

Anti-trust caution

- GS1 operates under the GS1 anti-trust caution. Strict compliance with anti-trust laws is and always has been the policy of GS1.
- The best way to avoid problems is to remember that the purpose of the group is to enhance the ability of all industry members to compete more efficiently.
- This means:
 - **There shall be no discussion of prices, allocation of customers, or products, boycotts, refusals to deal, or market share.**
 - If any participant believes the group is drifting toward impermissible discussion, the topic shall be tabled until the opinion of counsel can be obtained.
- The full anti-trust caution is available via the link below, if you would like to read it in its entirety: <http://www.gs1.org/gs1-anti-trust-caution>.

Statement & reminder for seeking intellectual property information

- Relevant to the features of the specification that are being developed in this work group, if anyone has knowledge or information about intellectual property rights, such as, patents or patent applications; please promptly convey this information to the work group facilitator.
- The intellectual property rights can either be in development or owned by persons, companies or third parties within this work group or outside this work group.
- We do this under the guidance of the GS1 Intellectual Property Policy, so that GS1 can seek to avoid the uncertainty regarding intellectual property claims against the Specification.

Meeting etiquette

- **Meetings will begin promptly as scheduled**
- **Be present – avoid multi-tasking**
- **Avoid distracting behaviour:**
 - Place mobile devices on silent mode
 - Avoid sidebar conversations
- **Be considerate**
 - Avoid monologues
 - Keep comments concise
- **Respect work group decisions**
 - Avoid re-opening decisions unless there is a significant quality impact
- **Collaborate** in support of meeting objectives
 - Ask questions
 - Be open to alternatives
- **Be representative**
 - Avoid personal remarks
 - Do not speak for your company or community if you do not clearly understand their needs
 - Votes should reflect the needs of your company or community

WiFi internet access

- Select network “**Sheraton Lisboa**” and connect
- Password: **GS1events**

Session Overview

The GS1 Global Data Model Programme

- a. Global Data Model Introduction
- b. Global Data Model Development & Next steps
- c. GDM Gallery Walk
 - Global Data Model Pilots
 - Attribute Definitions for Business MSWG
 - Business Case Preview
 - How to read the spreadsheet?!
- d. Questions

a. What is the Global Data Model?

Background – The Consumer Goods Forum (CGF)

“Leapfrog” pilots

- The quality and completeness of product data available to the consumer and to the retailer is inconsistent, varying widely by brand. Given the exponential growth of online commerce and web-enabled devices, unique product identity is a prerequisite for advancing industry use cases that deliver growth (e.g., consumer Internet of Things).
- In May of 2018, the Consumer Goods Forum hosted a two-day workshop with 40 members of industry. As a result, 5 industry pilots were launched to explore “leapfrog” approaches to Data Quality and Data Sharing.

In May the Consumer Goods Forum and Retail College leaders identified product data accuracy as a top priority for the industry to address

To address this End-to-End Value Chain priority, a selected group of industry executives and experts developed a vision of five Data Leapfrog Initiatives:

- 1. Automated Data Creation** – use AI/machine learning to extract product attributes from available text and images
- 2. Federated Data Sharing** – establish a “pull” model using direct connections between trading partners to share data rather than the traditional centralized model
- 3. Centralized Data Sharing** – apply new technologies to make centralized data sharing faster, easier to access, and more accurate
- 4. Data Attribute Structure** – align on a common language and structure
- 5. Data Quality** – produce scorecards/feedback on data quality of the provided or received information

*Our
Focus*



CGF Leapfrog Projects Participants

MiGROS

METRO



The Data Attribute Pilot Starting Point

Data Attribute Challenges

Differing product data terminology and interpretations by suppliers and retailers lead to a very difficult and complex data exchange that is extremely costly and feeds a whole new industry of CSPs



No Mandatory Core Set of Global Attributes



Different Definitions across Orgs and Markets & Differing Services Offered



Cost and Effort for Manufacturers to Satisfy All Different Demands and for Retailers to Collect Demand From Various Sources



Complex and Error-Prone Data Exchange and Listing

Pilot approach

- ❖ Review European data model and CGF transparency data set
- ❖ Split data into progression stages
- ❖ Compare against listing sheets of each retailer and manufacturer
- ❖ Align on the definitions, data types to be approved through GSMP
- ❖ Define attributes which will be core for all categories
- ❖ Identify category specific attributes on top of the core

Addressed by a Global Team

METRO | NOM
SETTING THE PACE IN FOOD AND TECHNOLOGY

Walmart

Johnson & Johnson

 **PEPSICO**

METRO

 **Ahold
Delhaize**

**M
MIGROS**


The Consumer Goods
FORUM

 **GS1**

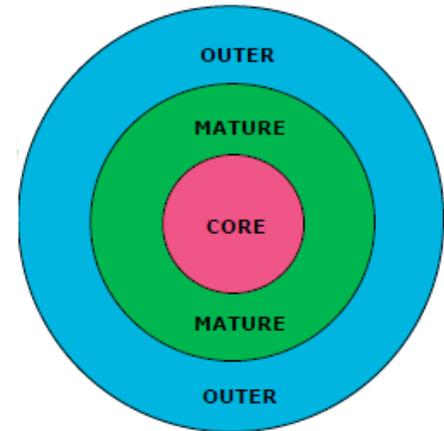
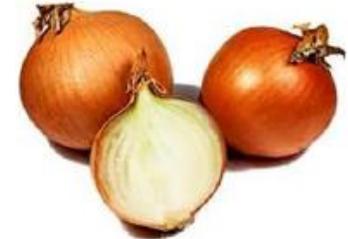
P&G
Procter & Gamble

