

Our ambition for data at Carrefour

Create a **data-driven**
competitive advantage
through
solid foundations
and use cases @scale



What a Data-driven Carrefour delivers

*Data &
analytics
uses cases
@scale*

Consumer-centricity

Better understanding,
better services and better reach

e.g. Assortment Builder,
personalized promotions

Operational efficiency

Optimized processes, digitization,
better decisions

e.g. waste reduction in Bakery

Trustable data available to everyone

Feeding all data analytics needs of Carrefour business users...
...from basic reporting up to most advanced data science

Foundation

2

The supermarket: the place where users can discover and consume all their data and related resources in self-service



The IT side

3

The warehouse: the data platform where all data processed is stored



4

The caterer: the "Analytics Factory" designing and creating advanced analytics products for the business



The business side

5

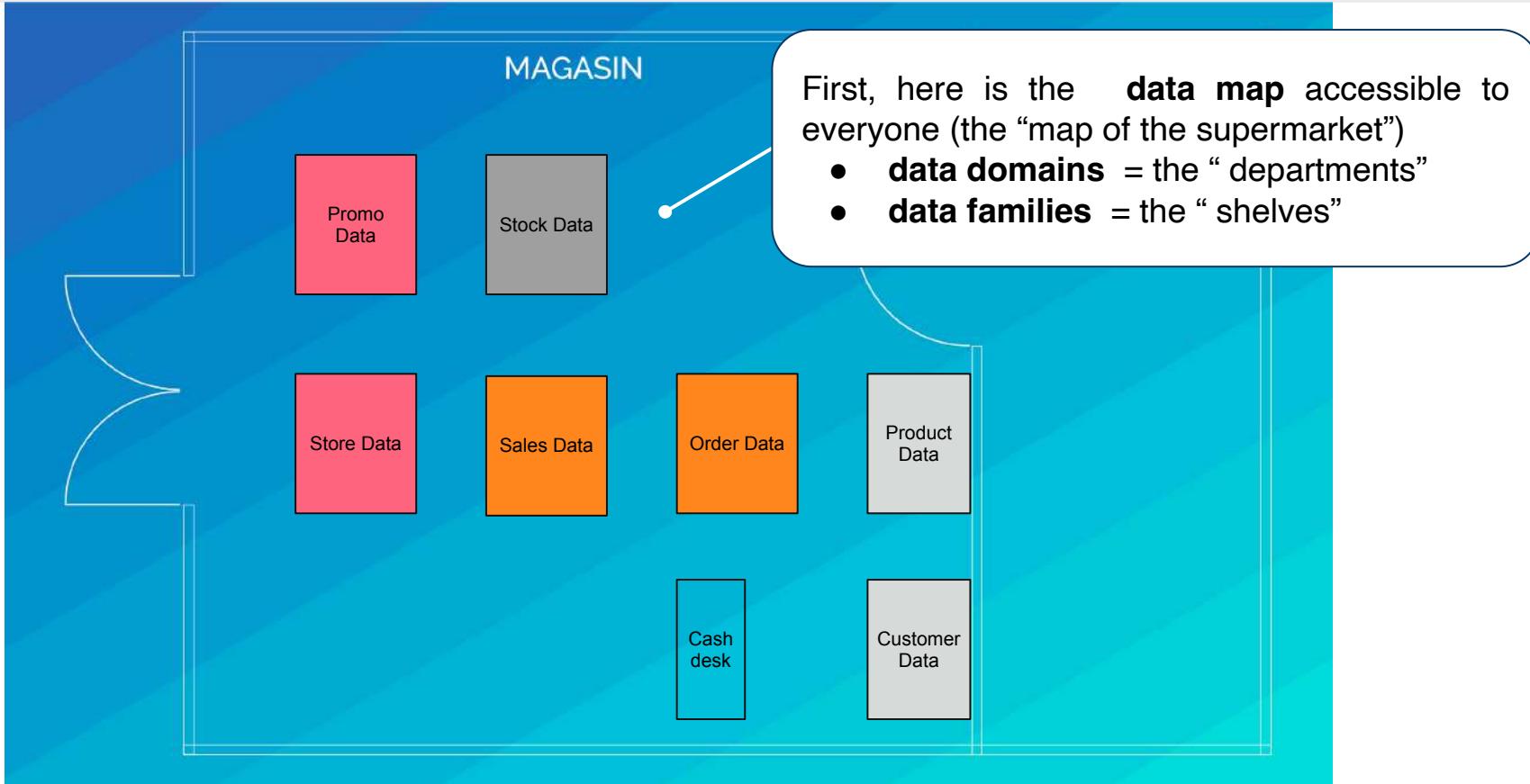
The processing plant: the place to process and transform raw data into enriched data ready to be consumed

