



DATA GOVERNANCE AND MASTER DATA MANAGEMENT CONFERENCE EUROPE

11 - 14 March 2024 | London, UK

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A PRACTICAL GUIDE TO ACHIEVING DATA QUALITY IN YOUR BUSINESS

Gerard Bartley

Wed 13th March 9:30am

GERARD BARTLEY

- Various roles in finance and data management for:



- Please feel free to ask me questions via: <https://www.linkedin.com/in/gerard-bartley/>

WHERE WILL WE GO TODAY?

- Today is a smorgasbord of different data quality activities, all wrapped around a Data Quality Matrix
- Running order will be:
 - Discussion of the **value** data quality plus some case studies
 - A data **vision** linked to the **data quality framework**
 - Then delving into each bit of the framework, e.g.: data strategy, scope, governance, documentation, training, data management processes, collection forms, tooling, reporting, post-entry correction and data management teams set-up.
 - Conclusions
- Along the way, we'll discuss bits amongst ourselves and how this impacts you.
- Some stuff you may know, other bits not. What is important is all the elements, together, in the round.
- But, importantly, this is not a **linear** journey. We'll have multiple loop-backs and no fixed break time. We'll stop when we're told to.
- Buckle up – it's fast!

FIRST A WORD ABOUT - SELL, SELL, SELL

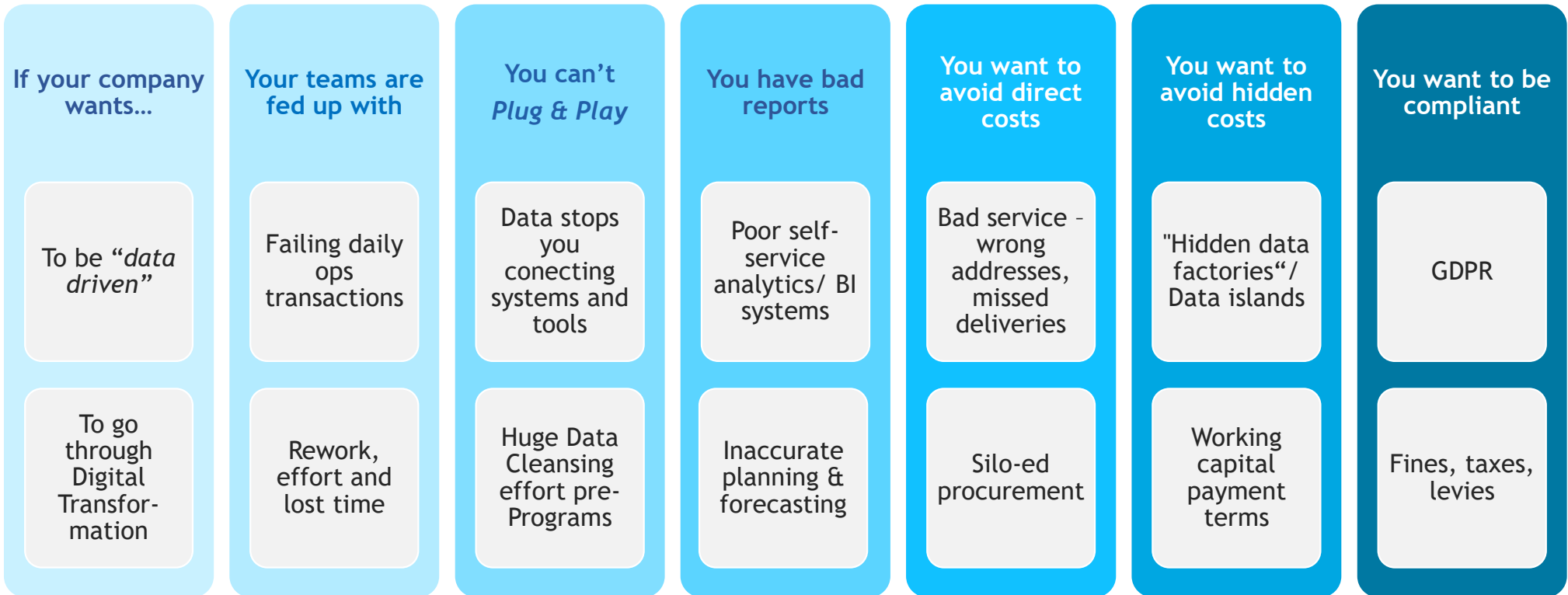
- A big part of this job is selling your message...
 - “This is how data works”
 - “Data quality is important”
 - “Bad data quality damages the business”
 - “This is how I will fix your data quality”
 - “This is how governance works”
 - “This is the resource I need”
- Without a structure, this is hard, so today you get that structure
- So you’ll see this guy pop up on key selling slides...



Sell your message

SO WHAT'S THE POINT?

YOU SHOULD CARE ABOUT DATA QUALITY IF...



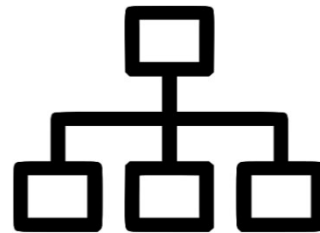
THE CAUSES OF COMMON DATA PROBLEM CAUSES



Missing/wrong/inactive owners & advisors



Unclear/missing definitions and rules



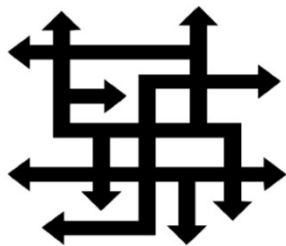
Unclear maintenance organisation



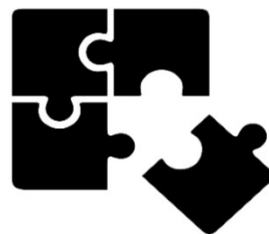
Poor data collection processes



Insufficient quality controls at the point of entry



Overly complex data set/customisation



Missing data set items

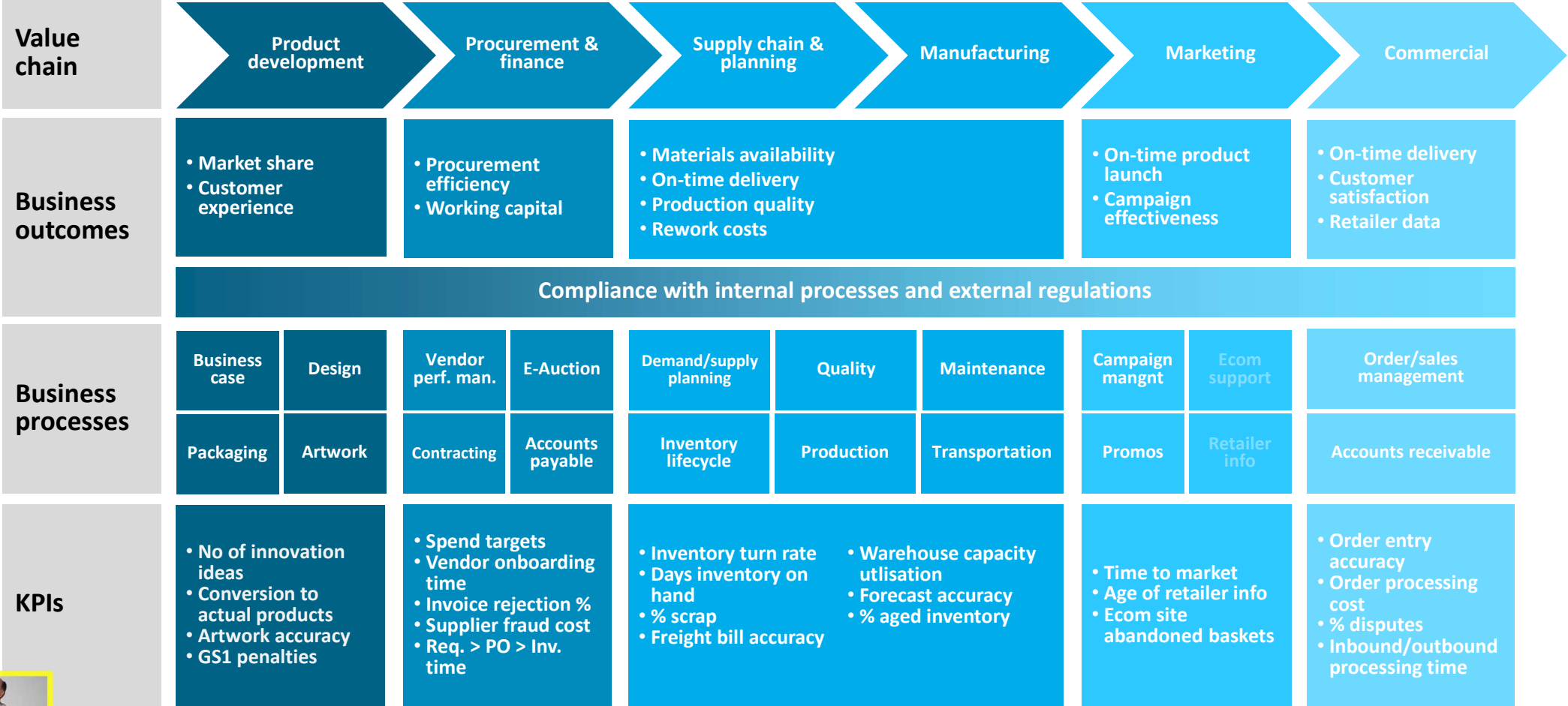


Missing training and documentation



Insufficient data quality profiling & correction processes

DATA VALUE



DISCUSSION TIME

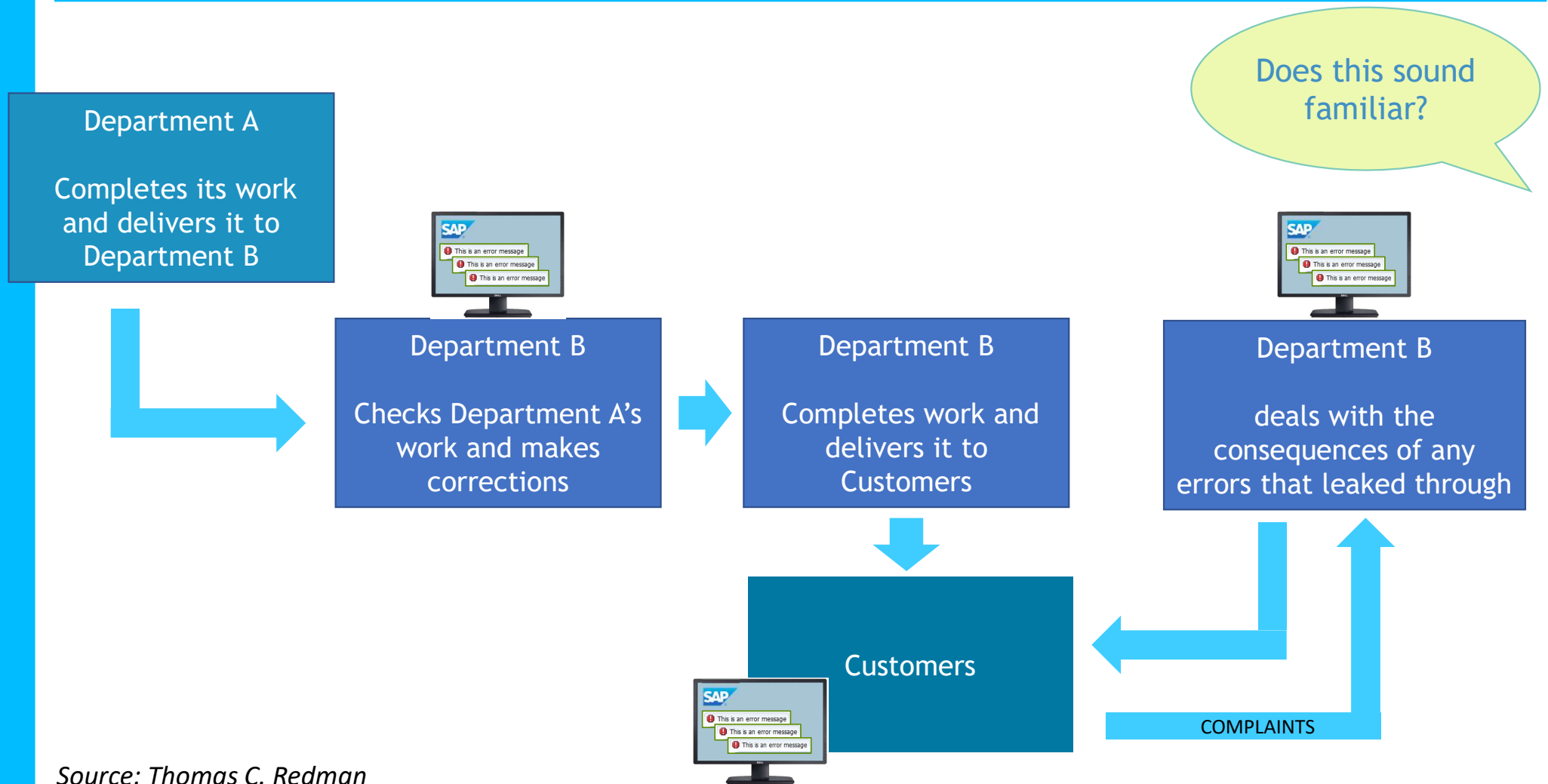
PLEASE INTRODUCE YOURSELVES AND SHARE YOUR THOUGHTS ON...