Nestlé



The 'old' European onion model

- Year 2016 - 2017
- 7 most developed GDSN markets in Europe
- Only FMCG
- No user involvement
- No discussion of attributes
- Proved that the onion concept works



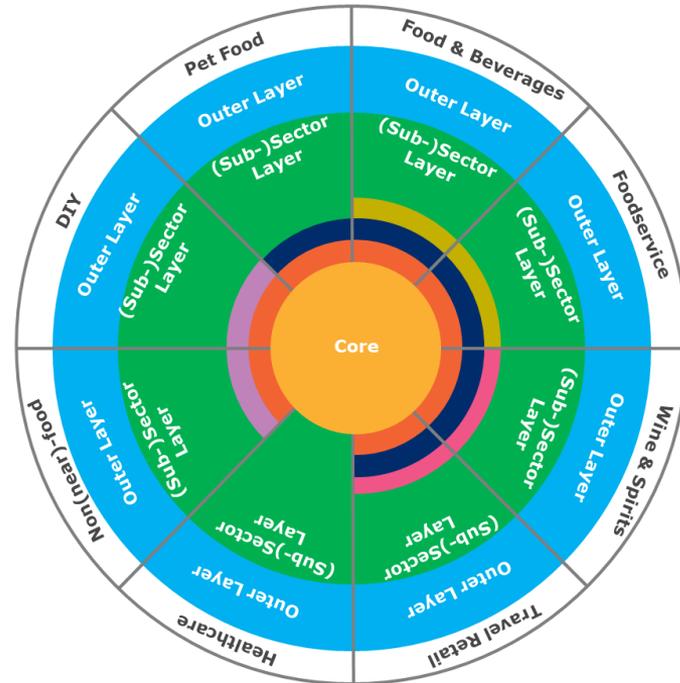
New European Onion Concept

Categories

- FMCG – Food
- FMCG – Near-Food
- Wines and Spirits
- DIY/Garden
- Pet Food
- Cosmetics
- Healthcare

Channels to be added on later stage:

- Food service
- Travel retail

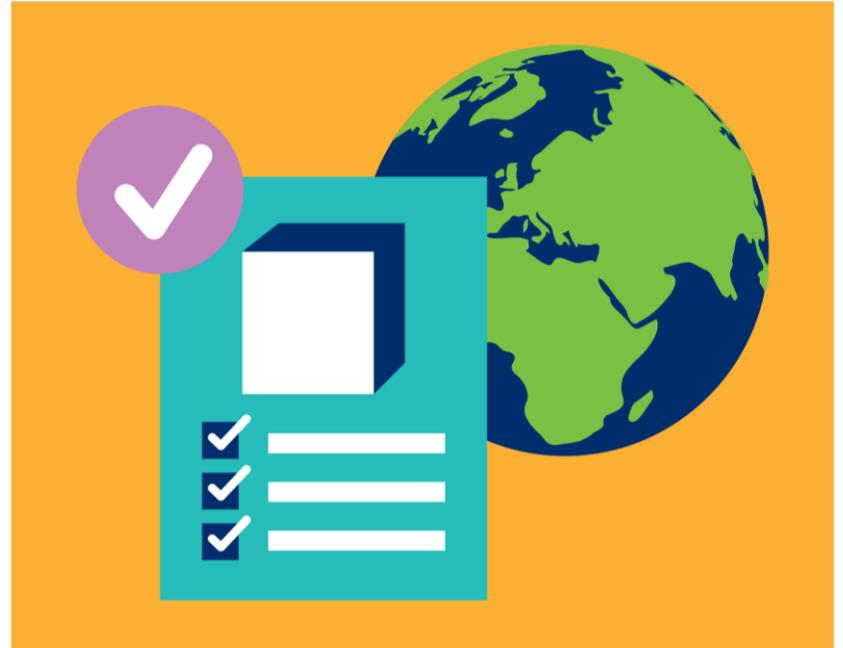


mindShift

Objective

Define a globally-agreed set of attributes that brand owners need to provide to retailers—in order to verify, list/order, move/store and sell products digitally and physically.

Simplifying and harmonising the content (master data) we exchange.



Why does it matter?

- Brand owners spend time and resources customising their data to meet individual retailer needs
- Data models are national
- Data exchange is complex

As a result, retailers often receive lower quality or incomplete data that lead to listing delays.



How are we doing this?

