parent relationships.
- Data validation at the time of entry (address checks, tax/bank info, duplicate check, etc).
  - ▶ Interaction with 3<sup>rd</sup> party tools for data validation: Address, DUNS, Brazil Tax, VIES (EU Tax), IBAN Checker, Consolidated Screening List maintained by US Bureau of Industry & Security (CSL by BIS).
- Simple customization of fields/attributes/hierarchies/relationships.
- Easy to configure workflows, delegation of authorization.
- Int **Pain Points – issues we have today we'd like addressed**
- Se
  - Audit Log/Tracking Changes: need to understand who last changed what.
- Ca
  - User Groups or Delegation of Authority: the requestor is the only person notified if there are any issues with a request. It would be helpful if a new tool allowed other users to access a request if the original requestor is out.
- Ad
  - Setting Character limitation: today integrations fail with Siebel if the address field is too long.
  - Manage status of an account at Company Code, Sales Org, Purchase Org levels.
  - Customization around who/when fields are editable: being able to change Material Groups on Vendors.
  - Requests Locking Up: if an approver has "picked up" the request to review/approve, another user cannot open/view the request (it disappears).
  - Upload Process: today team will enter data in QA for testing, would be helpful to capture that data (download) then load to production (upload) rather than having the team re-enter all of the information again.
  - Understanding status in downstream systems: when is account blocked/unblocked in SAP?

# Initial screen for End User

## What to include in first screen

- Welcome statement (thinking about design of Service Now portal)
- Hyperlinks to further screens
  - ▶ Worklist/status of requests or a link to “My Requests”
  - ▶ Search for an Account
  - ▶ Create an Account



# Search Screen



## What to Include:

- Search Criteria:
  - ▶ Name
  - ▶ Street Address & Country
  - ▶ Company Code
  - ▶ Payment Terms
  - ▶ Type of Account
- Name is mandatory, rest should be optional.
- Search functionality should be “fuzzy” to return not exact matches
- Once user hits search button then results appear.
- Result List Includes the above with:
  - ▶ Transactional Account ID (*hyperlink to get more detailed view*)
  - ▶ Party Role/Type
  - ▶ Business Partner (ie legal entity)
  - ▶ Level Zero
  - ▶ Reporting Link drives to hierarchy view

Search

Name

Street Address Country

Company Code Payment Terms

Type of Account:  Sold To  Vendor  Service Provider

List of Results

Name	Street	Ctry	Co Code	Pay Terms	Type	Party Role	Party Type	Legal Entity	Level Zero
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## Where to start...

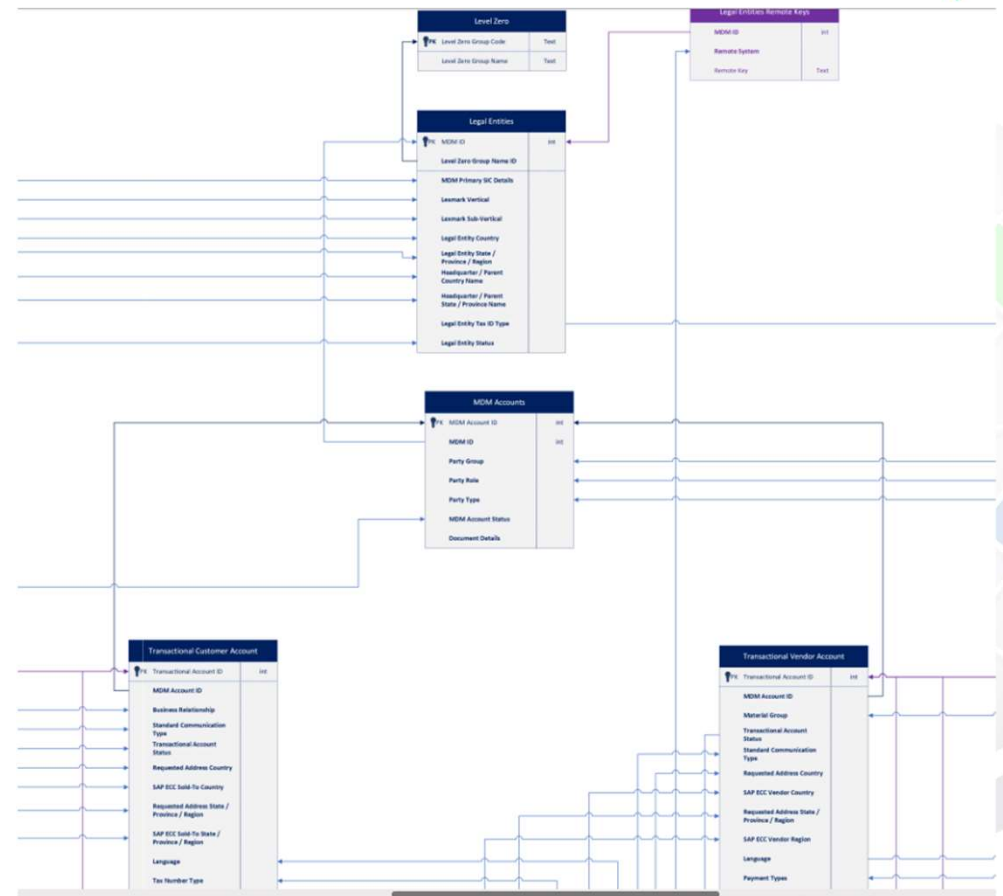
- Brainstorm with your team
  - ▶ What do you want out of the new system?
  - ▶ What are pain points you have with existing system?
  - ▶ Sketch out ideas of what it could look like.
- Engage with the users
- Review the whole end to end process.
  - ▶ What data are you capturing?
  - ▶ Where is that data going?
  - ▶ Who is impacted if you change your process?