The biggest data challenges you face right now



CASE STUDIES

CASE STUDY 1 – THE HIDDEN DATA FACTORY



CASE STUDY 2 – MISSING CORE PRODUCT CHARACTERISTICS

Product hierarchy



Attributes


Brand	Range	Factory process
Counts/weights	Varieties	Packaging type
Promotions	Certification logos	NPD

CASE STUDY 3 – SPARE PARTS



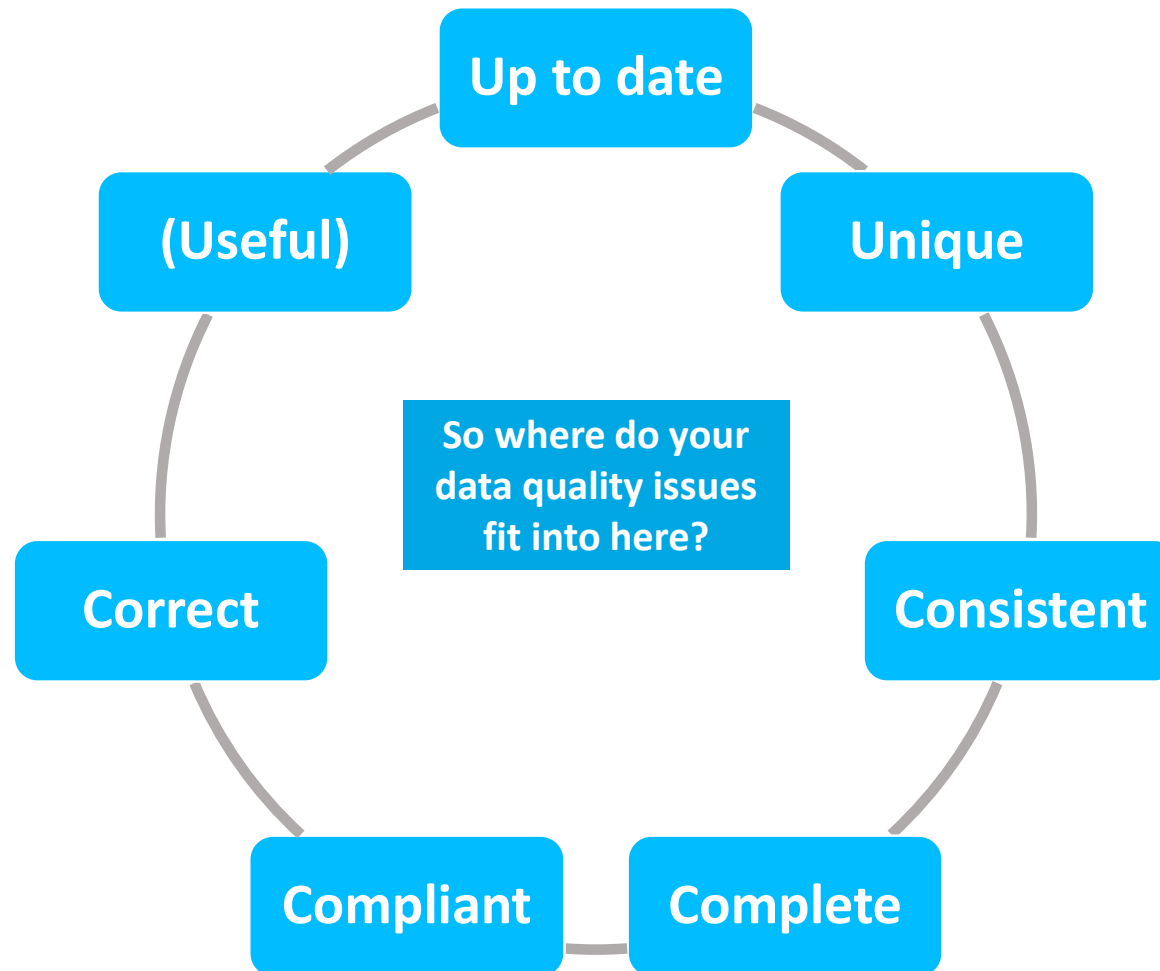
SO WHAT IS YOUR BAD NEWS STORY?



- Important to:
 - Make is real
 - Make it quantifiable
 - Make it identifiable 
 - Make it emotional...

WHAT IS QUALITY?

THE DATA DIMENSIONS



LET'S START AT THE END!

DATA QUALITY MISSION

To maintain data, at the lowest **cost**, taking the shortest **time** whilst maximising data **quality**

Governance

- A **clear** data governance network of **informed, engaged** and **active** business owners, delivering real ownership

Processes

- Efficient, effective and low cost **processes** for **maintaining** master data
- Regular **cleansing** activities driving high quality data

Data and rules

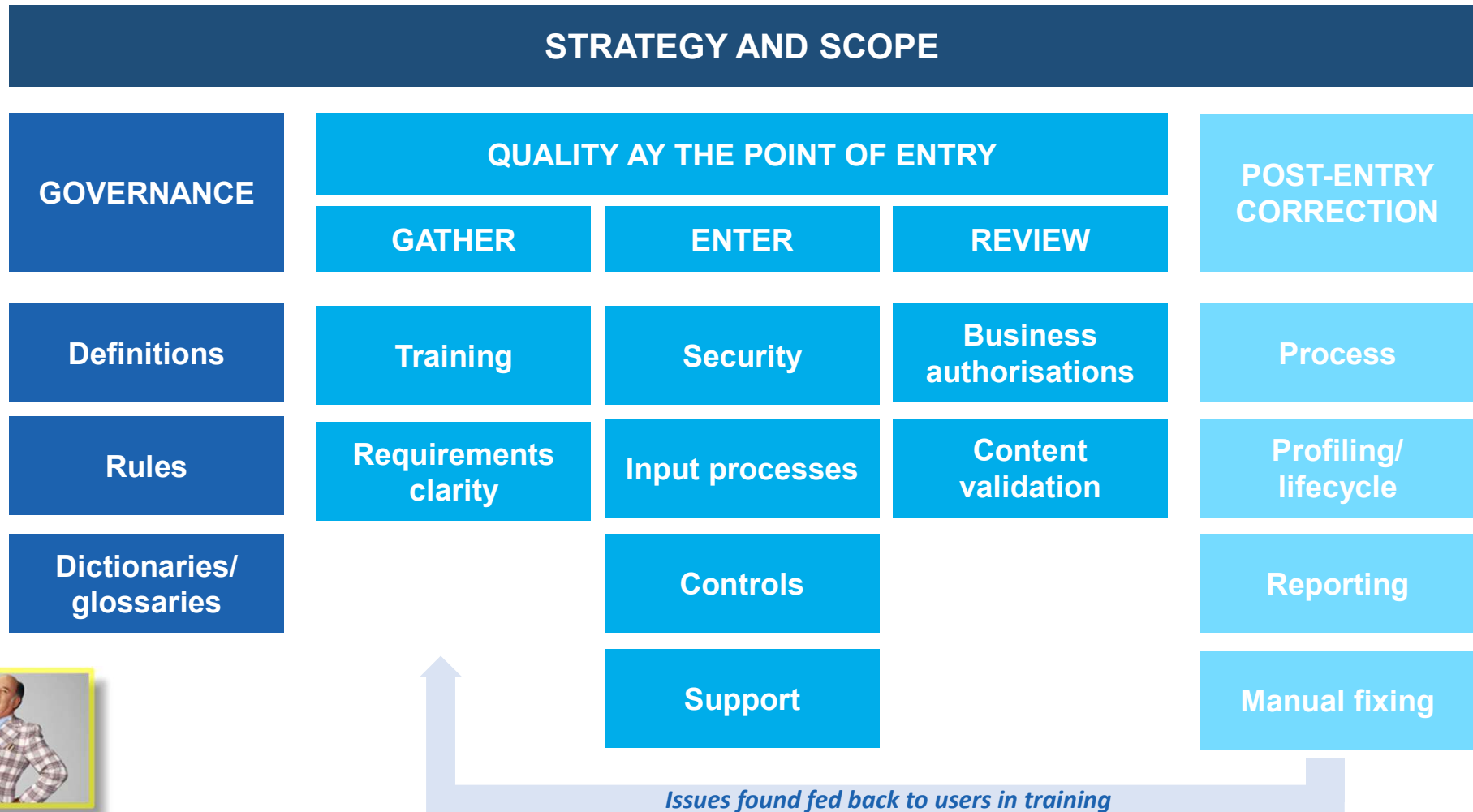
- Clearly **defined** and **documented** set of global data **objects** and **rules**, to which the data complies with
- (A **data model** which supports users' needs so that they easily get what they need)

Technology

- Simple and effective tools for the **maintenance** and **cleansing** of master data, using a high degree of automation



DATA QUALITY FRAMEWORK



A MESSAGE BEFORE WE START...

**DATA QUALITY IS ACHIEVED BY GETTING PEOPLE TO DO
WHAT THEY SHOULD DO, WHEN THEY SHOULD DO IT**

So

**MASTER DATA MANAGEMENT
IS ALL ABOUT PEOPLE NOT TECHNOLOGY**



STRATEGY

ELEMENTS OF A DATA STRATEGY

	DEFENSIVE	OFFENSIVE
KEY OBJECTIVES	Ensure data security, privacy, integrity, quality, regulatory compliance (and governance)	Improve competitive position and profitability
CORE ACTIVITIES	Optimize data extraction, standardization, storage and access	Optimize data analytics, modeling, visualization, transformation, and enrichment
DATA-MANAGEMENT ORIENTATION	Control	Flexibility
ENABLING ARCHITECTURE	SSOT (Single source of truth)	MVOTs (Multiple versions of the truth)

- It is important to be clear on broad approach **up front** as this will impact operational decisions such as where data is processed...

SCOPING

- What data should be in the scope of **your** quality framework depends on:

STRATEGY

What is the overall data philosophy of the business?

VALUE

The more important the data is to the business, the stronger the case for management

USAGE

It is more important that globally used data is controlled, than purely local

COMMONALITY

The greater the number of systems the data is used in then the greater the need for control

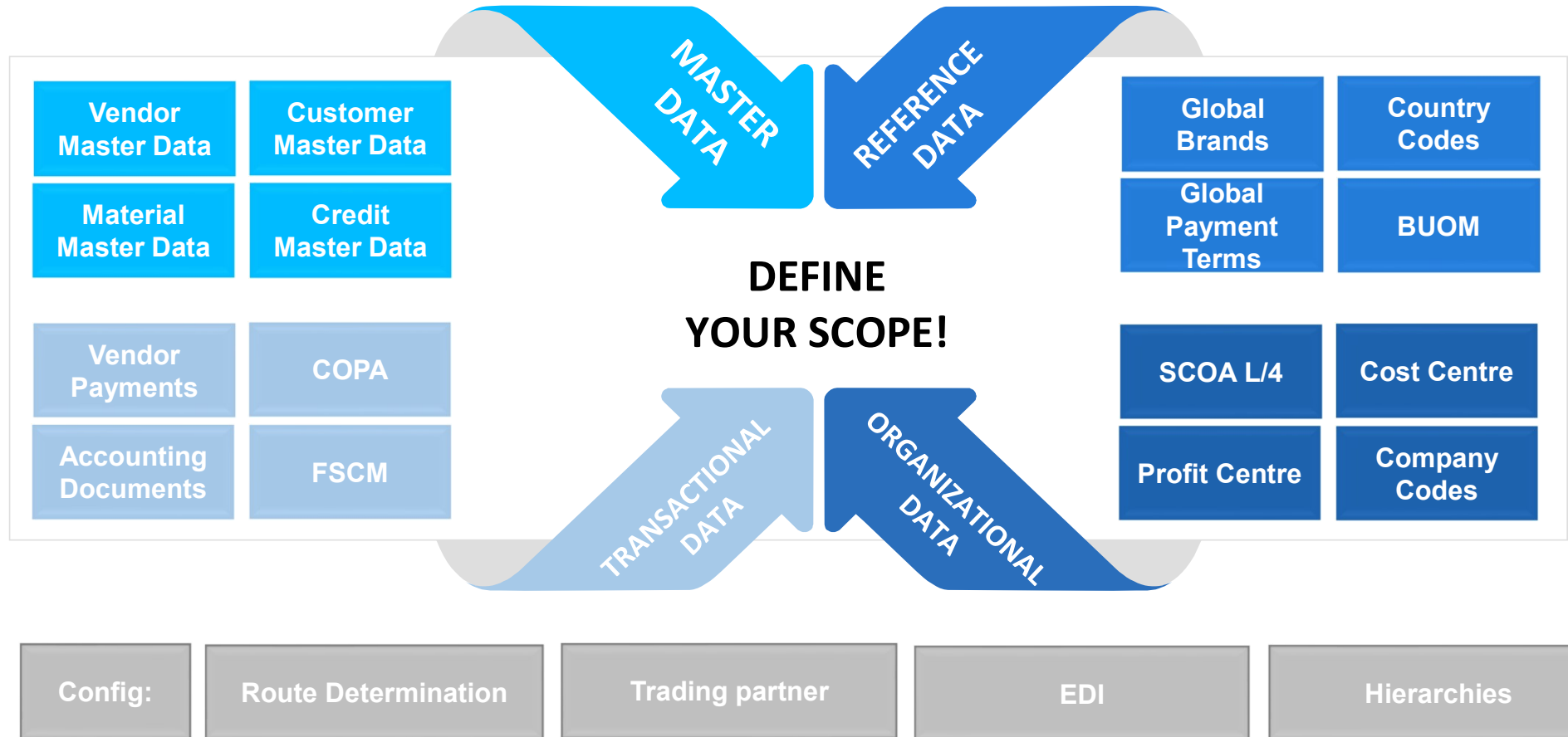
DEPENDANCY

It makes little sense to control data which is dependent on uncontrolled data

EASE

(If it is easy to control it, then do it)