Working collaboratively with industry:

- 60 Industry representatives
- 35 GS1 Member Organisations

Two development tracks

- Global Data Model: specifying which attributes are needed globally for all products and for selected product categories.
- Attribute Definitions for Business: providing business friendly attribute names and definitions for each attribute



6 work streams have been kicked-off

New working structure based on the summit output

Global Data Model
Completion

Growing the Global Data Model by integrating additional categories and channels.
Industry co-chairs: Christian Zaeske (METRO), Laurent Seroux (P&G)

Attribute Definitions
for Business
Completion

Completing business friendly attributes based on the growing Global Data Model.
Industry co-chairs: Gina Tomassi (PepsiCo), Tracy Scott (Walmart), Jeff Cree (Ahold/Delhaize)

Pilots &
Implementation

Piloting the Global Data Model for to be defined categories and regions.
Christian Zaeske (METRO), Laurent Seroux (P&G), Gina Tomassi (PepsiCo), Tracy Scott (Walmart)

Implementation
tools

Creating implementation tools to support Global Data Model pilots and implementation.

Engagement &
Adoption

Developing a sound business case and growing the Global Data Model community.
Andrea Schlossarek (METRO), Jean-Marc Klopfenstein (Nestlé)

Communication &
Marketing

Telling the Global Data Model Story and creating a communication plan.
John Phillips (PepsiCo), Armand Schins (Ahold/Delhaize)

Governance

Developing a governance that is user led and fit for purpose.
Christian Zaeske (METRO), Laurent Seroux (P&G)



Companies that contribute to the work

(non exclusive overview)



Global Data Model for FMCG Food & Near-Food V1.0



- **First version of GDM has been released** on August 5th 2019
- 170 initial attributes with business friendly names and definitions **have been published as a new GS1 Standard in July 2019**
- **Development work continues** to integrate additional categories (pet food, tobacco etc.) and finalize business friendly attribute names and definitions

How does it work?



Global mandatory attributes

- Net content
- Image



Global category specific conditional/mandatory

- Ingredients
- Nutritional facts



Regional category specific conditional/mandatory

- Package material
- Allergen statement



Country conditional/mandatory or optional

- Order quantity minimum



Global Data Model v1.0 – a Pilot Standard

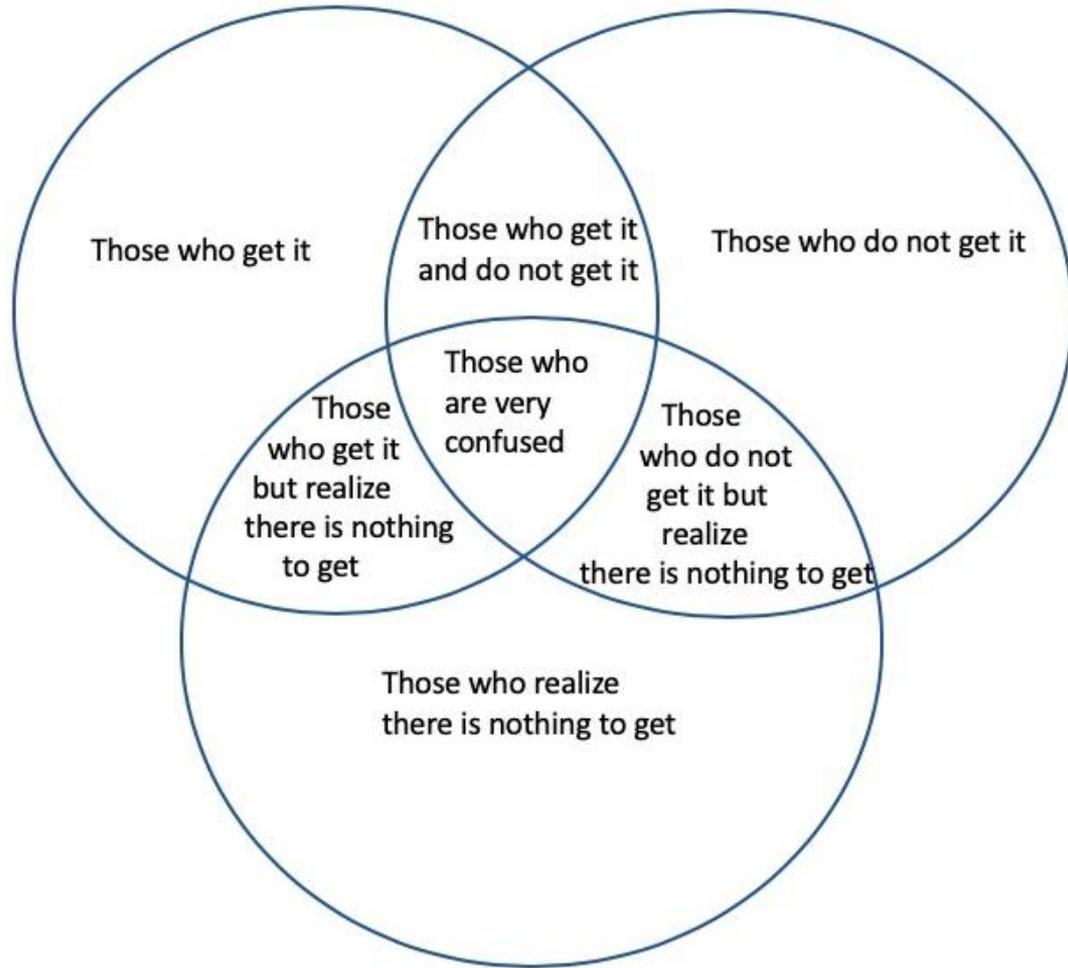
- GDM v1.0 is currently a **pilot standard**
- It has been developed by an **Industry User Group** and did not go through the Global Standards management Process (GSMP)
- GDM v1.0 will enable all stakeholders to:
 - **Pilot** the Global Data Model
 - Run a **gap analysis** vs. the local target market profile and/or internal data needs and structures
 - Build a **governance** for the Global Data Model Programme
 - Validate the **GDM business case**
- The **pilot learnings** will feed back into the GDM development to make it stronger before it will be transformed into a global GS1 standard