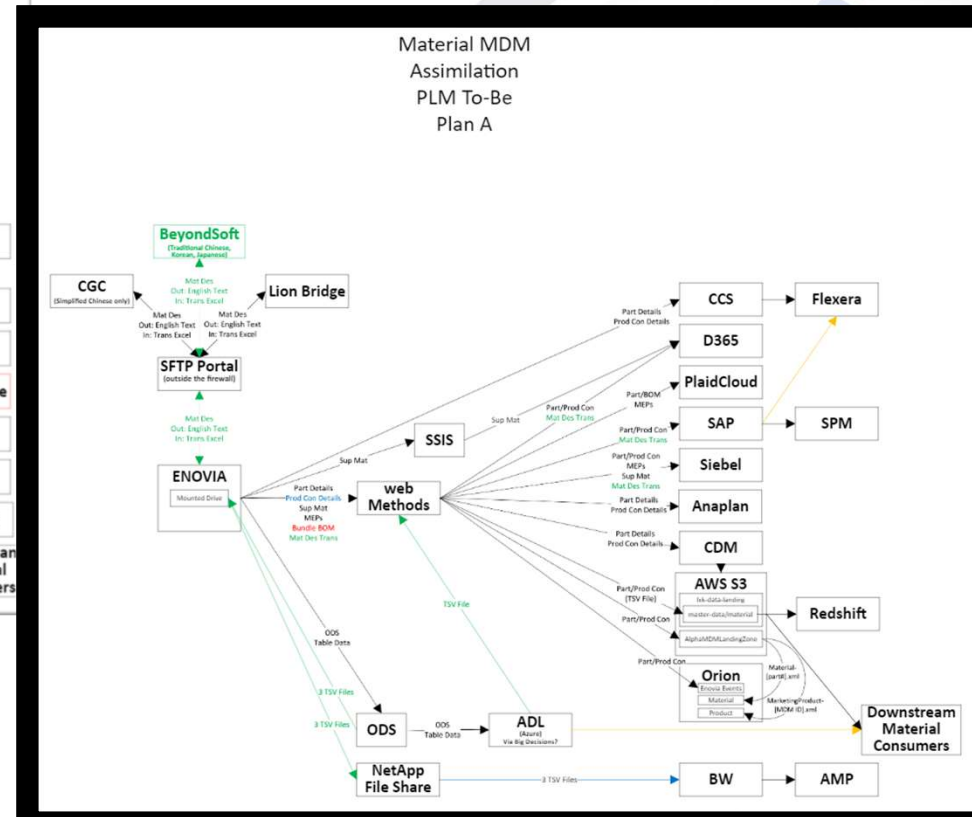
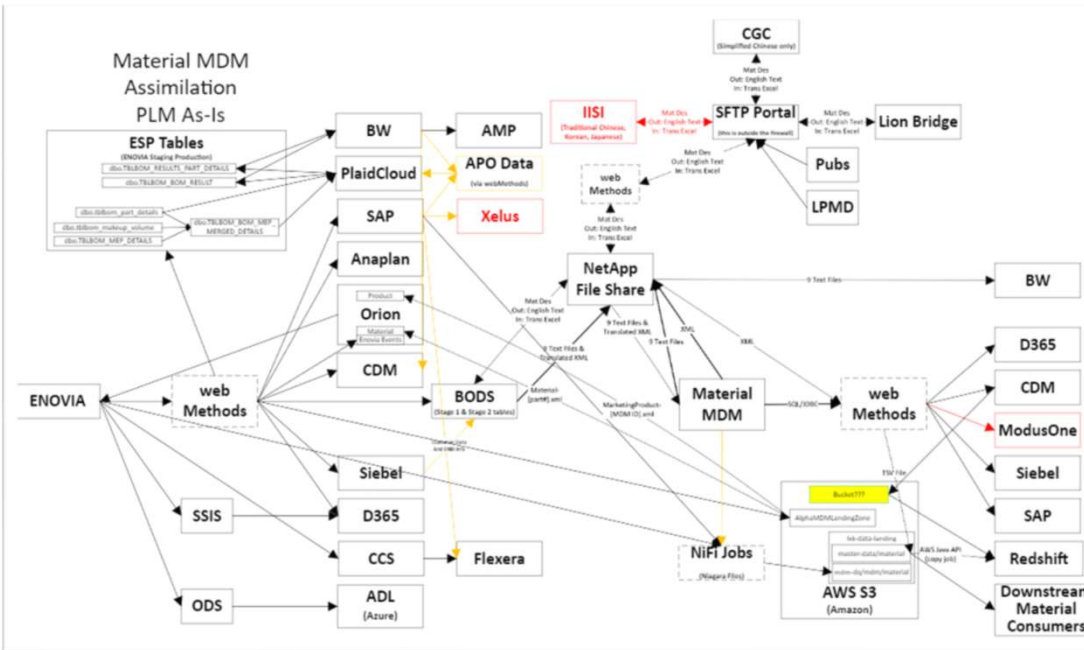
# Dive into your ERD



- Review your Entity Relationships Diagram
- Recognize how all of your tables are connected.
- Understand what data is being captured at each level.
  - ▶ Does it need to be in its own table?
  - ▶ Can you flatten the structure?
- Look at every field in every table.
  - ▶ What is the purpose of it?
  - ▶ How is it being governed/controlled?
  - ▶ What decisions is it driving?
  - ▶ What value does it have?