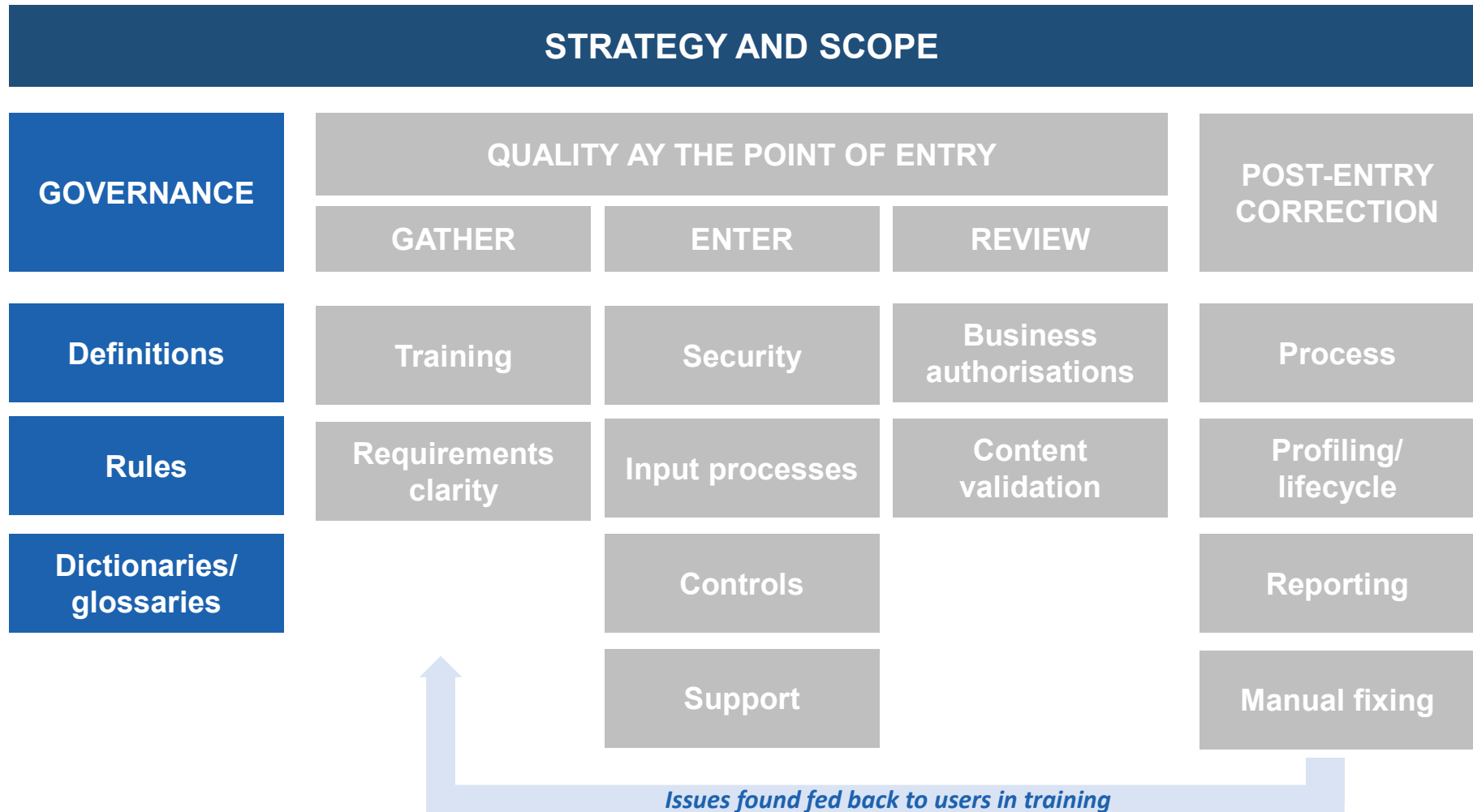
WHAT ARE THE SCOPE POSSIBILITIES



(VERY QUICK RUN THROUGH OF)

DATA GOVERNANCE

DATA QUALITY FRAMEWORK



THE CORNERSTONE OF DATA QUALITY

- Remember this?

DATA QUALITY IS ACHIEVED BY GETTING PEOPLE TO DO WHAT THEY SHOULD DO, WHEN THEY SHOULD DO IT

- Simply put, if no-one knows what they should be doing, they ain't going to do what you want them to
- Simply put, governance defines the **rules** to which the data complies
- So, a brief canter through governance...

GOVERNANCE ELEMENTS

PROGRAMME FOUNDATION AND MANAGEMENT

Vision/end-state

Scope

Management,
timeline, budget, etc.

Sponsorship &
business case

STRUCTURE AND BUILD

Framework
design

Dimensions,
structures and
rules

Functional
model

Documentation

Data model

OPERATION

Communication
framework design

Communication
materials

Recruitment
programme

Sustain programme

STRUCTURE AND BUILD

BIT MORE ON SCOPING – GLOBAL/LOCAL

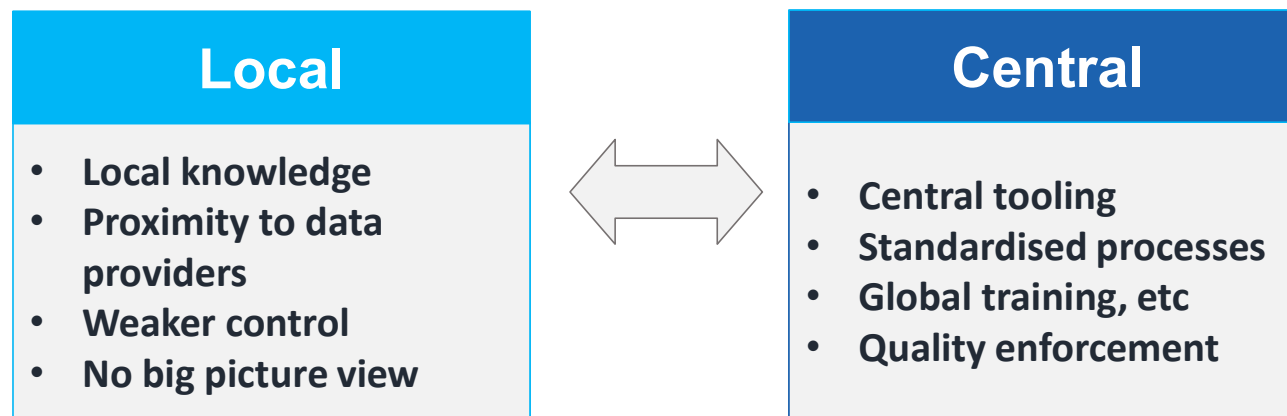
- **Global** versus **local** ownership and usage:

Global item	Local/Global item
<ul style="list-style-type: none"> • Content is defined globally • Selection is made globally <p><i>Example: Finance reconciliation accounts</i></p>	<ul style="list-style-type: none"> • Content is defined locally • Selection is made globally <p><i>Not possible</i></p>
Parent-led item (drop-downs)	Local for local
<ul style="list-style-type: none"> • Content is defined globally • Selection is made locally <p><i>Example: Base unit of measure field (Kg or Lbs)</i></p>	<ul style="list-style-type: none"> • Content is defined locally • Choice is made locally <p><i>Example: Minimum lot size</i></p>

Note!
 Technicalities,
 like field length,
 are always **global**

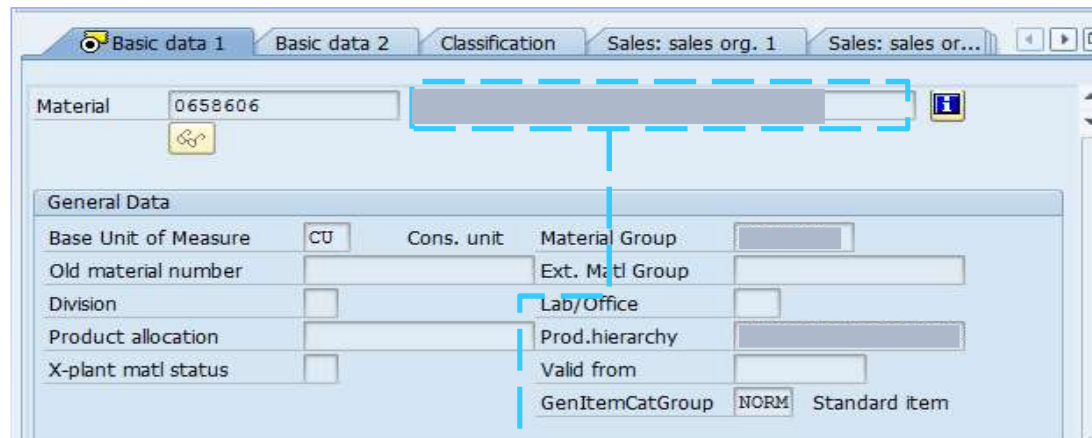
DIGGING A BIT INTO LOCAL VS CENTRAL SPLIT

- Data is:
 - Always **generated** locally...
 - And then either **input** centrally or locally.
- Which data is **input** where “depends” on business priorities (Data Strategy):



- Remember – data **ownership** may have a different central/local split!

WHAT IS TO BE MANAGED?



Detailed but necessary

3 elements come together:

Field Structure

Technical system characteristics.

Examples

- Max 40 characters field length
- Free text or drop-down

Ownership

- Always global

Field Rule

Standard formatting and sequencing of data so that the field supports business needs.

Examples

- Must contain Brand name
- Cannot contain special characters (&#amp;@)
- Mandatory / Optional

Ownership

- Can be local or global

Field Content

Business driven content of the field. (What people type into the field)

Examples

- Branded Milk Bun 4x140g

Ownership

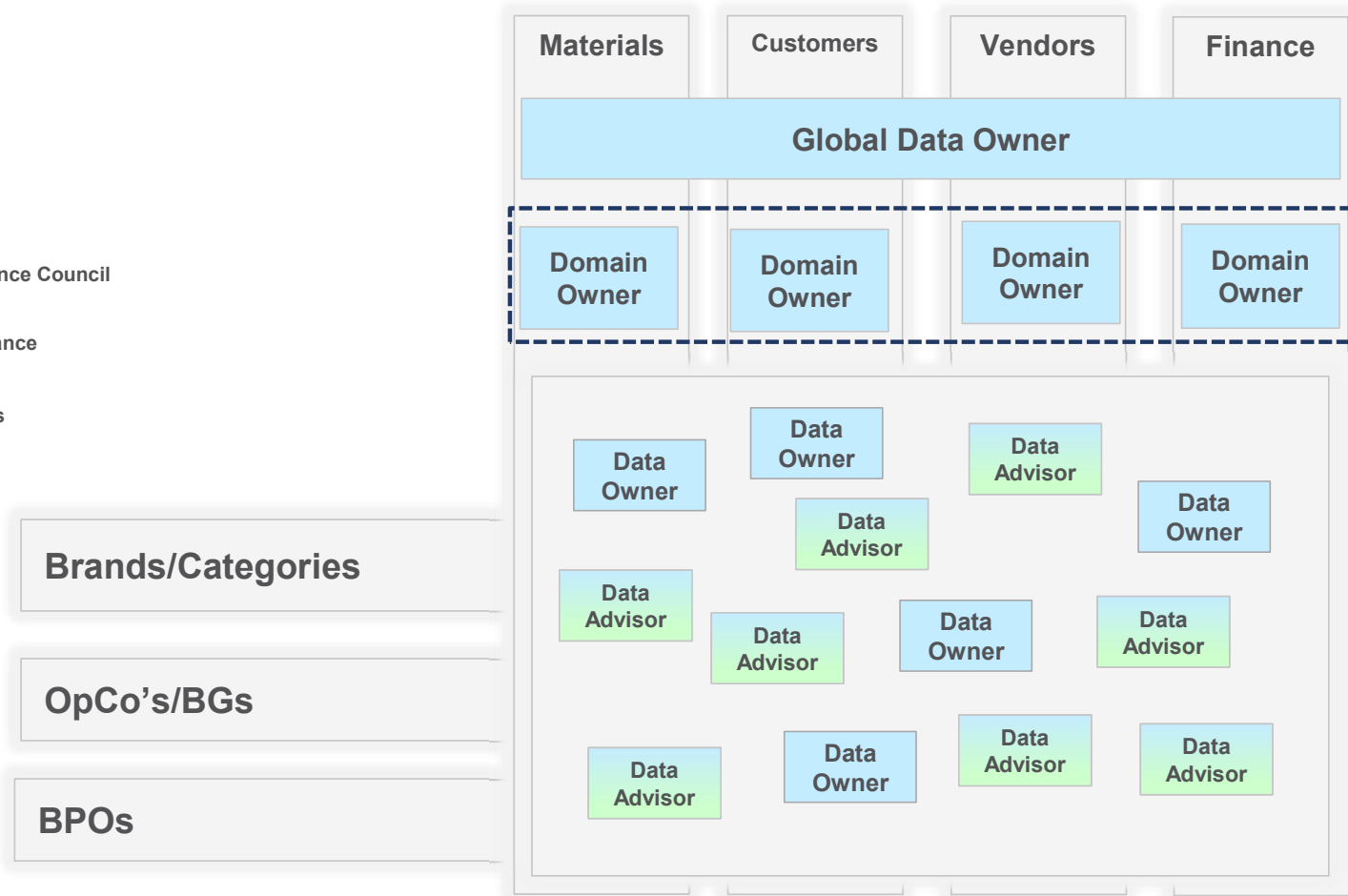
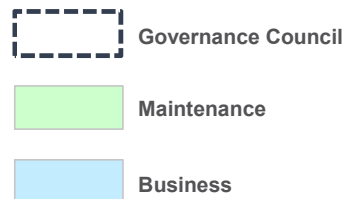
- Local for local fields and materials which are not shared;
- Global for globally shared materials & fields.