b. Global Data Model Development & Next steps

Overview

The GS1 Global Data Model Development Work

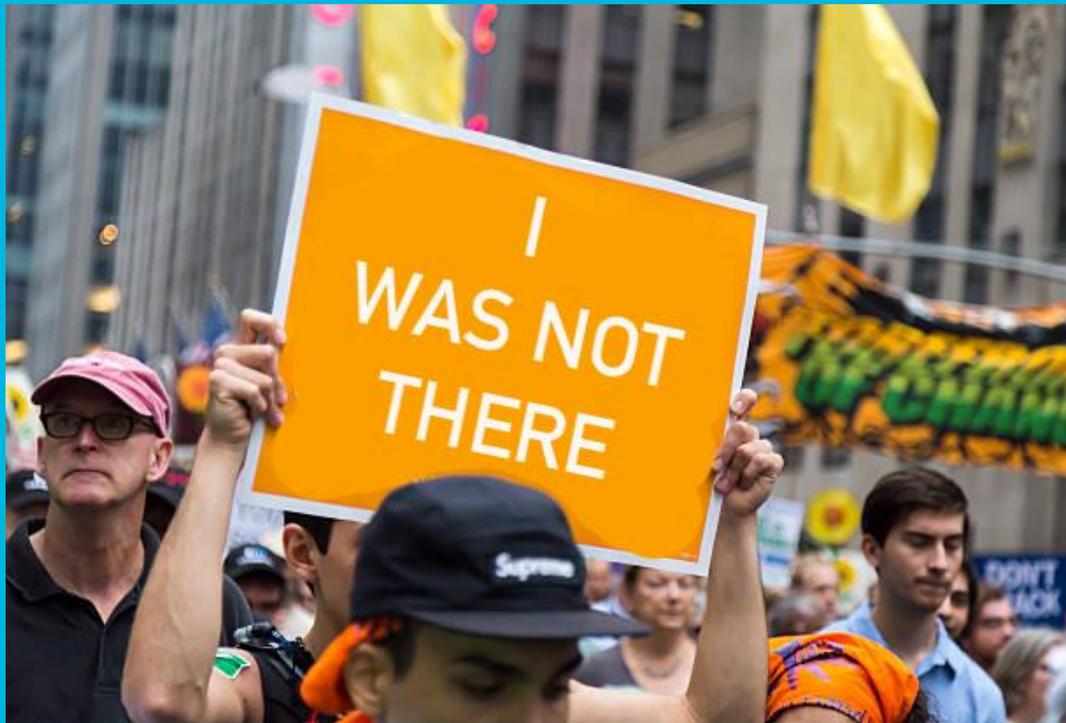
- a. Generic workstream setup
- b. The actual work and next steps



WHAT WE WANT TO KNOW



**RAISE YOUR HAND IF YOU
WERE THERE**



**RAISE YOUR HAND IF YOU
WERE NOT THERE**

a. Generic workstream setup

Global Data Model Project

Overview of current work

The Attribute Definitions for Business (ADB) Mission Specific Working Group (MSWG)

- The objective of the Attribute Definitions for Business (ADB) MSWG is to create clear business-oriented names and definitions for the predefined list of critical attributes needed to support the business processes: verify, list/order, move/store, sell product digitally and physically.
- These new names/definitions need to be understandable to the business community as well as the technical community that supports the means of data exchange so there is no confusion over what information is needed.

The Global Data Model (GDM) Industry Group

- The objective of the Global Data Model (GDM) Industry Group is to create, deploy and maintain a dynamic set of data attributes (a Global Data Model) that can enable industries all around the world to effectively engage in Business-to-Business (B2B) and Business-to-Consumer (B2C) by simplifying and harmonising product master data.
- The Global Data Model will include globally applicable attributes and also additional, product-specific and/ or regional attributes.
- This group does not create or define attributes.