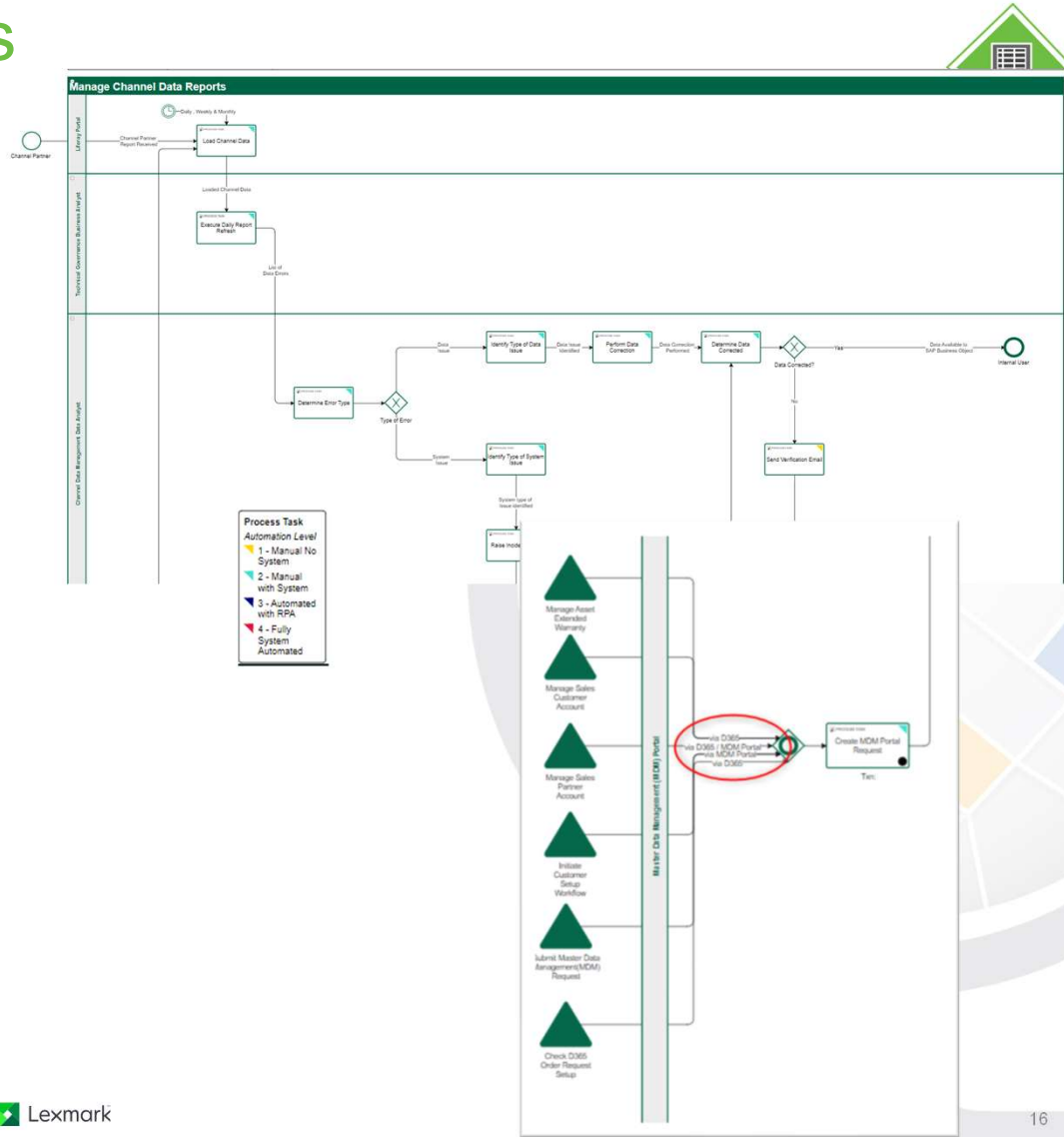


# Understand where the data is going...



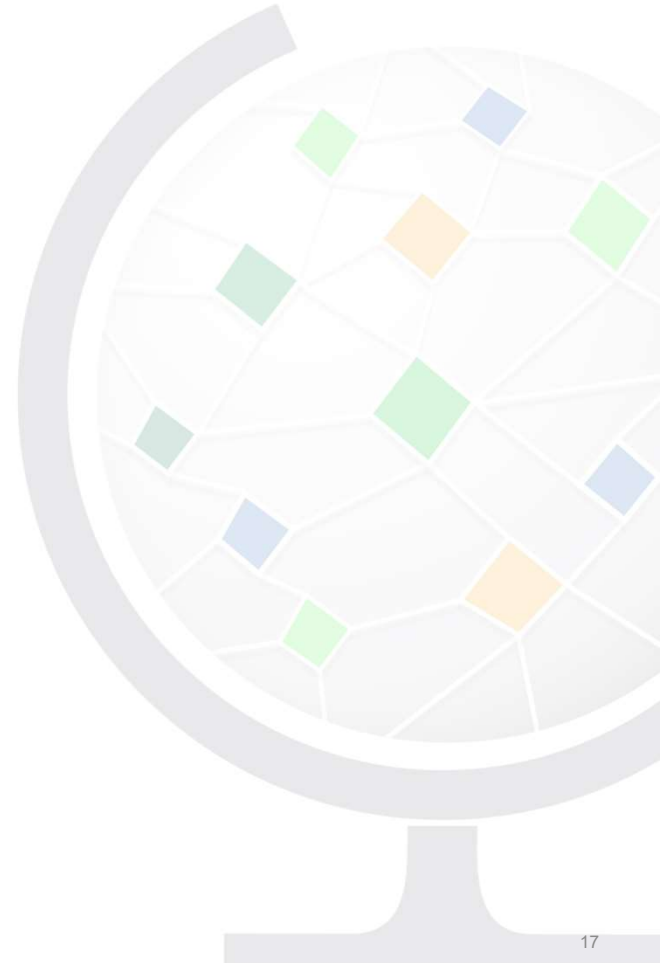
# Reviewing End to End Process

- By digitalizing our processes we can...
  - ▶ Dive into the detailed tasks, understand timing and level of automation.
  - ▶ Understand the inputs to our process. Identify users and simplify solutions.
  - ▶ See links to other processes, understand what activities they do, find redundancy.
- Using analytics from the tool we can identify opportunities that will deliver the greatest time savings and bring the most value.



## Where to start...

- Brainstorm with your team
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- Review the whole end to end process.
  - ▶ What data are you capturing?
  - ▶ Where is that data going?
  - ▶ Who is impacted if you change your process?
- Question what has value and what doesn't!





## Evaluating MDM Tools

- A look at our checklist



# Evaluating MDM Tools

- Very detailed checklist when looking at options available.
- Assign a priority to define how important that element is to the solution.
- Both IT and GBS evaluated the solutions.



## Solution Viability



Focus	Priority	Vendor Score (0-10)	Weighted Score
When was the MDM solution introduced to the market for the first time?	3 - Mission Critical	10	100
How many employees in the organization are focused on the MDM solution?	4 - Important	10	20
What other software solutions does the company offer?			
What percentage of your total revenue is derived from MDM?			
<b>Focus Score</b>			

## Functional Features

### Modeling



Focus	Priority	Score (0-10)	Weighted Score
Does the MDM solution support standards and policies defined by the governance organization?	0 - Not Important	0	0
Does the MDM solution provide mechanisms to capture SLAs defined by the governance organization?	2 - Very Important	10	70