GOVERNANCE ORGANISATION

- There are different activities carried out at different levels:



ORGANISATIONAL MODEL - 1



ORGANISATIONAL MODEL - 2

- Three types of role:

Owner	Advisor	Maintainer
<ul style="list-style-type: none">• Making decisions• Point of escalation for issues	<ul style="list-style-type: none">• Advising	<ul style="list-style-type: none">• Maintaining• Training• Documenting• Fixing• Etc. etc. etc.

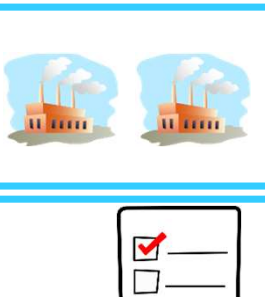

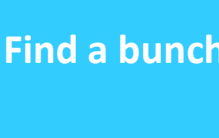
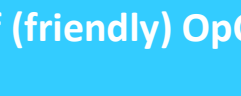


- To be clear, **this** isn't you
- You own nothing!
- You help, flag up stuff, train them, etc.
- But, **you own nothing...**

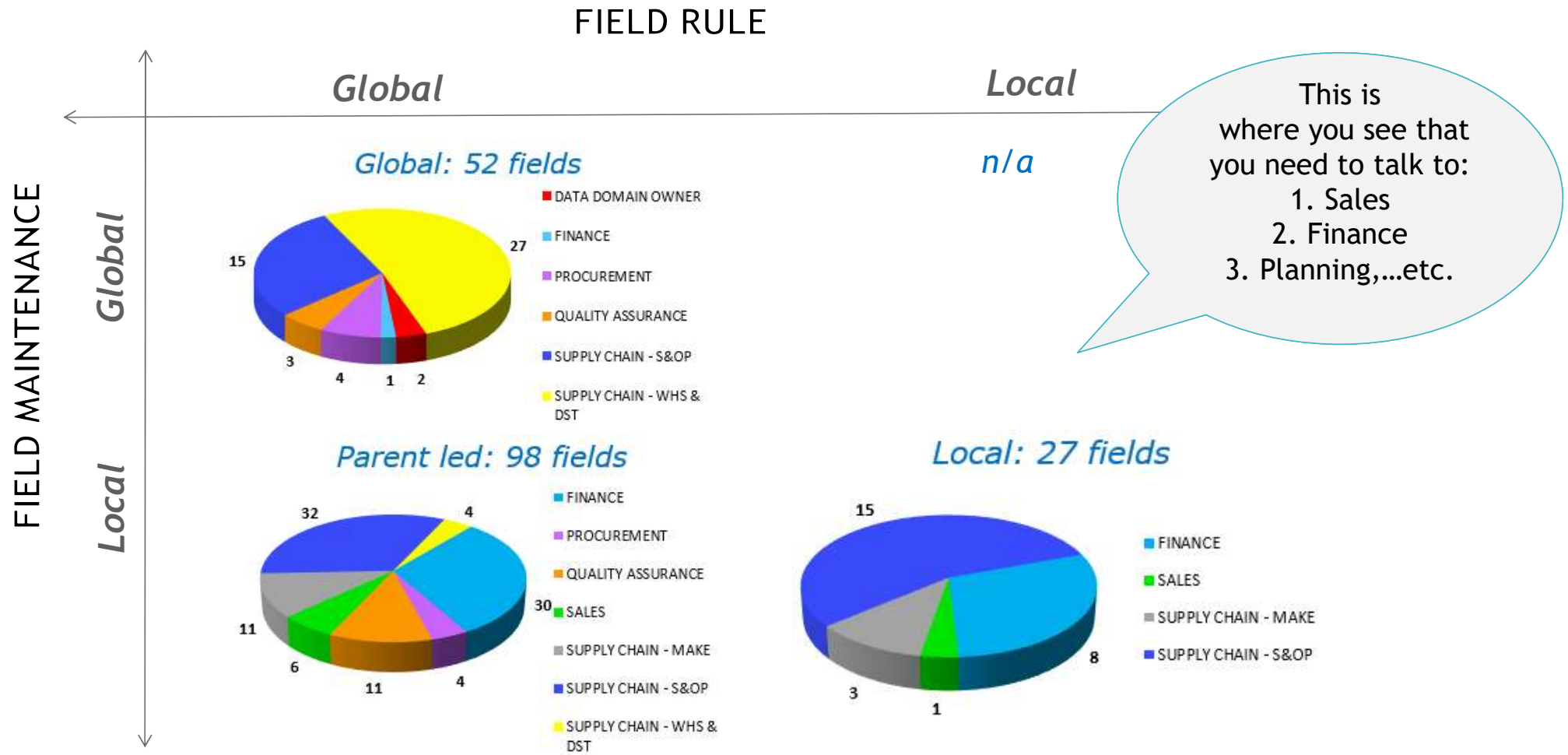


THE “FUNCTIONAL MODEL”

- It defines the groupings of **ownership** by **function** (geddit?)

Step 1		Find a bunch of (friendly) OpCos to help you
Step 2		Ask them who <u>supplies</u> them with their data – field by field
Step 3		<u>Group</u> fields by <u>like</u> data suppliers
Step 4		Go up one/two/three level(s) to find the potential <u>owner</u>

FUNCTIONAL MODEL RESULT



GOVERNANCE OPERATION

DOCUMENTATION

• Why is it important?

- Because these are your ground rules
- These words are the basis for **everything** else. The principle is, no new words!

- Documentation should describe at least 3 things:
 - What it is **called**
 - What it **does**
 - What people should **fill in** (IMPORTANT FOR LATER)

Data Standards

DS090 Business Process	... Basic
DS100 Business Partner Number	... Basic
DS101 Business Partner Name	The reason for this data standard is
DS102 Business Partner Address	<ul style="list-style-type: none"> • to uniquely identify business partners • to support the future business (MDM) framework • to support the flexibility to aggregate and disaggregate the businesses.
DS103 Business Partner Phone An	
DS106 Language	1.3 Rules for Business Partner number
DS107 Business Partner Search Ter	<ul style="list-style-type: none"> • A non-significant sequential number is uniquely assigned to each Business Partner record. The identification key (ID number) does not contain any business logic and is a system-generated number. • The rule is applicable for every system in which business partner are created/generated. • In the situation where we have deployed our Global MDM application, we expect a linkage between the number in the Global Data Repository (MDM) and the target legacy ERP application. In both systems we apply the business partner number rule but via linkage process they are 'linked'.
DS108 Transportation Zone	
DS117 Business Partner E-Mail	

List of Global Values

Internal Code	Display Value	Data Category	Global HKN Data Entities
PLJZ	PLJZ, Distributions Tarnow	Master Data	DE026 - Profit Center
PLJQ	PLJQ, Distributions Warszawa	Master Data	DE001 - Business Partner Sales
PLJF	PLJF, Distributions Warszawa Poludnie	Reference Data	DE028 - Brand
PLJ9	PLJ9, Distributions Wroclaw	Reference Data	DE094 - Global Vendor Payment Terms
PLJV	PLJV, Distributions Zamosc	Organisational Data	DE097 - Division
PLJ5	PLJ5, Distributions Zielona Gora	Organisational Data	DE112 - Trading Partners
PL77	PL77, Distributions Grodzisk Maz Ra	Organisational Data	DE800 - Controlling Area
PL35	PL35, Distributions Grójec	Organisational Data	DE801 - Operating Concern
PL07	PL07, Distributions Mszczonow Da	Organisational Data	DE802 - Company Code
PL06	PL06, Distributions Myslowice KA	Organisational Data	DE803 - Sales organization
		Organisational Data	DE804 - Distribution channel

DOCUMENTATION

FOUR COMMON MISTAKES AND HOW TO AVOID THEM:

	Wrong	Right
Target user	The IT team The migration team	Ordinary requestors
Focus	All the technical details of fields	How to request
Content	Complex	Simple
Wording	Unique content for the documentation	One set of wording for documentation, training and forms

- Documentation serves to aid the reduction of poor quality tickets.
- You are not IT's technical documentation library.

DOCUMENTATION



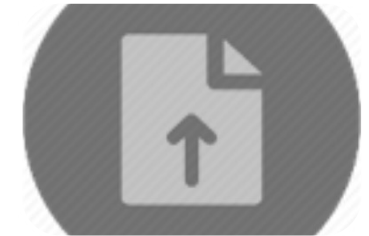
Master Data Dictionaries/
Data Object Sheets



Data Standards/
Codebooks



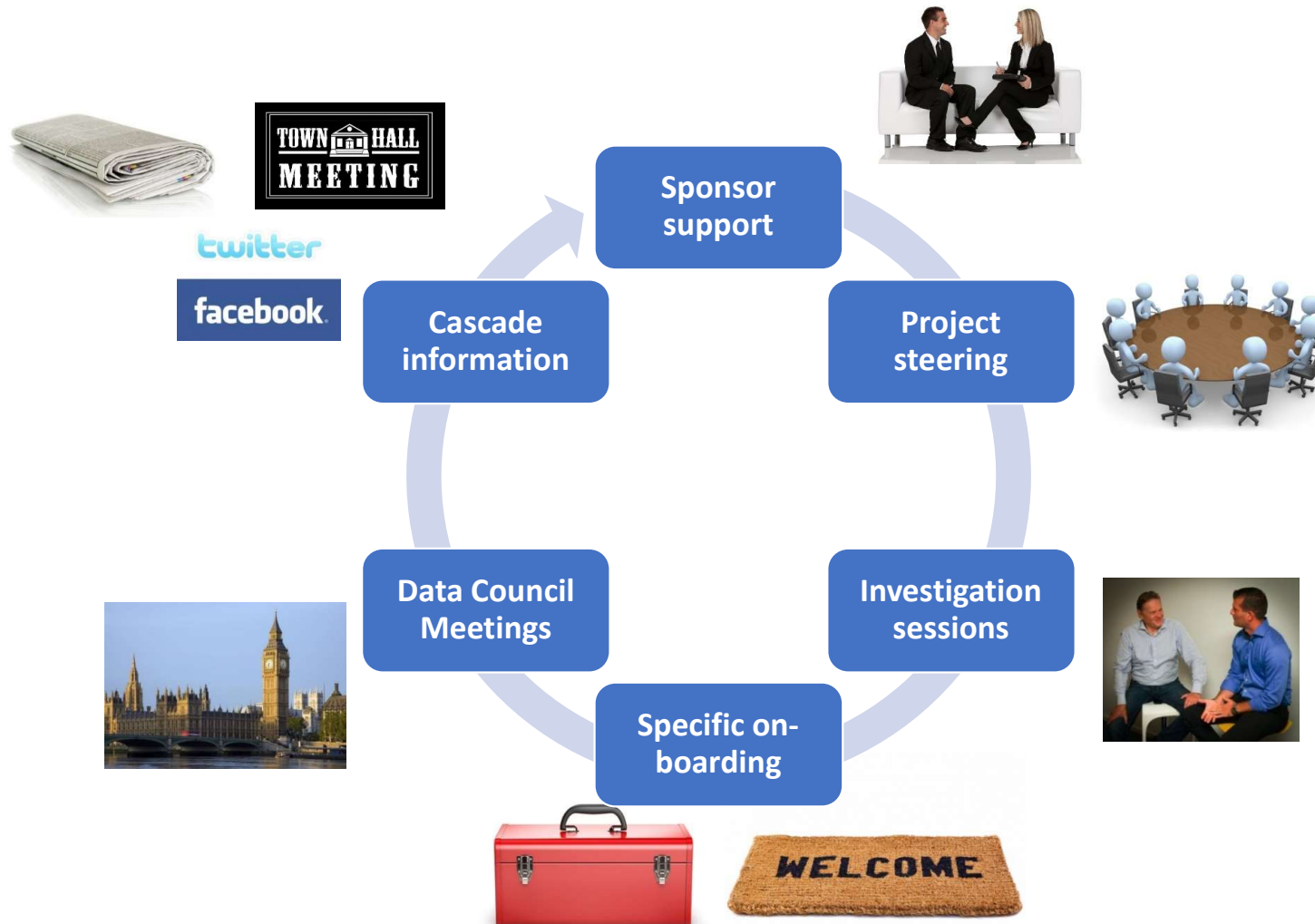
Training Materials



Documented
Governance Cases
(Position papers)