1

Raw material: the raw data coming from the different Carrefour IS systems (e.g. PoS, Prolog, Apoline,etc.)







Data domains have been defined to ensure a complete and well structured mapping of Carrefour's data patrimony



Assortment

Equivalents in a grocery supermarket:

Example of data domain structure

Definition

PFT shelf



E.g Product

10 to 25

**Vegetables,
Meats, etc...**



E.g Packaging

$\sim 10^2$

**Zucchini,
Lettuce,
Carrots, etc...**



Business objects

E.g Dimensions

$\sim 10^3$

**Weight,
Price**



Data Attributes

E.g width, height

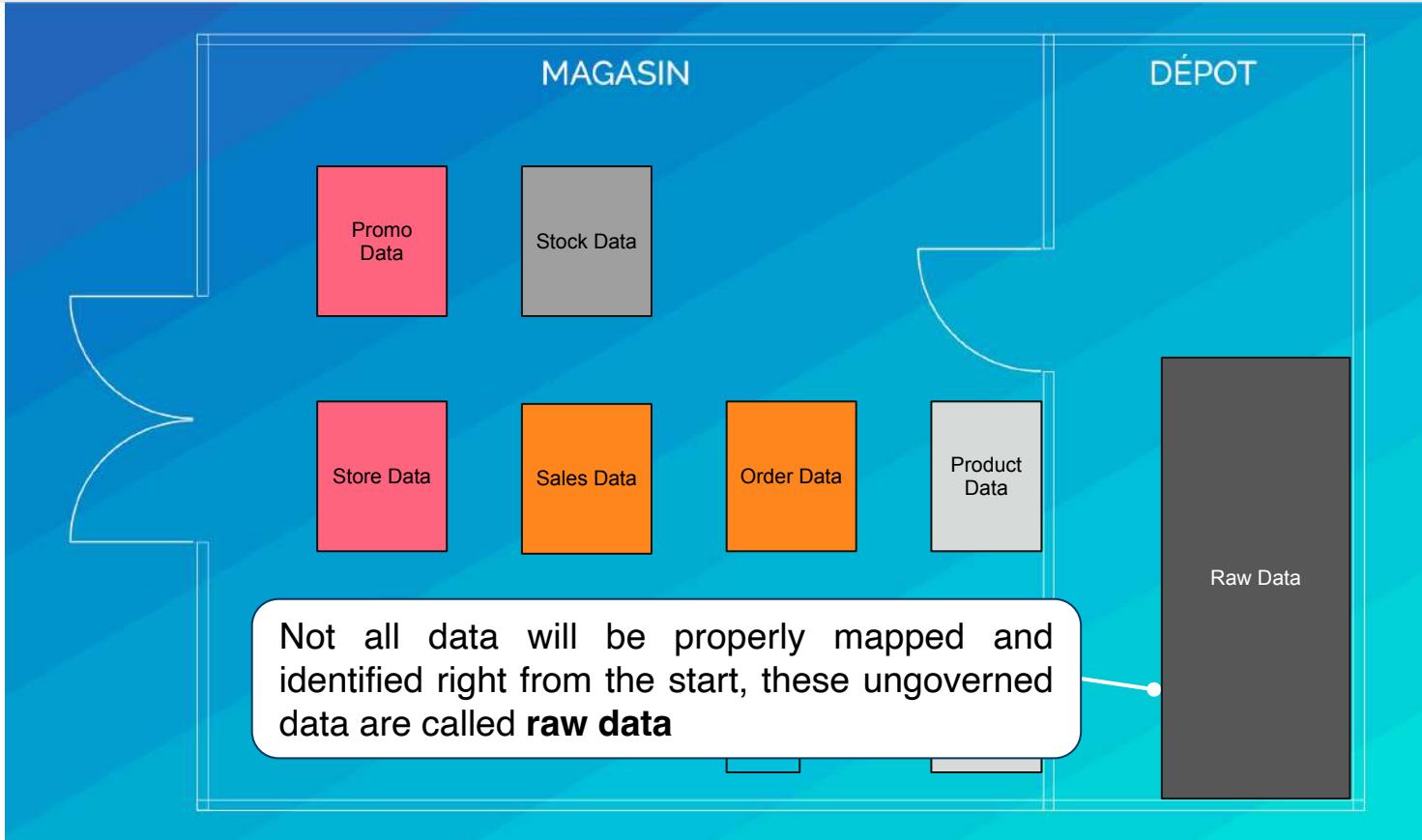
$\sim 10^4-10^5$

Coherent and balanced sets of data that can be placed under the responsibility of a Data Domain Owner

Logical groupings within a data domain

Smallest unit of a business concept, clearly and commonly defined with specific quality criteria

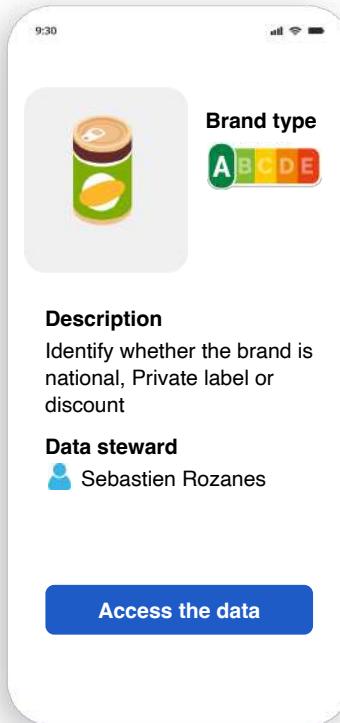
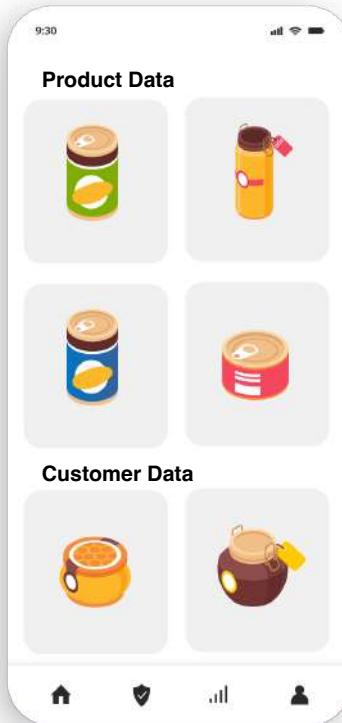
Translates a BO into data attributes within IT systems;
⇒ **data quality improvements are executed at this level**



Based on this map, **data will be properly ordered**, like products in a store







Data Catalog is an easy-to-use application that allows business users to **search** for data and **find** useful information about them called the “meta-data”







An assortment

The data domains with a business-ready catalog



An organization and a team



Department manager
Data domain leader
Data family owner



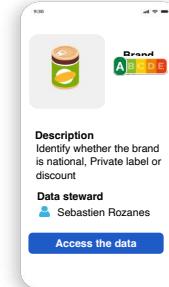
Shelf Manager
("Responsable de rayon")
Data owner



Compliance & quality
Data Governance Leader
Data Quality Specialist



Logistics
Data Product Owner
Data Gov Tech



A tool

To support the store operators

Zoom #3 : Data supermarket

Ce à quoi ressemblerait le data supermarket (1/4) - Accès rapide à l'information

The screenshot displays a user interface for a 'Data supermarket' with a dark blue header and a light gray content area. The header features the Carrefour logo, a search bar with the placeholder 'What data are you going to discover today?', and a user profile for 'Elodie - Business user'.