What has been the MDM company's growth rate over the last 3 years?			

Non-Functional Features			Tool A
Platform	Priority	Vendor Score (0-10)	Weighted Score
Does the MDM solution have support options for backup, restore, and disaster recovery? If so, you'll want to ask if the vendor has any documentation they can share.	2 - Very Important	4	28
<b>Architecture and Deployment Score</b>			<b>7.31</b>
Performance and Scalability			Tool A
Focus	Priority	Vendor Score (0-10)	Weighted Score
Does the MDM solution vendor benchmark each release of the solution? If so, you'll want to know what the process is and if they can share the results.	0 - Not Important	8	8
What performance benchmarks does the MDM solution have for batch-based data integrations (loading)?	1 - Important	5	15
What performance benchmarks does the MDM solution have for services based integrations (CRUD), for performance of a single transaction, and overall throughput?	3 - Mission Critical	7	70
What performance benchmarks does the MDM solution have for matching, for the throughput for batch matching, and the performance of individual matching transactions?	2 - Very Important	4	28
Does the MDM solution have a limit to the number of records that can be managed?	1 - Important	7	21
Does the MDM solution have a limit to the number of concurrent users?	0 - Not Important	4	4
<b>Performance and Scalability Score</b>			<b>5.84</b>
Security and User Management			Tool A
Focus	Priority	Vendor Score (0-10)	Weighted Score
Does the MDM solution support authentication and authorization technologies? If so, you'll want to know what they are.	2 - Very Important	6	42
Can the MDM solution support single sign on?	3 - Mission Critical	6	60
Can the MDM solution provide the ability to manage access to system functions, such as data	4 - Important	9	36