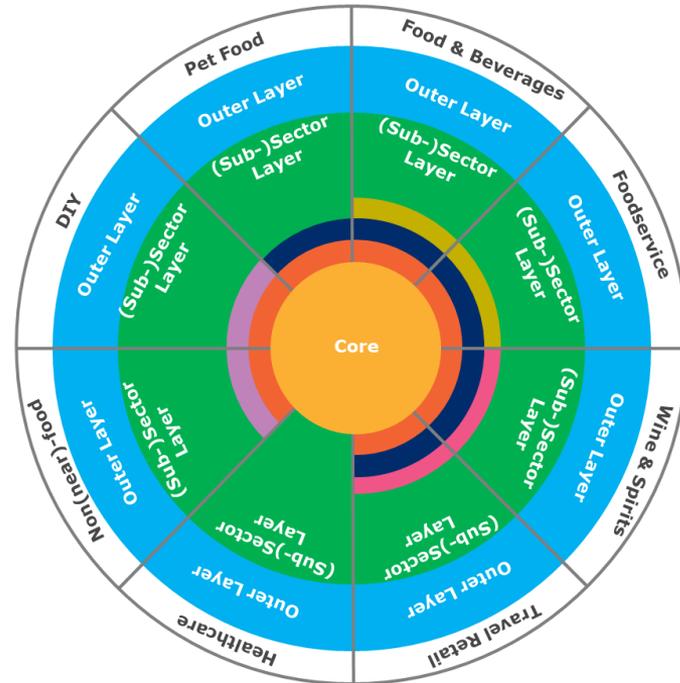
New European Onion Concept

Categories

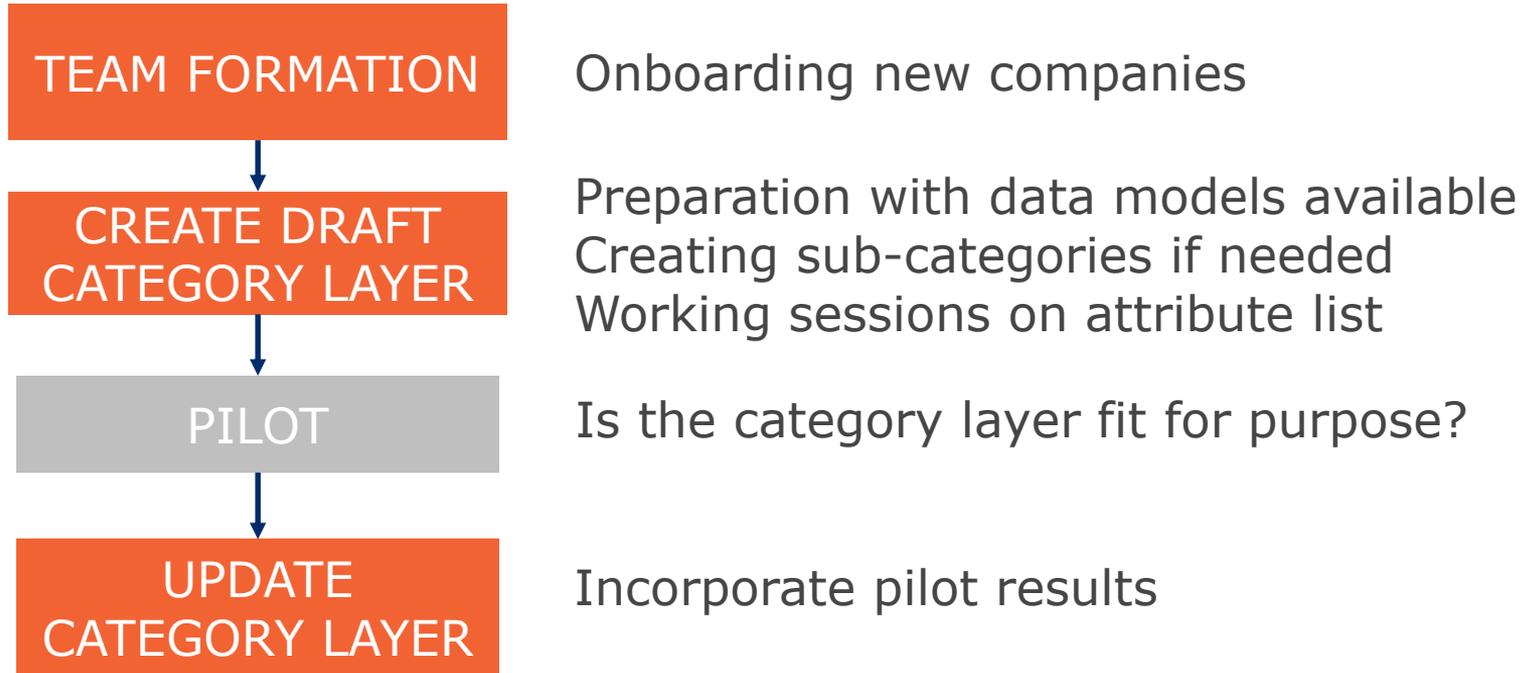
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- Healthcare

Channels to be added on later stage:

- Food service
- Travel retail



Methodology

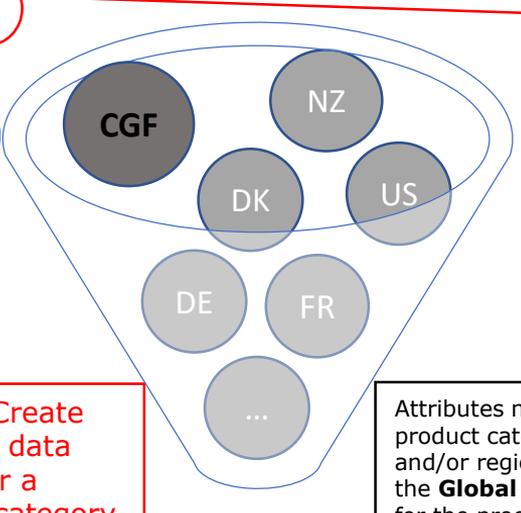
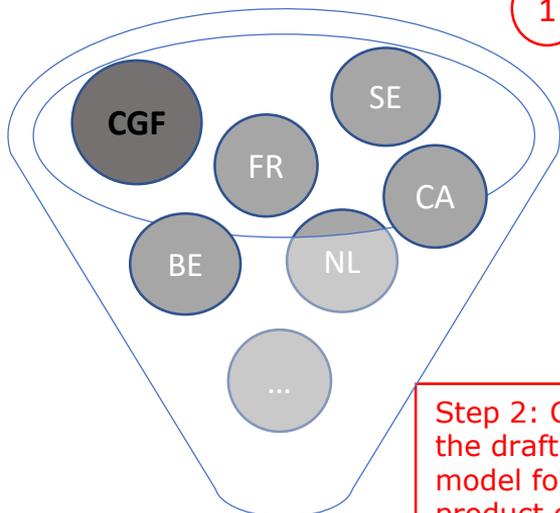
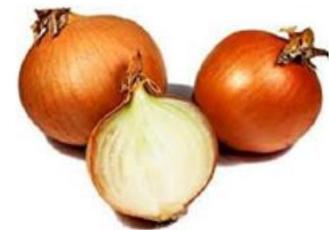


FMCG food

FMCG near-food

1

Step 1: Get all data models together in a unified way



Step 2: Create the draft data model for a product category

Attributes needed for the product category on global and/or regional level form the **Global Category** layer for the product category

2



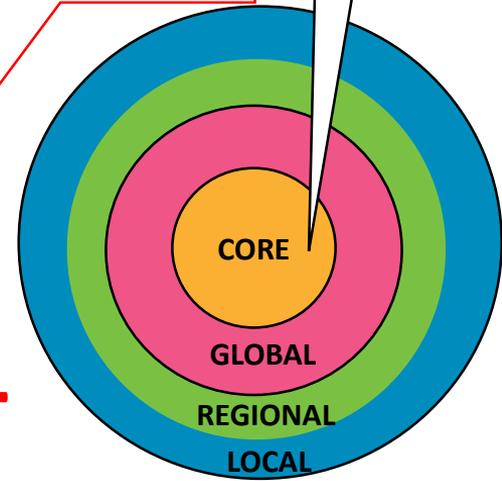
Step 3: Compare all product category data models

3

Other product categories and channels

Attributes that are common in all categories form the **draft Core** layer

All attributes that are only applicable nationally stay in the **Local** layer for the product category

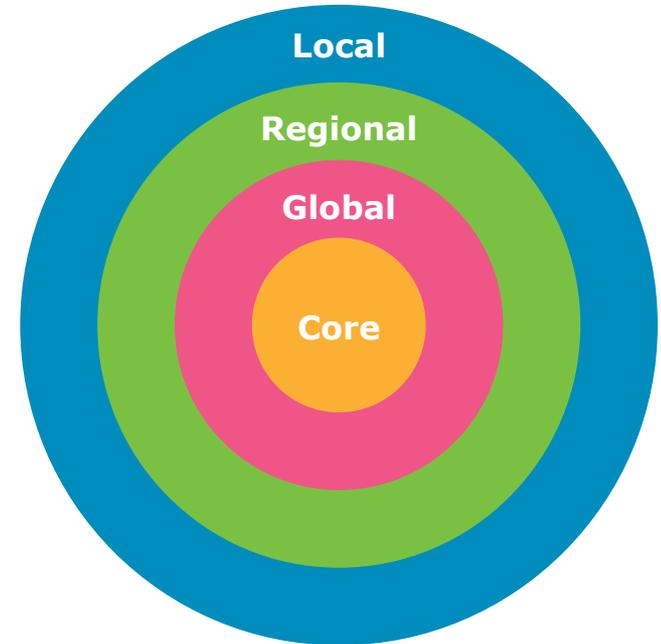


IN PILOT

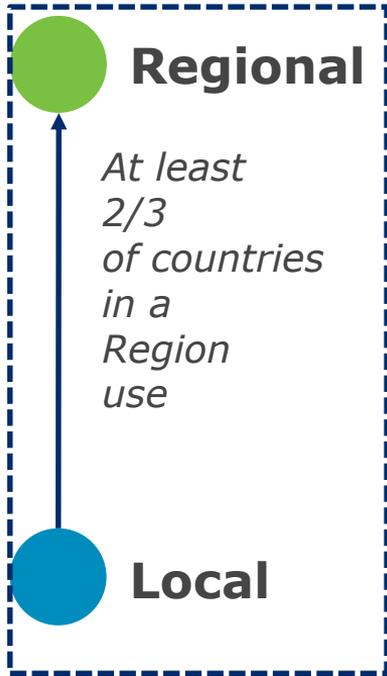
From Local to Core – Understanding the Layers

Local

- **Attributes** that are agreed to on **local level** only (i.e. GS1 Member Organisation, National Data Models, etc..).
- Can be **(conditional) mandatory or optional** and can be related to a product category. Please note, these attributes can occur in more than one country around the world.