Field by field explanation:	Per Entity/Field:	Various modules:	Each case contains:
<ul style="list-style-type: none"> • Active/hidden • Free text/dropdown • Table & Field name • Mandatory/optional • Standard/enhancement • Field Status • Business Ownership 	<p>In business language, system independent:</p> <ul style="list-style-type: none"> • Big picture • What is it • Where is it used • Allowed usage • Not allowed usage • Things to watch out for and remember • Relationships with other Domains 	<ul style="list-style-type: none"> • What is (Master) Data • Data in our Company • Data Mgmt Process(es) per Data Object: <ul style="list-style-type: none"> • Customer • Vendor • Material • BOM • Cost Centre 	<ul style="list-style-type: none"> • Short summary (A4) • Input from all parties • Detailed analysis • Proposed solutions • Data Owner's decision • Follow up plan/tasks

COMMUNICATION – MATCH CHANNEL TO MARKET

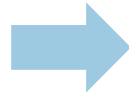


(BACK TO) CASE STUDY 2 – DEFINE STUFF CAREFULLY

Product hierarchy



Hierarchy



Attributes

Brand	Range	Factory process
Counts/weights	Varieties	Packaging type
Promotions	Certification logos	NPD

Brand	Sub-Brand	Varieties

Promotions

Packaging type

Certification logos

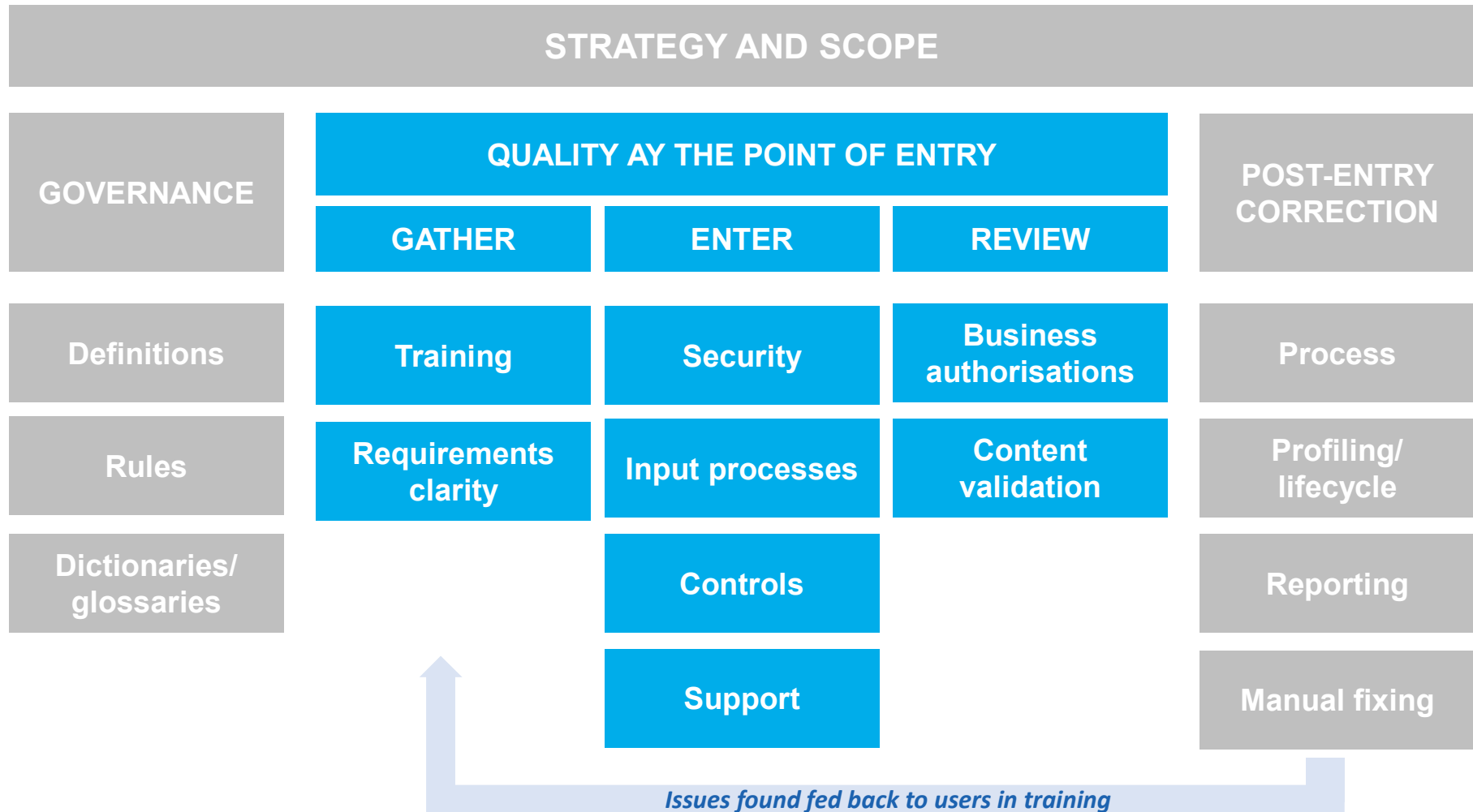
SHARE YOUR THOUGHTS ON...

Do you think you
have “real”
governance in
place?



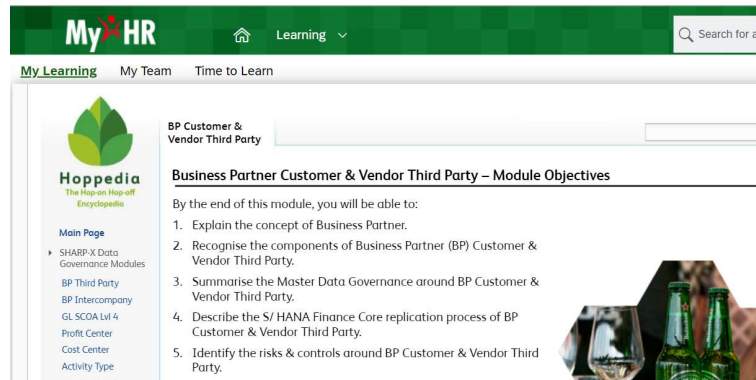
QUALITY AT THE POINT OF ENTRY

DATA QUALITY FRAMEWORK



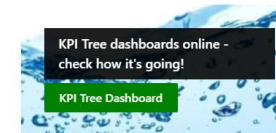
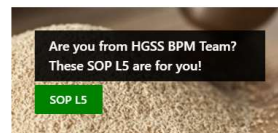
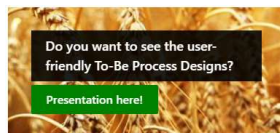
TRAINING/REQUIREMENTS - EASE OF USE

- The delivery of your forms, workflow, training, etc needs to be:
 - Easy to find
 - Clear
 - (Preferably sexy)
- Remember this is a human journey. Any additional process frustration will lead to less effort on the data entry.
- Best embedded in existing platforms (e.g. MyHR) or published on SharePoint
- Training should be available to new starters as a regular cycle plus refreshes as and when needed.
- Make sure you have good, skilled trainers.



Integrated

Available on SharePoint



USER TRAINING

- But, no-one ever really reads documentation. (They don't.)
- So, you need to work to get information into the heads of the users most efficiently.
- Hence you need to write training:



- Two formats – written and live
- Don't forget – no new words!

Vendor Contracts - Initial

Vendor
Defined here is the SAP number of the vendor for which the contract is to be created.

Agreement Type
The type of contract. Valid entries are Price Contract (ZPK), Volume Contract (MK), Main/Sub Contract (ZHK) and Local Contract (ZSK).

Purch. Organization
The organization under which the contract is made. The default entry is ...

Purchasing Group
The purchasing group for this contract.

Item Category
If the purchased product cost will be booked directly into a cost centre and/or a general ledger account, you have to define the cost centre and G/L account number here. It is mostly used for non-valuated stock materials.

Req. Tracking Number
Number that facilitates the monitoring of the procurement of required materials or services. This number can relate to a requisition note (or requirement notice/slip) that was not generated in the system.

The requirement tracking number from the purchase requisition is copied to the purchasing documents (for example: RFQ or purchase order) created with reference to a purchase requisition.

Create Contract : Initial Screen

Reference to PReq Reference to RFQ

Vendor

Agreement Type

Agreement Date

Agreement

Organizational Data

Purch. Organization

Purchasing Group

Default Data for Items

Item Category

Acct Assignment Cat.

Plant

Storage Location

Material Group

Req. Tracking Number

Vendor Subrange

Acknowledmen. Reqd

The image shows a screenshot of the SAP 'Create Contract : Initial Screen' with several fields highlighted by colored boxes and arrows. Blue arrows point from the 'Vendor' text to the 'Vendor' field. Green arrows point from the 'Agreement Type' text to the 'Agreement Type' field. Pink arrows point from the 'Purch. Organization' text to the 'Purch. Organization' field. Yellow arrows point from the 'Purchasing Group' text to the 'Purchasing Group' field. Orange arrows point from the 'Item Category' text to the 'Item Category' field. Red arrows point from the 'Req. Tracking Number' text to the 'Req. Tracking Number' field. A red arrow also points from the 'Req. Tracking Number' text to the 'Vendor Subrange' field.

SECURITY AND ACCESS

- Choices are:

	Free for all	Mandated user lists	Key user/approver lists
What	<ul style="list-style-type: none"> • Anyone can send in anything 	<ul style="list-style-type: none"> • You will only accept requests from certain users 	<ul style="list-style-type: none"> • You only accept requests from authorisers/key people
Pros	<ul style="list-style-type: none"> • Don't need to keep track of users • Cuts down noise • May be only choice in some tools 	<ul style="list-style-type: none"> • Can train them and get better quality results 	<ul style="list-style-type: none"> • Users become skilled so best quality
Cons	<ul style="list-style-type: none"> • Often poor quality requests meaning more rework 	<ul style="list-style-type: none"> • Keeping track of them is tricky • Missing any leads to delays 	<ul style="list-style-type: none"> • May get fed up as being de facto MDM team members
Conclusion	<ul style="list-style-type: none"> • Only if you have to 	<ul style="list-style-type: none"> • Good 	<ul style="list-style-type: none"> • Best