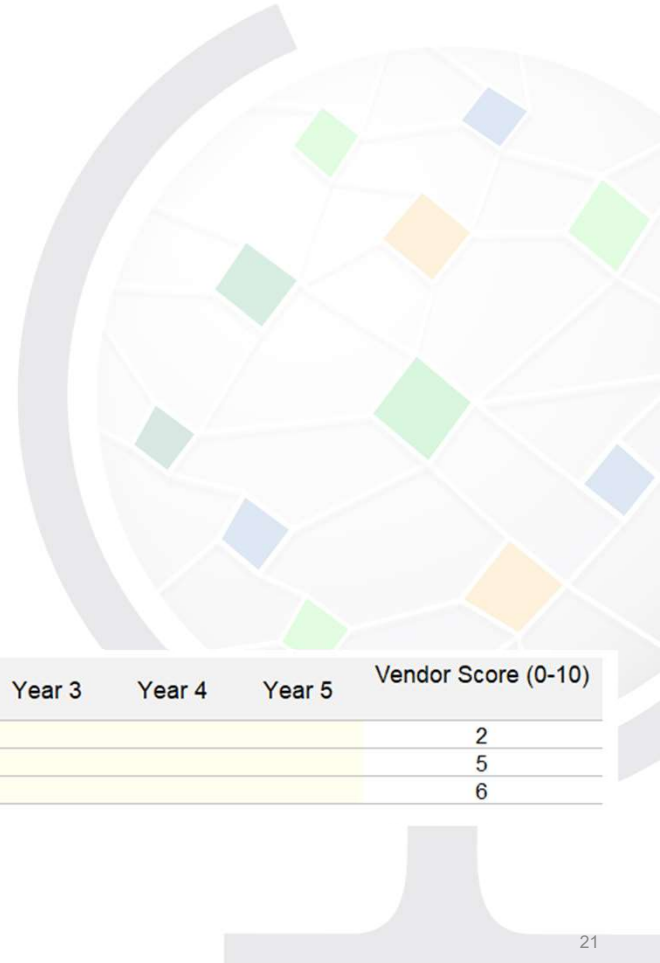
## Key areas to Evaluate

- Solution Viability
- Functional
- Non-Functional
- Licensing & Pricing

		Tool A	
Evaluation Area	Criteria	% Fit	Weighted Score
Vendor Viability	Focus	100%	10.00
	Track Record	70%	6.95
	General Product Information	89%	8.85
	Expertise	65%	6.50
	Support	100%	10.00
	<b>Total</b>		<b>85%</b>
Functional	Modeling	60%	6.02
	Integration	0%	0.00
	Data Cleansing and Validation	56%	5.57
	Matching and Survivorship	36%	3.59
	Data Stewardship	47%	4.67
	Data Governance	88%	8.81
	Auditing	86%	8.65
	Hierarchy Management	26%	2.56
	Workflow	52%	5.16
	Reporting and Analytics	68%	6.78
<b>Total</b>		<b>52%</b>	
Non Functional	Platform	38%	3.78
	Architecture and Deployment	73%	7.31
	Performance and Scalability	58%	5.84
	Security and User Management	52%	5.17
	<b>Total</b>		<b>55%</b>
<b>Rollup</b>		<b>64%</b>	

# Look at Total Cost of Ownership

- Understand the licensing model
- Cost of any new hardware
- Support and maintenance
- Professional services and training



## 5-Year Total Cost of Ownership Projection (Estimate based on information above)

Software, Support, and Maintenance Costs  
Professional Services and Training Costs  
Hardware Costs

	Year 1	Year 2	Year 3	Year 4	Year 5	Vendor Score (0-10)
Software, Support, and Maintenance Costs						2
Professional Services and Training Costs						5
Hardware Costs						6



## Managing the Change



# Engage and Communicate




- Everyone is scared of change, ease them into it.
- Make them part of the design process. Let them have a say. Listen to their input.
- Keep them updated regularly as project evolves. Don't leave them behind.
- If possible, use OCM team to focus on communication.
  - ▶ Unique project logo.
  - ▶ Presentation templates.
  - ▶ Shared intranet site with FAQs.
  - ▶ Consistent messaging.
  - ▶ Cohesive training materials.




# Our Intranet Site designed by OCM

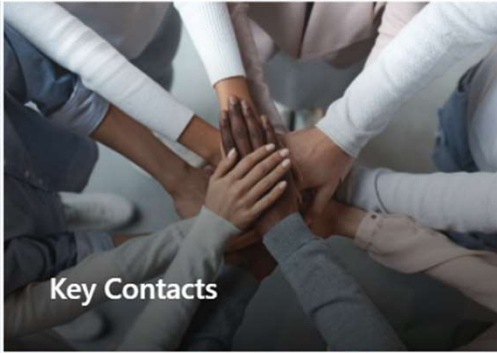


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**Cross-Functional Team Information**