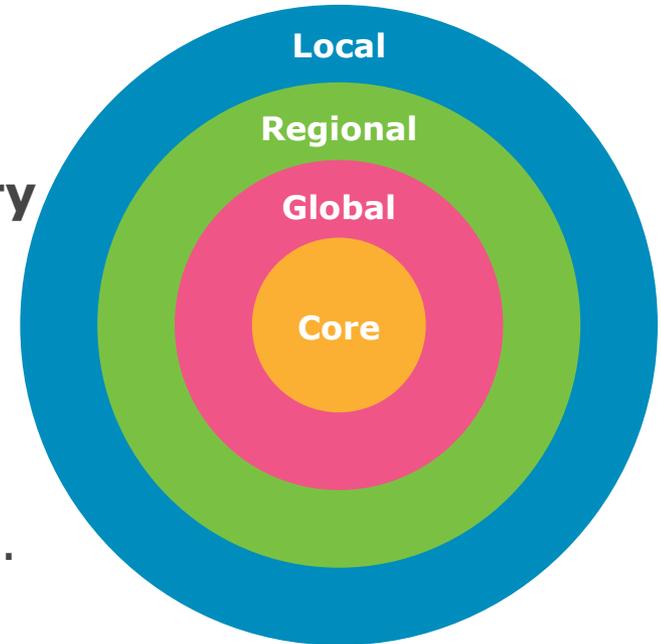


From Local to Core – Understanding the Layers



The **(conditional) mandatory attributes** that are agreed to for a **specific product category** (i.e. FMCG Food, DIY, ...) and this on a **Regional level**
Not part of the Global layer.

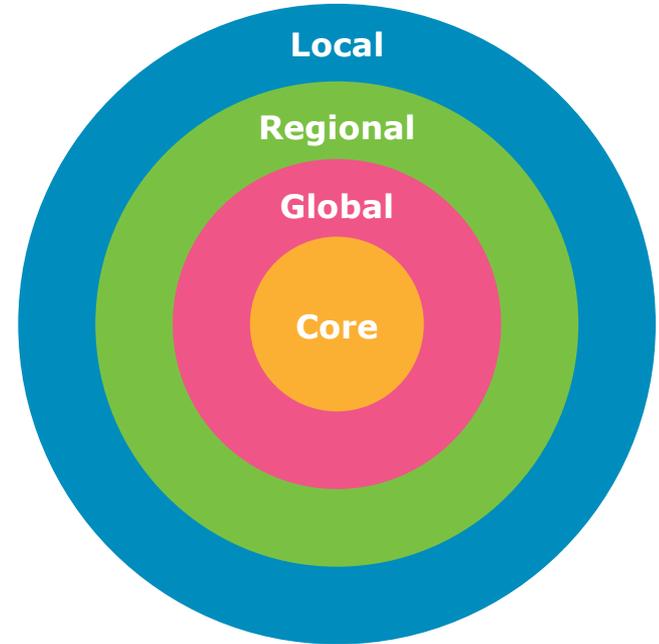
Current regions: Europe, North America, Australia/New Zealand.



From Local to Core – Understanding the Layers



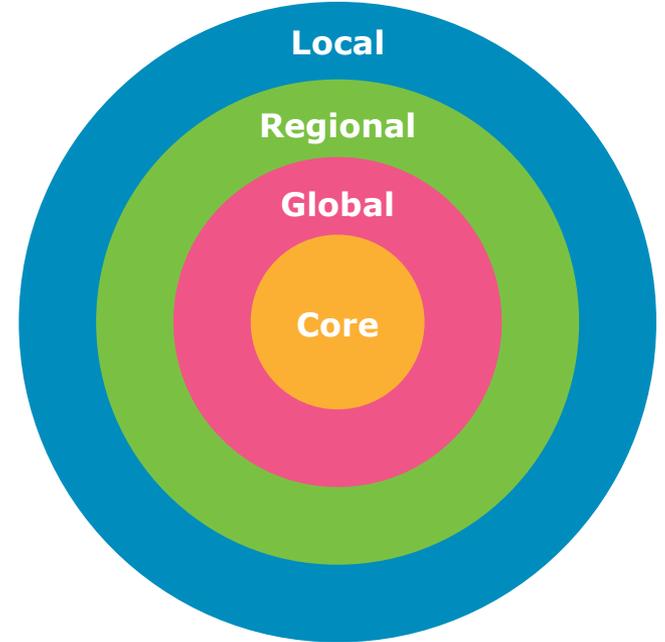
Attributes that are agreed to for a **specific product category** (i.e. FMCG Food, FMCG Near Food, etc.) on a **Global level**.