- A hybrid approach by domain likely best

INPUT PROCESSES

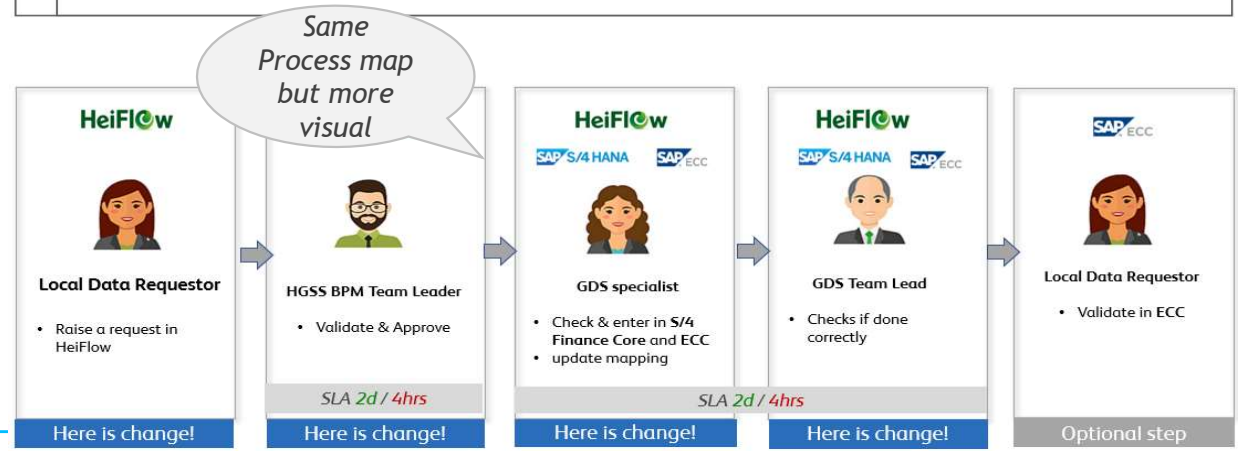
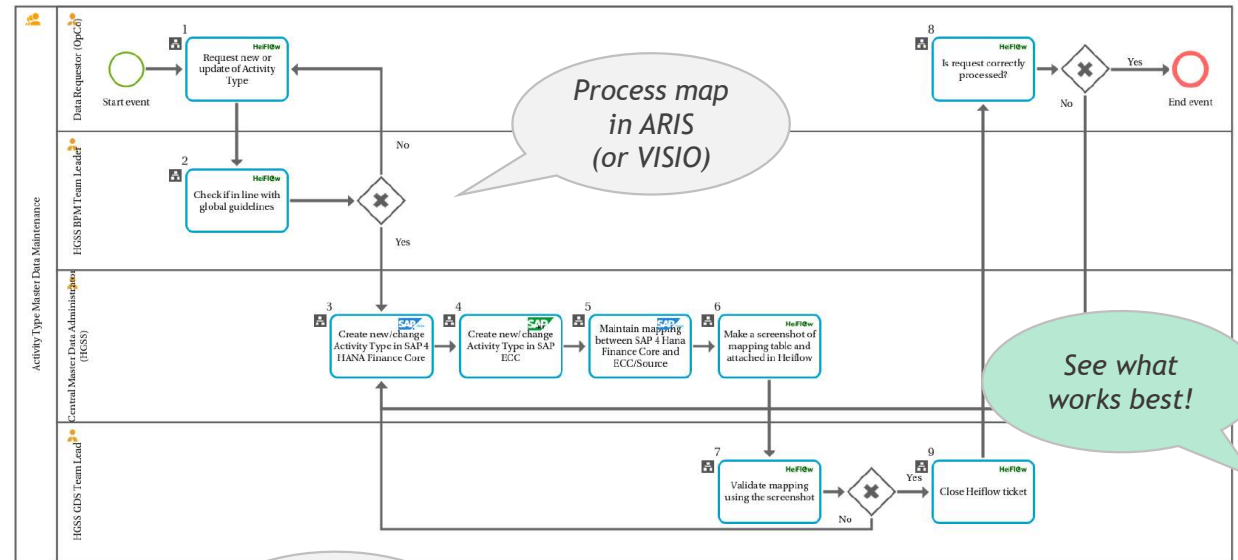
Business Process Owners define and govern Business Processes,

IT Process Owners define and govern IT Processes;

Data Process Owners (often Global or Local Data Teams) define and govern Data processes for

- MDM
- Data Governance
- Data Cleansing (DQ checks)
- ...etc.

Make sure to cover all 4 areas:
Data + Process + Tooling + People.



COLLECTION MECHANIC (aka FORMS)

- But people don't read documentation and forget training,
- For me, the **NUMBER 1** thing you can do!
- ALL starts with this, so MAXIMUM effort in here!

- It is quite simple:

The better quality of your forms the better people will fill them in.

- Hence (IMHO) you need to pour effort into them.
- This is “live” documentation, on the fly, guiding users through their data collection journey.

COLLECTION FORMS

Name, address, etc.



	Character count
Name 1 = Vendor name	0
Name 2	0
Name 3	0
Search term	
Street 1	0
Street 2	0
Street 3	0
Street 4	0
Street 5	0
House number	0
Postal code	
City (CAPITALS ONLY)	
Country	
Region	
PO box number/identifier	
Postal code (of the PO box)	
City (of the PO box)	
Region (of the PO box)	
Language key	EN
Telephone	Hint: Telephone number, consisting of dialing code and number, but without the country code, spaces and leading-zero. For example 0031 (0)33 7132234, would be entered as 337132234. The country dialing code will be automatically added by SAP using the Country key.
Fax	
Email (for information only)	
Email to send PO to SmartBuy vendor	
Email to send payment advice to	
Please choose a transportation zone	



What does good look like?

Note the:

- Multiple tabs
- Lack of clutter
- Spacing
- Clear naming
- Hints on **every** cell
- **Precision** of every word

Remember, this is a human journey through your forms

INTERNAL CONTROL FRAMEWORK (ICF)

WHY DO I NEED ONE?

- To demonstrate you have:
 - Considered how to de-risk the change request process via controls
 - Operated in compliance with the controls

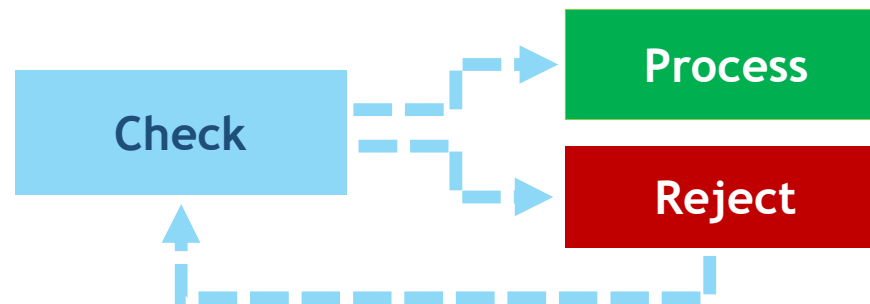
WHAT IS IT?

- Just a list of risks, the controls to address them and the audit schedule to check.

Category	Control	Evidenced/facilitated by	Type	Test frequency	Total sample number	Q1	Q2	Q3	Q4	Test
Approval	All requests are appropriately approved	- Approver "buttons" having been "pressed" on the VMF and the approver name compared to the approver list by CMDD	Manual	Quarterly	25	7	6	6	6	From the list of newly created and changed vendors (50:50 sample), trace the vendor number to the ticketing system, then to the request form. Check the form is approved. Check to the relevant approver list.
Completeness	All mandatory VMF information has been provided	Control boxes at foot of VMF not red	Manual	Quarterly	25	7	6	6	6	From the list of newly created vendors, trace the vendor number to the ticketing system, then to the request form. Check the form mandatory fields are filled.
Uniqueness	New vendors are not duplicates of items already in the system	Before a creating new vendor in the system CMDD checks whether requested vendor already exists in the system based on a name/VAT number search.	Manual	Quarterly	100%	100%	100%	100%	100%	For all vendors created in the period, run the report and examine for duplicate VAT numbers/names to existing vendors. Any occurrences to be investigated for rationale.

PREVENTION – HUMAN OR AUTOMATED CONTROLS

- Master data maintenance is all about people not IT systems.
- Essential to have a solid process with discipline:



- Notice: “fiddle around and correct the data” is NOT a step on there...
- You need to run this like a call centre. Bang – bang – bang! (But be prepared for trouble)
- Note: some of these could be replaced with robots (if you have good manual processes).

AUTO UPLOAD

- If you are still typing stuff in that you collect, you need to stop that.
- Why? 2½ reasons:
 - Automated upload eliminates errors – no rework.
 - Elimination of typing effort/cost but also of checking effort.
 - (Helps creates a slick human process. Receive > check > load/reject. Bang – bang – bang.)



- How?
 - Various **loading systems** are available. (A good one is WinShuttle.)
 - You build script into your Excel forms. Steward pushes the button. In it goes.
 - Follows SAP authorisations, so impossible to mess up.

WORKFLOW – BE CLEAR WHY YOU WANT IT

- Yes, by all means but you've got to do all the previous to get it to work!
- So forms, processes, rules, mandated user lists, etc.
- Word of warning... Be clear on WHY you are buying a workflow

GOOD REASONS



- Speed up local processes
- Give clarity on request statuses after receipt (ticketing system)

BAD REASONS

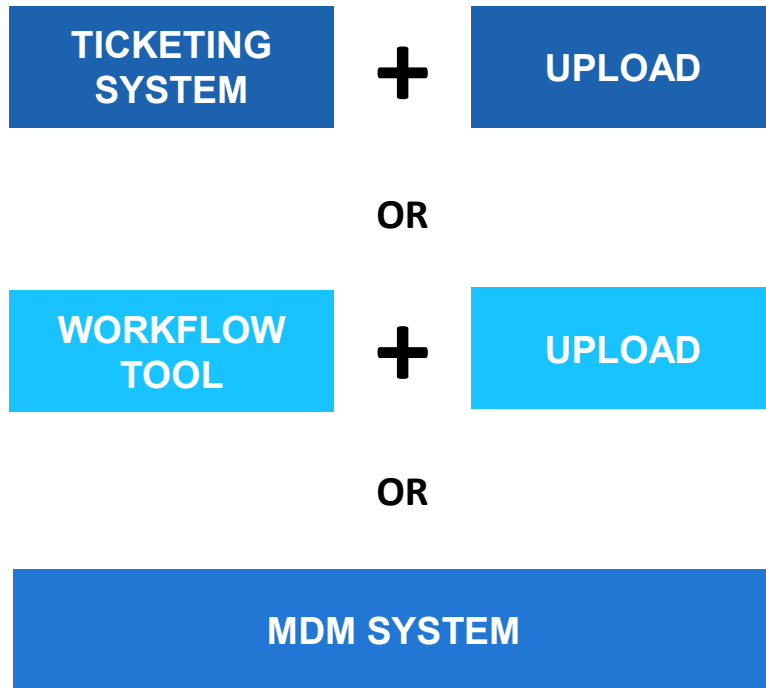


- Implement governance
- Fix all your quality issues directly
- (Reduce cost)

- Do 2 business cases: basics + workflow
- From a quality viewpoint, leave the big MDM solutions alone for now. (Unless you are distributing data...)

MDM TOOLING CHOICES

- Choices are:



VALUE

- How useful is that data or what would be the impact if it were wrong, unavailable, etc.

VOLUME

- Large volume of data benefits from management far more than small volumes

CHANGE

- Data which does not change frequently is less likely to need management

SPREAD

- If data is used across several/many systems then ensuring it is consistent across all will be a challenge

COMPLEXITY

- Complex items like materials may benefit from automisation

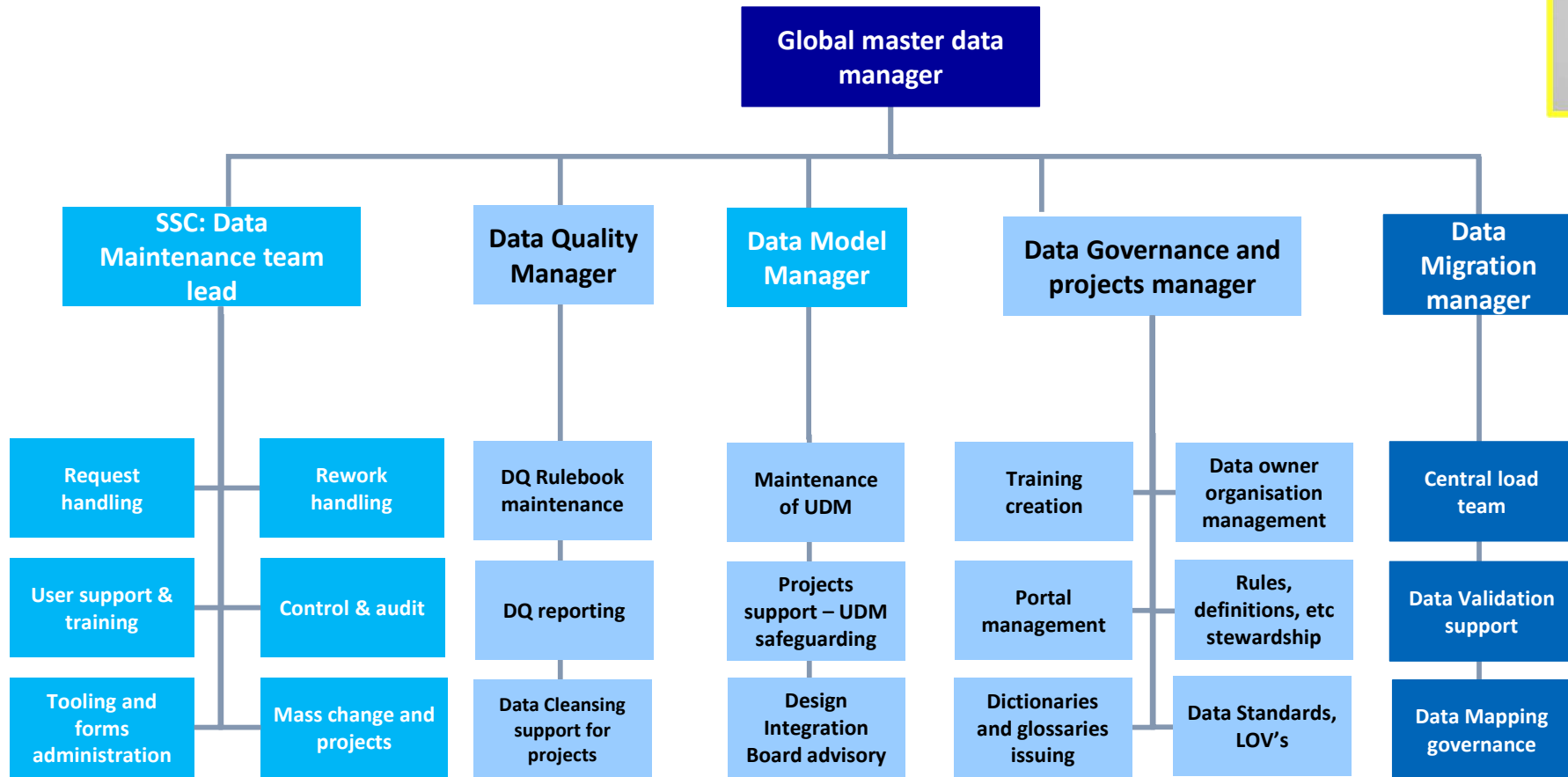


SHARE YOUR THOUGHTS ON...