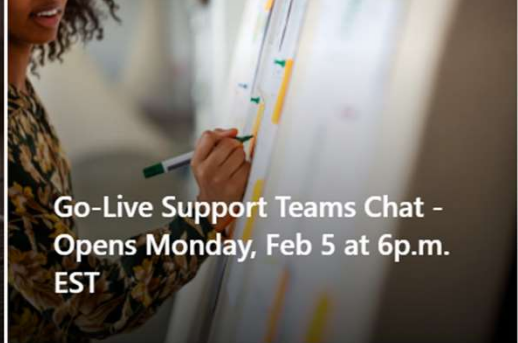
**Key Contacts**



**Project Calendar**



**Learning Materials**



**Go-Live Support Teams Chat - Opens Monday, Feb 5 at 6p.m. EST**



## Timing and Resources




# Our Teams



## Material & Product

5  Data Stewards

Data Custodians  3

4  Integrations Team

Key Users  6

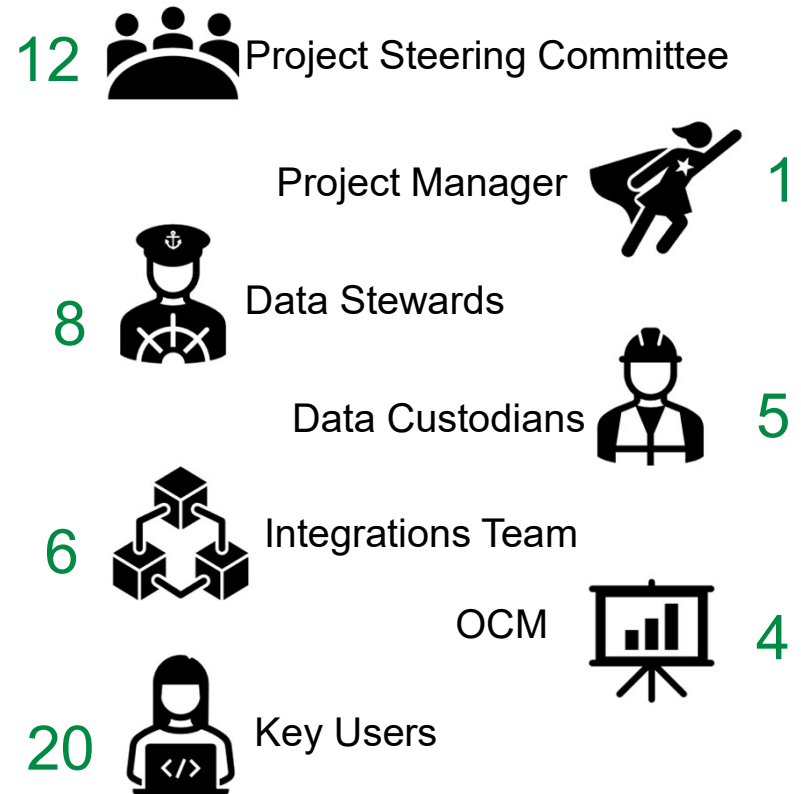
- A very informal project structure.
- Moved to a legacy tool with development done in house.
- Material change
  - ▶ Just moved managing translated descriptions data.
  - ▶ Redesign of integrations was the most difficult and time consuming piece.
- Product change
  - ▶ Required building a new user interface but limited data fields to manage.
  - ▶ Defining data and determining what to keep vs what to remove was most difficult.
  - ▶ Less than 20 end users to train on how to manage product model data in the new tool.

# Our Teams



- A completely new tool to learn and develop.
- A structured and formal project team with a joint steering committee with IT and GBS.
- A dedicated project manager.
- Engaged a 3<sup>rd</sup> party to do design and transition knowledge to our team.
- Over 1M records managed.
- More than 200 end users impacted.

## Customer & Vendor



# Depends on Scope & Experience



## Material & Product

- 5 Data Stewards
- Data Custodians 3
- 4 Integrations Team
- Key Users 6

## Customer & Vendor

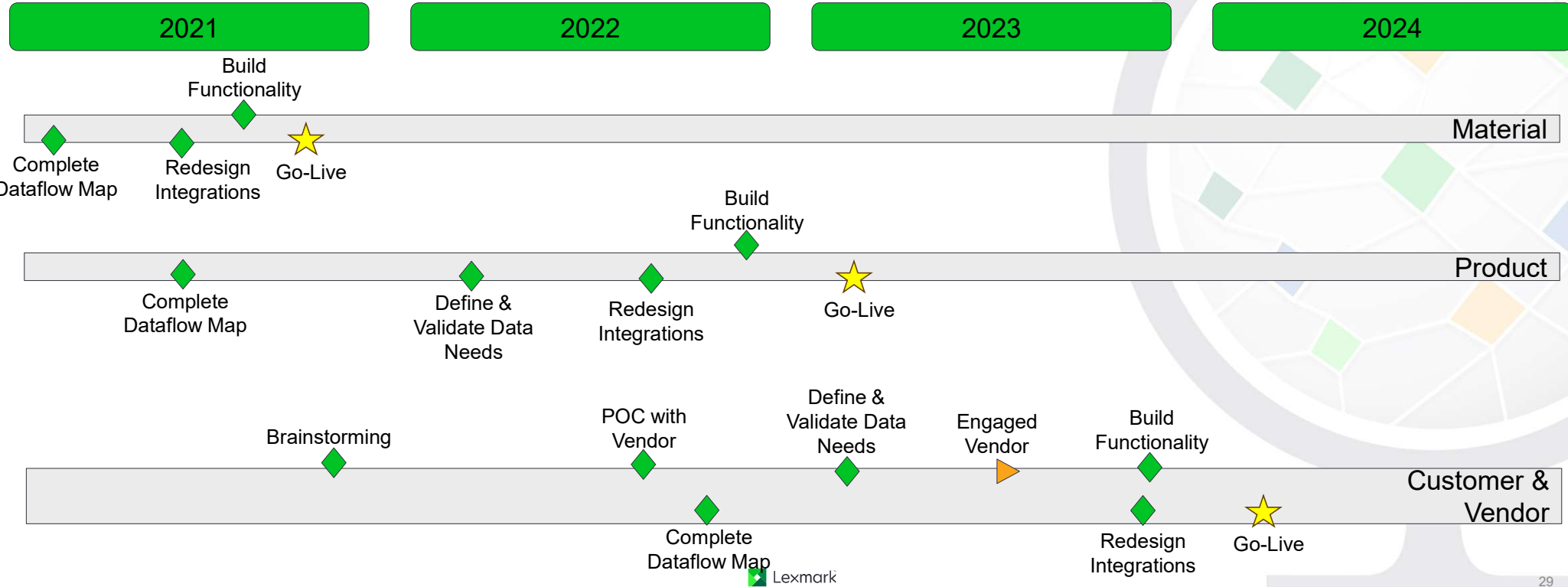
- 12 Project Steering Committee
- Project Manager 1
- 8 Data Stewards
- Data Custodians 5
- 6 Integrations Team
- OCM 4
- 20 Key Users