From Local to Core – Understanding the Layers



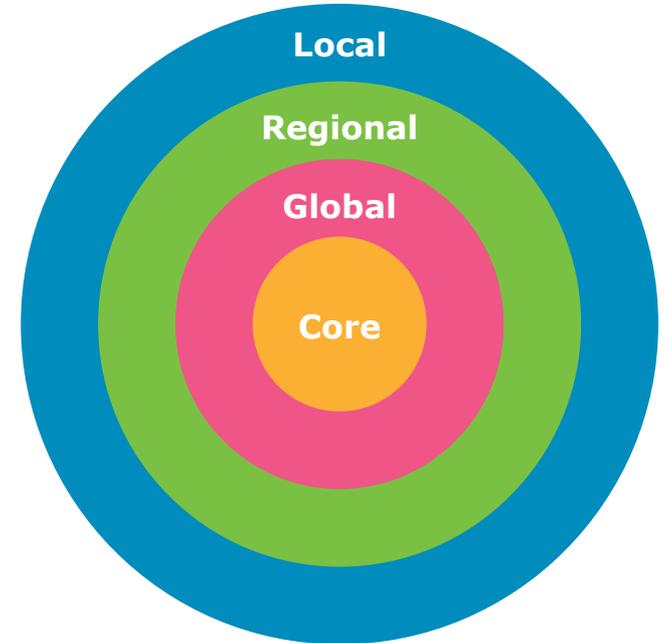
All mandatory attributes that are agreed to for **all product categories**, by default including the Verified by GS1 attributes.



How does it work?



- Global mandatory attributes**
 - Net content
 - Image
- Global category specific conditional/mandatory**
 - Ingredients
 - Nutritional facts
- Regional category specific conditional/mandatory**
 - Package material
 - Allergen statement
- Local conditional/mandatory or optional**
 - Order quantity minimum



a. The actual work and next steps

Global Data Model for Food

- **Mandatory & conditional attributes** that are agreed to for a **specific product category** on a **global level**
- **Mandatory & conditional attributes** that are agreed to for a **specific product category** on a **regional level**.



It's that simple!

Global Data Model for Food # of attributes

		Dairy, Refrigerated & Frozen	Deli & Prepared	Fresh Meat	Fresh Fish	Fresh Fruits & Vegetables	Grocery
Global				120	119	130	121
Regional	North America	18	18	13	13	14	18
	EU	13	13	13	17	13	13
	AU/NZ	12	12	11	11	11	12

Global Data Model for Near-Food

- **Mandatory & conditional attributes** that are agreed to for a **specific product category** on a **global level**
- **Mandatory & conditional attributes** that are agreed to for a **specific product category** on a **regional level**.



It's that simple!

Global Data Model for Near-food: # of attributes

		Cleaners	Disposables	Beauty & personal care
Global		97	87	107
Regional	North America	11	9	11
	EU	18	11	19
	AU/NZ	4	3	4



Global Data Model for Pet-Food

WORK IN PROGRESS

- **Mandatory & conditional attributes** that are agreed to for a **specific product category** on a **global level**
- **Mandatory & conditional attributes** that are agreed to for a **specific product category** on a **regional level**.



It's that simple!

Global Data Model for Near-food: # of attributes

		Pet Food
Global		95
Regional	North America	12
	EU	18
	AU/NZ	3



Next on the list

- Fast moving consumer goods (2019):
 - Tobacco – Call to action has gone out
 - Alcoholic Beverages

Timeline

Weeknumbers	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
mondays	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	28-Oct
Engagement & Adoption															
Important dates & GDM Milestones								GS1 Industry & Standards Event	GS1 Advisory council				GS1 in Europe Regional Forum		
Workstream management				Projectplan (FMCG)											
GDM development project plan	Plan workstream (FMCG categories)	Describe methodology	Finalise projectplan	Projectplan (FMCG)											
Consolidation GDM and ADB workstreams				Guestimation FMCG attributes						Pet food attributes		Tobacco attributes	Fruits & vegetables attributes		
FMCG data model										Pet food data model		Tobacco data model	Fruits & Vegetables Update		
Pet food		Call to action	Preparation		Introduction call	Working session + processing	Working session + processing		Review meeting	Pet food data model					
Fresh Foods											Review Fruits & Vegetables		Fruits & Vegetables Update		
Tobacco			Call to action		Preparation	Onboarding new companies	Introduction call	Working session + processing	Working session + processing		Review meeting	Tobacco data model			
Alcoholic beverages					Call to action			Preparation		Onboarding new companies	Introduction call	Working session + processing	Working session during GS1 in Europe forum + processing		Review meeting
Additional deliverables			First version for pilots											Second version implementation guide	
GDM Implementation guide	Write implementation guide	Write implementation guide	First version for pilots									Update implementation guide after Pilots	Update implementation guide after Pilots	Second version implementation guide	

And Beyond

After these initial product categories more will be added to the Global Data Model:

- Cosmetics
- Apparel / Fashion
- Electronics
- Healthcare
- ...



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