Do you think you are doing the maximum for quality at the point of entry and if not, why not?



THE MDM GLOBAL TEAM - example



AUTHORISATIONS AND APPROVALS

- Really, really, tricky! (More than you think.)
- So, you send forms to managers and they'll sign them off. Quality must be great and all is well...
- Two stories...
- So, beware “fake” approvals. Sure, you have a legal/reputational cover but be realistic as to what you expect and what others expect of you
- Concept of “oven ready”
 - Expectations
 - No audit trail
- However, the setting of expectations about no safety net will improve care and attention

WORKFLOW TOOLING

- Yes, by all means – it does help to prevent Data Quality issues.
- But you've got to do **all** the previous to get it to work! It's not a magic wand.
- So forms, processes, rules, documentation, data owners, training materials, trained users, etc.
- Word of warning... Be clear on **WHY** you are buying a workflow

GOOD REASONS

- Speed up local processes
- Give clarity on request statuses after receipt (ticketing system)



BAD REASONS

- Implement governance
- Get better data quality



- Do 2 business cases: basics + workflow
- From a quality viewpoint, leave the big MDM solutions alone for now. (Unless you are distributing data).

MDM TEAM PERFORMANCE & REPORTING

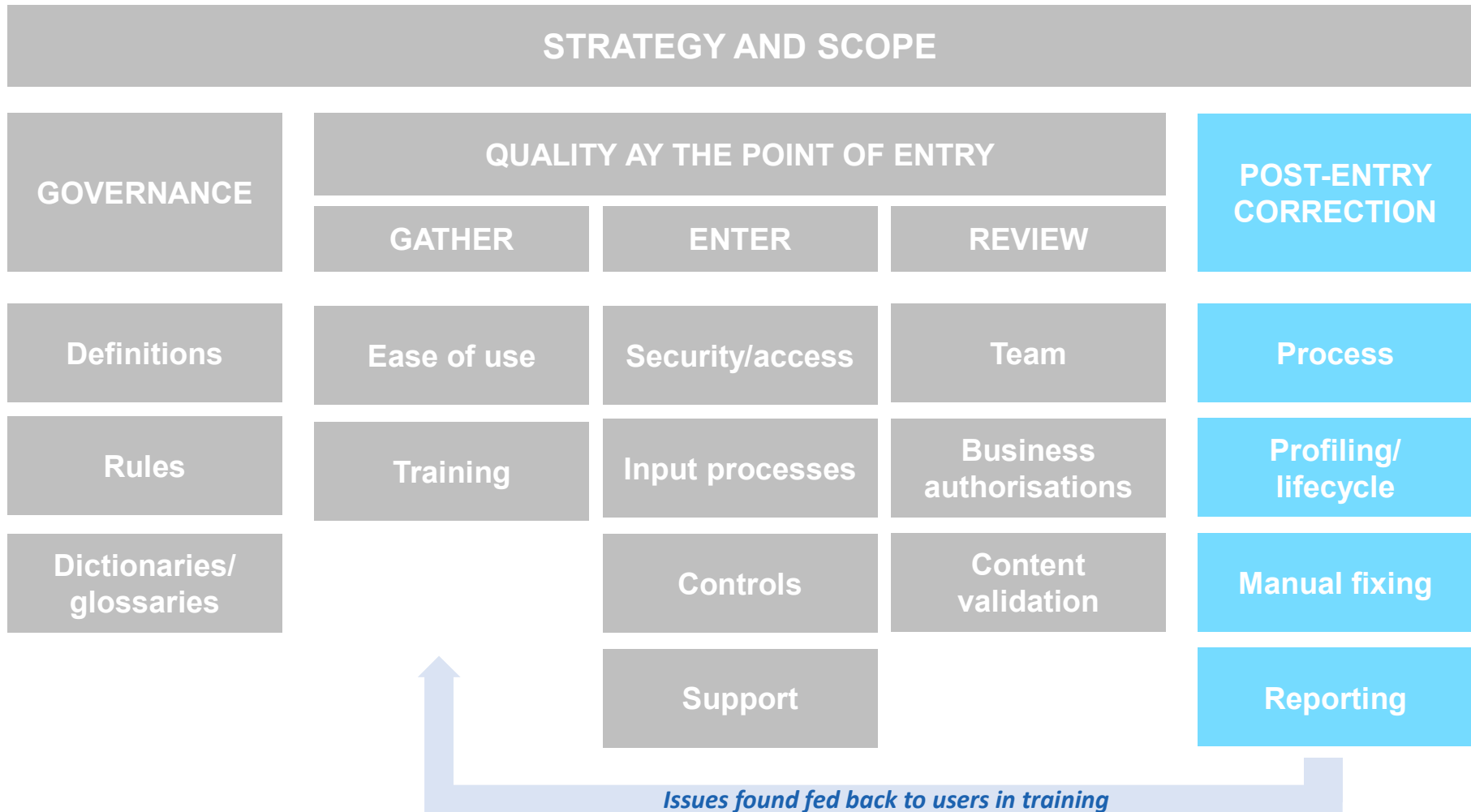
What to feed back to the business?

- **What is being requested:**
 - Good for planning
 - Useful for the business, e.g.: lots of new vendors discounts central control or a “partner” based supply chain
- **Who is requesting:**
 - Used to calculate recharge of costs
- **Who is getting requests wrong:**
 - Directing training or escalation
- **Team performance:**
 - E.g.: tickets dealt with and performance versus SLAs*
 - Used to improve the team
- **If you don't have some kind of tooling, you just can't do this...**

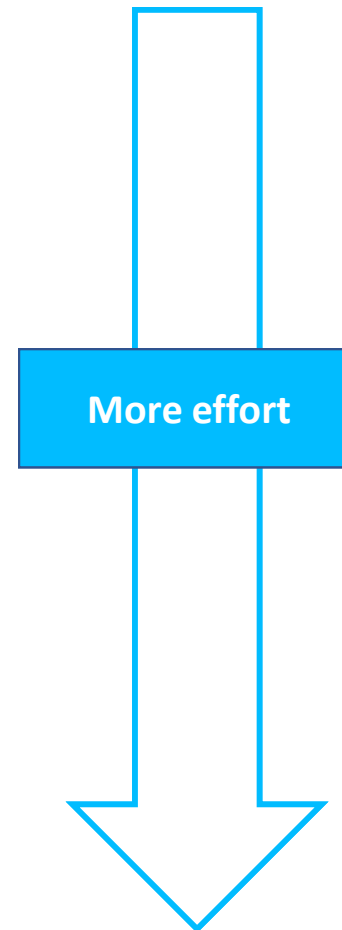
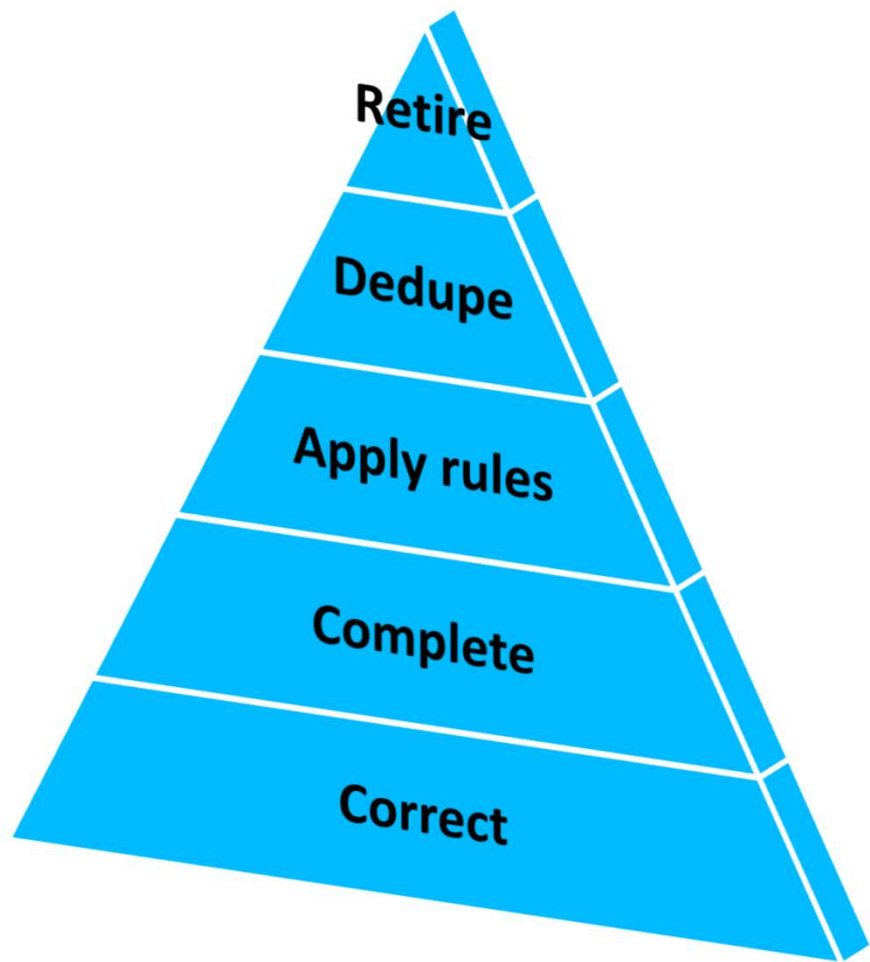
** - intra small team comparisons are difficult and dangerous. Careful of setting KPIs.*

POST-ENTRY CORRECTION

BACK TO DATA QUALITY FRAMEWORK



PERIODIC CLEANSING PROCESS



PROFILING

This is where you find out if your data does or does not obey your rules. You'll need some tooling for this.

Three choices:

- **DIY** – Excel/VBA/Access
- **Modified analytics tool** – E.g.: Every Angle, KPMG Sofi, Power BI, etc
- **Dedicated** – E.g.: Trillium or Informatica.

Rules:

- Any record not complying with the rules gets pulled out and investigated

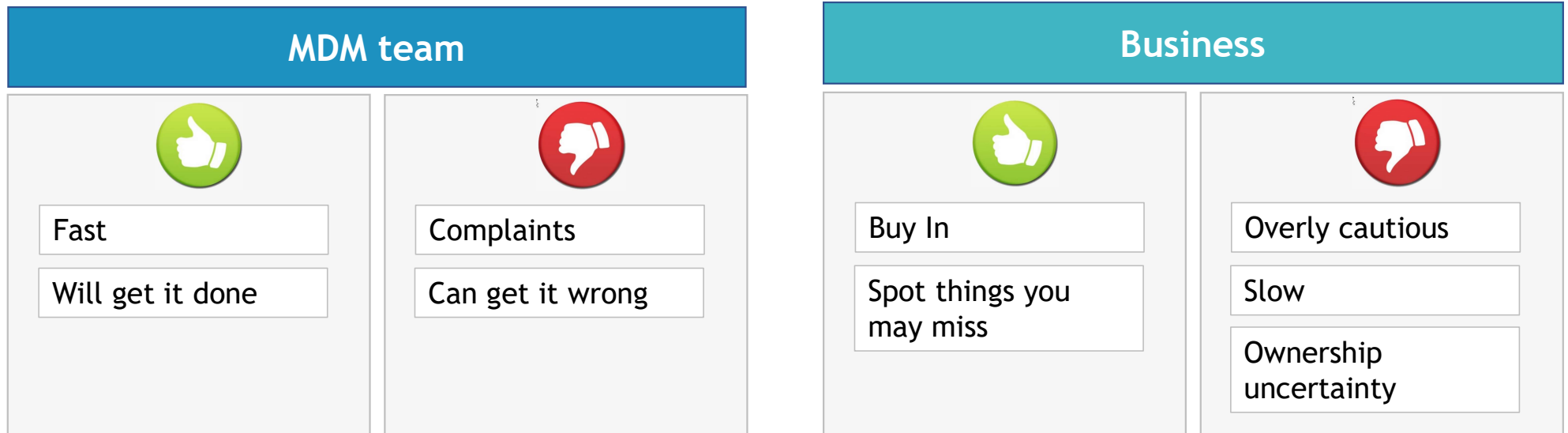
Business rule details						
Entity ID	2072					
Rule Name	BR_25 (Rulenr 23)					
Description	Field Name = TELF1. Check if format is correct: no country code, no special character, no leading 0					
Failing Rows	2156					
Total Rows	20600					
Rows Processed	20600					
Lifnr	Land1	Name1	Erdat	Ernam	Telf1	
0000121144	DE	Volkswagen	20150422	Volksw001	0351 84240	
0000143514	DE	Daimler	20150422	MONDAS01	0351/482036-0	
0000121186	DE	Exor	20150422	MONDAS01	03332 43510	
0000101322	DE	BASF	20130517	LEIJSR01	03496 512100	
0000122375	DE	Nestle			01 0351-83393110	
0000143523	DE	Siemens			01 0351/85348-730	
0000143060	DE	BMW			01 0351 839 99--99	
0000151819	DE	Bosch			+49 (0)1522 8...	
0000143556	DE	Arcelor			01 035205 6090	
0000143554	DE	Airbus			035263/68687	
0000121866	DE	Peugeot	20150422	MONDAS01	035263/440	
0000143692	DE	Unilever	20150422	MONDAS01	0351/210806-0	
0000143751	DE	Repsol	20150422	MONDAS01	035955/44792	
0000121139	DE	Saint-Gobain	20150422	MONDAS01	03529-5615-0	
0000121433	DE	Novartis	20150422	MONDAS01	035797662-0	
0000143054	DE	Renault	20150422	MONDAS01	035952 406--0	
0000122349	DE	Bayer	20150422	MONDAS01	035936/36-0	
0000121651	DE	ThyssenKrupp	20150422	MONDAS01	035936-395-0	
0000121872	DE	Rio Tinto	20150422	MONDAS01	0355/711330	