# Scope & Timing



◆ Completed Milestone

- How long it is going to take depends on scope.
- Here is how our change progressed...



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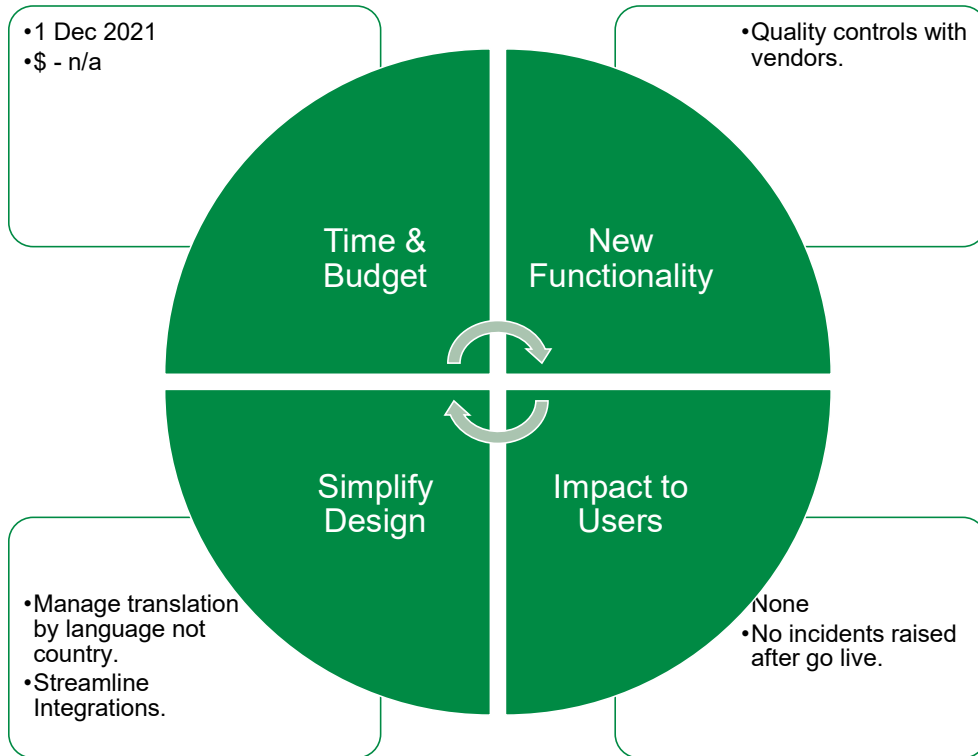


## Did it work?

- Our criteria for success and how we measured up.