Note:
the differences to the
telephone number rule

Which is up to you, but:

- ⚠ Don't get scammed into buying a load of useless features
- ⚠ You will have to invest significant time/effort into getting it properly working (and don't even think about it if you've not done the rules)
- ⚠ You'll need a level of ongoing expertise in your team to keep it working = cost

WHO FIXES IT? – 1/2



- Whichever gets to do it, you can't just send a big file out and say "*fix that*"!
- Instead, **be clear of what is expected**. Often, not one owner of the thing to be fixed. People are busy so often this doesn't get done.
- **Build relationships with the "fixers"**; be prescriptive - need to be clear on what you want them to fix, how and by when. Have an escalation path, if it is not happening (governance)!

WHO FIXES IT? – 2/2

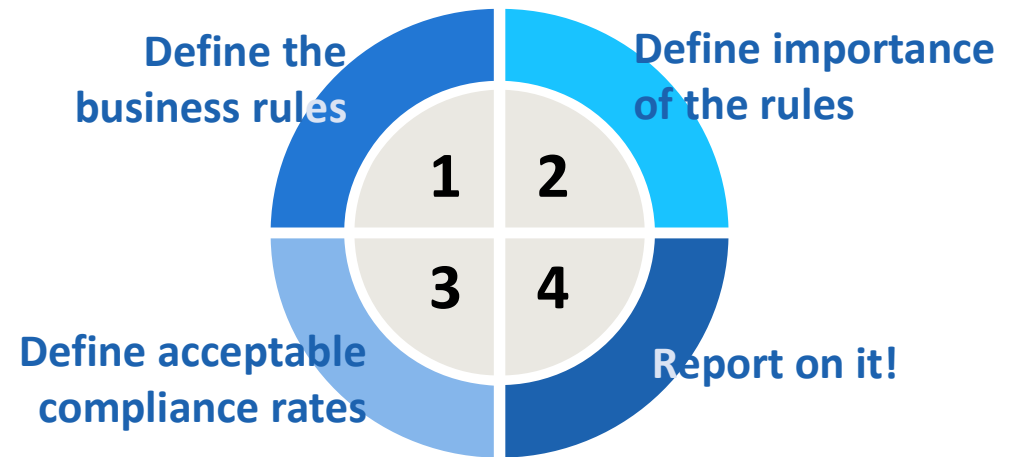
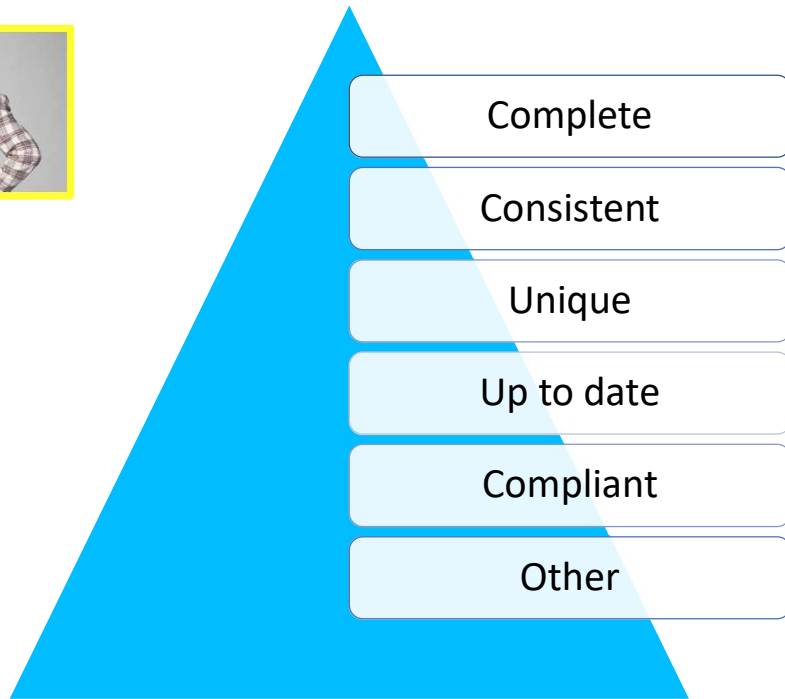
Despite you owning nothing, you could still make “minor” changes.

- **For example:** Vendor de-duplicates; Legal name changes; VAT numbers.
- **But not:** Production stuff; Bank data, etc.
- **But, need:**
 - Clear operational parameters;
 - Sign-off of the rules of engagement from someone very senior;
 - Standard communication - matter of routine;
 - Have an escalation path, if it is not happening (governance)!



KPI'S

- Choose the relevant dimensions that you will focus on



- Note: you can never come up with an **overall** data quality “number”;
- Instead, always **split it into the different dimensions**.

REPORTING & KPIS

So what is your reportable KPI?



- Having done extensive research, there is no right answer...
 - Of his customer addresses, a sales manager would say **100%** is the only acceptable number.
 - Of his vendor addresses, a procurement manager would say **100%** is the only acceptable number.

How about aiming for 100%; but as we need time to fix (on the big rules) we operate with a 4% buffer, i.e.: **96%** run rate?

Hence, **useful to split the KPIs/reporting based on the specific dimension, e.g.:**

- ✓ % complete
 - ✓ % timely
 - ✓ % unique
- being the biggest ones.



DUPLICATES REPORT	
score	85%

DUPLICATES REPORT	
score	85%

DUPLICATES REPORT	
score	85%

What is
Red
Orange
Green
for your company?

REPORTING AND KPIS

EXAMPLE

- Take 100 vendors:

Rules	Importance	Fails	Quality %
A - Every vendor must have a VAT number	High	8 vendors fail this rule	92%
B - Every vendor must have their city in their search term	Low	30 different vendors fail this rule	70%
Total “fails”		38 “fails” in total	62%

- So is your “quality” really **62%** or is it really **92%**?

Rules	Importance	Fails	Quality %
A - Every vendor must have a VAT number	High	8 vendors fail this rule	92%
B - Every vendor must have a postcode	High	The same 8 vendors fail this rule	92%
Total “fails”		16 “fails” in total	84%

- So is your data quality **92%** or **84%**? Is it “fails” or “failing vendors”?

TAKE AWAYS

- So, going home, please consider:
 - **What** are your **data problems**? So look to the **Dimensions**
 - **Where** do they **come from**? So look the **Issues** list
 - **How** to **fix** them? So look to the **Quality Framework**
 - **Which** to **fix**? So look to the **Value** statement
- Tips:
 - Get your **basics** right first, before embarking on more elaborate – governance, rules, processes and forms first
 - Be careful just how much tooling you buy
 - You need to sell your message at every point

Thanks and goodbye



My details: <https://www.linkedin.com/in/gerard-bartley/>

A screenshot of a LinkedIn profile card for Gerard Bartley. The card has a red header with the text 'TOP 100 2021' in white. Below the header is a circular profile picture of Gerard Bartley. To the right of the profile picture is a green checkmark icon. Below the profile picture, the name 'Gerard Bartley' is followed by '- 1st' and 'Independent Data Consultant'. Below that, it says 'Newcastle upon Tyne, England, United Kingdom' and 'Contact info'. Further down, it shows '2,473 followers' and '500+ connections'. At the bottom, it says '208 mutual connections: Aaron Zornes, Juan Gorricho, and 206 others'. There are two buttons: 'Message' and 'More'.



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****



Managing information and knowledge

- Different approach to managing the data itself...
- **Knowledge collection**
 - You have to **drive** it...
 - You do the **collecting, editing, storage** and **presentation**
 - You do not **own** the content – that is **governance**
- **Presentation**
 - Less is more – 3 bits only:
 1. What is it **called**?
 2. What does it **do**?
 3. How do I **use** it?
 - Bring it alive
 - Assume no knowledge

Master Recipe – Materials List

The screenshot shows the 'Materials' tab of a SAP Master Recipe. It displays a table of material component assignments for material 0820308 at plant 3401. The table has columns for Material, Operat., Phase, Phase Indicator, Sup. Operator, Operation Desc., Quantity, Component, Unit of Measure, Backflushing, and Item Text. Annotations with arrows point to specific fields: 'Operat., Phase' (blue), 'Phase Indicator' (red), 'Sup. Operator' (green), and 'Operation Desc.' (pink). Below the table, four text boxes provide definitions for these fields.

Material	Operat., Phase	Phase Indicator	Sup. Operator	Operation Desc.	Quantity	Component	Unit of Measure	Backflushing	Item Text
0820068		<input type="checkbox"/>			93,024	KG		<input type="checkbox"/>	Granulated Sugar 25
0820084		<input type="checkbox"/>			50,016	KG		<input type="checkbox"/>	Genuspectne Typ JM
0820090		<input type="checkbox"/>			10,764	KG		<input type="checkbox"/>	Potable Water
0820090		<input type="checkbox"/>			204,516	KG		<input type="checkbox"/>	Potable Water
0930918		<input type="checkbox"/>			9.641,430	KG		<input type="checkbox"/>	Milk Skimmed Liquid F

Operational Phase
For use in Production Planning. Determines in which order the operations of a sequence are carried out.

Phase Indicator
Indicator for phases as opposed to operations.

Sup. Operator
Superordinate Operation, which is the key of the operation to which the phase is subordinated. This field is used for phases but not for operations.

Operational Description
Describes the operation or sub-operation.

GOVERNANCE ACTIVITIES

Data dictionaries and Glossary

- Being custodian for Data Dictionaries and Glossary (writing/editorship)
- Publishing them online, easy to find location with no restricted access

Data owner organisation management

- Onboarding Data Owners, Data Advisors, and other DG roles
- Making sure the Data Owners remain up to date (issues, new scope items)
- Recruiting new Data Owners when needed

Rules, definitions, etc stewardship

- Investigating and writing Data Standards with the Data owners
- Governing Lists of Global Values (e.g. common reference data)
- Participating as key stakeholder for Data Governance, and aligning on linked topics (e.g. to-be design) at all relevant projects in the Company

DATA MAINTENANCE ACTIVITIES

Request handling

- Processing change requests from the business
- Request checking (automated and manual)
- Getting data into system
- Dealing with incorrect requests
- Dealing with special requests, mass changes, projects and new entity on-boarding

User training and support

- Training users on forms and systems
- Dealing with queries as they arise

Control and audit, KPI reporting

- Ensuring that change requests have been handled correctly via an ICF
- Auditing compliance
- Feeding back to the business what is being requested, by whom, who is getting requests wrong

DATA MODELING ACTIVITIES

Build and maintain Unified Data Model (or several data models)

- Build a standard data model in line with data standards, DQ rules, and policies
- Maintain the data model, safeguard and govern updates

Prevent customization

- Help prevent customization in case if you want to go for Unified data model
- Be the gatekeeper for all “local legal requirements” and “but we are special” requests

Run or participate in Design Integration Board committees

- Be the voice of data standards and harmonized data models in the committee
- Act as key stakeholder & signee for any design change for data object structure & how they connect

DATA QUALITY ACTIVITIES

Data quality rules collecting, safeguarding, implementing

- Collecting global (and local) DQ rules
- Helping to translate business rules into technical logical codes in DQ tool

Data quality reporting against the rule book

- Investigation of issues generated by profiling and executing the changes (with the business or independently)
- Regular DQ reporting for various data entities in different data domains
- Reporting and follow up

Custodian in projects – for data cleansing activities

- Enforcing standards at different business projects and initiatives by ensuring right data quality checks are part of all relevant projects (aka any project that is using common data)

Driving data quality improvement projects

- It's not in everyone's DNA to initiate cleansing and enhancing of data, - a top down project can help to get data cleaner