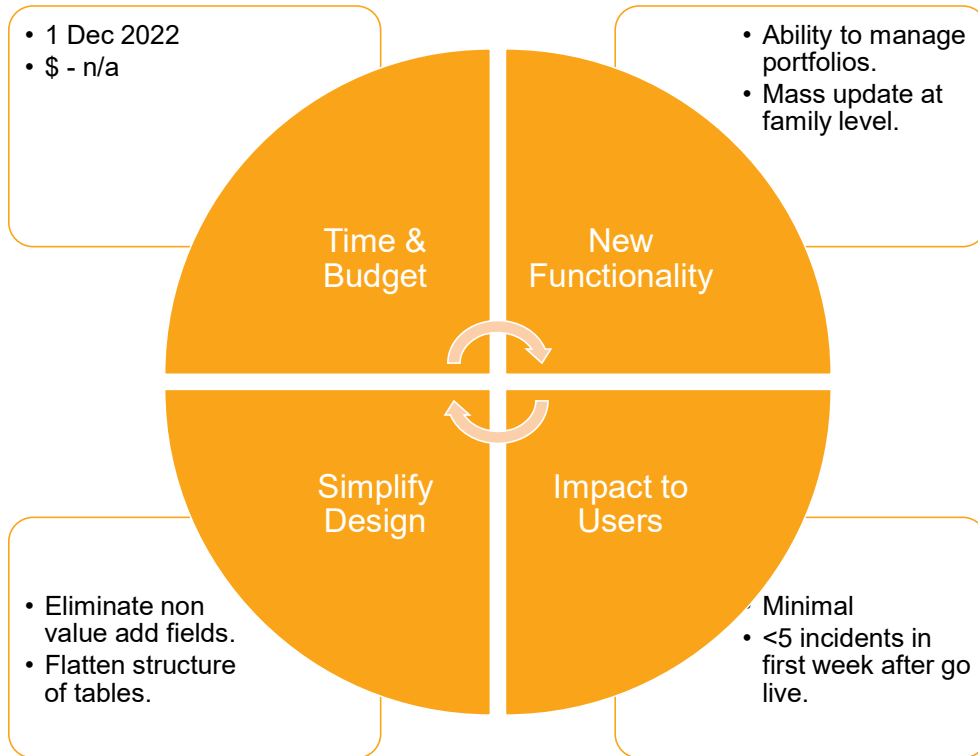
# Material







## 4 MAIN CRITERIA

- Time & Budget (informal) ✓
  - ▶ Tentative timeline of before year end → 30 Nov 2021
  - ▶ No set \$ amounts, used CI budget for IT resources
- Simplify Design ✓
  - ▶ Instead of managing translations by country and language, we simply manage it by language and have a relationship with country.
  - ▶ Reorganizing integrations was key element to remove MDM as a “pass through” system.
- New Functionality ✓
  - ▶ Improve controls to monitor when translations are pending from the vendor.
- Impact to Users ✓
  - ▶ How the translated data moves between systems has no impact to users and how they are using the information.

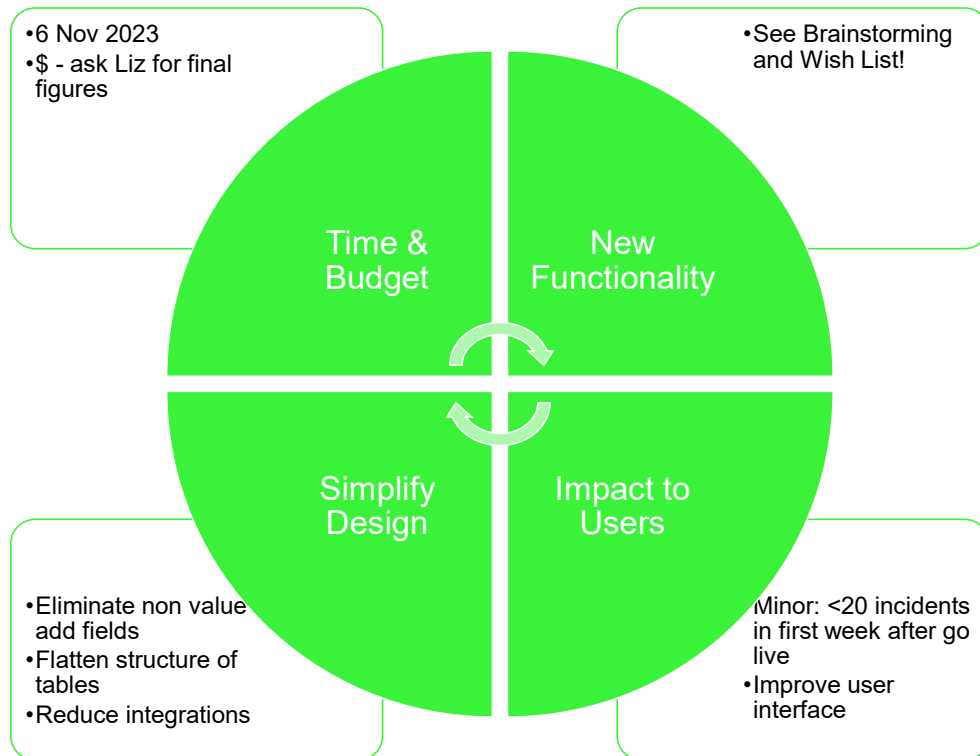
# Product





## 4 MAIN CRITERIA

- Time & Budget (informal) 
  - ▶ Tentative timeline of before year end → 1 May 2023
  - ▶ Data mapping took a considerable amount of time to get all users feedback.
- Simplify Design 
  - ▶ Identified non value add fields as part of mapping exercise.
  - ▶ Redesigned table structure and relationships to reduce size.
- New Functionality 
  - ▶ Improved user experience on how they can manage portfolios.
  - ▶ Added ability to manage attributes at a higher level of product hierarchy and have it trickle down.
- Impact to Users 
  - ▶ Had training sessions but then also worked 1x1 with users as they first used the system.

# Customer & Vendor



## 4 MAIN CRITERIA

- **Time & Budget** 
  - ▶ Go live moved 3 times. 6 Nov → 4 Dec → 15 Jan → 5 Feb.
  - ▶ As time slipped, so did the budget.
- **Simplify Design** 
  - ▶ Removed non value add fields to ensure they were not brought into the new system.
  - ▶ Flattened the structure and removed unused tables.
- **New Functionality** 
  - ▶ IT wanted Minimal Viable Product. We wanted the moon!
  - ▶ We had a lot of great plans as we went through brainstorming sessions and built our wish list, but we had to find a compromise.
- **Impact to Users** 
  - ▶ We had around 10 incidents the first week but they were mostly related to access.

# Reminders

- Do your homework!
- Get input from your users!
- Communicate! Communicate! Communicate!
- Eliminate whatever doesn't add value!
- It is going to take longer than you think!





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# DATA GOVERNANCE AND MASTER DATA MANAGEMENT CONFERENCE EUROPE

11 - 14 March 2024 | London, UK

***\*Please score and comment on this session and speaker  
in the event mobile app\****