The main content area is organized into three main sections:

- YOUR BOOKMARKS** (Maroon box): Based on your preferences. Contains items: 'Customer' (Owner: Charles G., Last update: Yesterday, 3.47pm) and 'Online sales' (Owner: Rodrigue F., Last update: Today, 10.30am).
- NEW FOR YOU** (Green box): Based on your last consulted elements. Contains items: 'Contactability' (Owner: Catherine Li, Created: Today, 8.43am) and 'Contactability' (Owner: Catherine Li, Created: Yesterday, 3.33pm).
- SELECTION OF THE MOMENT** (Dark blue box): Based on your favorite themes: eCommerce, digital, ... Contains items: 'SmartPoS deplo...' (Owner: Laurence A., Last update: Today, 11.50am) and 'All contacts' (Owner: Catherine Li, Last update: Today, 10.45am).

Each item card includes a small yellow star icon and a downward arrow icon at the bottom right.

Zoom #3 : Data supermarket

Ce à quoi ressemblerait le data supermarket (2/4) - Définitions et navigation des datasets

The screenshot shows the Carrefour Data supermarket interface. At the top, there is a navigation bar with the Carrefour logo, a shopping cart icon, and a user profile for 'Elodie - Business user'. The main content area is divided into two main sections: 'Definitions' and 'Data catalog'.

Definitions (selected tab):

- Drive** (green status): This Data Family contains all the data related to Carrefour's drive locations. [see more](#)
- Ticket Sales** (green status): This Data Family contains all the data related to the Point of Sale tickets. [see more](#)

Data catalog (selected tab):

- Online sales** (blue status): This table gives an overview of the revenue and its evolution per day per Drive in France... [see more](#)
 - Popularity: ★★★★9★
 - Quality Score: 2%
 - Owner: Laetitia Bastien
 - Last updated: Today, 8.43 am
- Drive performance** (blue status): This report is used to track financial and operational performance of our individual drive locations. [see more](#)
 - Popularity: ★★★★6★
 - Quality Score: 4%
 - Owner: Catherine Li
 - Last updated: Yesterday, 9.26 am
- Drive** (blue status): Popularity: ★★★★8★

Zoom #3 : Data supermarket

Ce à quoi ressemblerait le data supermarket (4/4) - *Informations techniques sur un dataset*

Data supermarket

Transaction > Online > Revenue

Online sales

Elodie - Business user

Online sales is a Carrefour certified Data Product

Popularity: ★★★★☆ 89 votes

Quality Score: 92 %

Data Owner: Laetitia Bastien

Technical owner: Sophie Danzé

Description

This table gives an overview of the revenue and its evolution per day per Drive in France... [see more](#)

#	Type	Column name	Description
1	date	Day	Day observed
2	abc	Structure	Store or warehouse where product are stored
3	123	Revenue	Volume of transactions performed in a given day (in €)

Scroll for more ...

Lineage - where this data comes from

Source systems: SAP, Darwin

Source datasets: Revenue, Store referential, Warehouse ref.

Data objects: Online sales

Report issue | Frequent queries | Add to cart

Thread

Open in Mon tableau

Hello, les définitions s'appliquent bien aux 24 derniers mois ?

OUI, tout à fait

Merçi !

Vous avez une bonne..



A date, nous exposons nos "ingrédients" dans notre datalake , mais **3 éléments sont nécessaires** pour que nos Métiers soient capable de complètement les exploiter

Shop ingredients effortlessly:

Data



Use a great kitchen with utensiles & recipes:

Citizen data tooling



Acquire the Chef skills:

DigitalRetail Academy



**Priorités
2023**

Q1: Pilote FR sur deux domaines de données:
Customer and finance

Next steps: Extension à d'autres domaines et SP / BR

Q1: RFP global visant à sélectionner **1-2 outils de dataviz** (vs. 13 aujourd'hui) pour la totalité de nos pays

2023: Formation aux bases de la data et aux outils de dataviz pour **100% des utilisateurs monde**



The supermarket: the place where users can discover and consume all their data and related resources in self-service



Consumers need additional components to cook:
A **kitchen with utensiles & recipes** - environment to consume data, BI tool, data transfo. tool, ...
Chef training - minimum tech skills to use data



The customers: the different users (business users, data analysts, data scientists) consuming and using data in day-to-day operations



The caterer: the "Analytics Factory" designing and creating advanced analytics products for the business

The IT side



The warehouse: the data platform where all data processed is stored, waiting to be consumed



The processing plant: the place to process and transform raw data into enriched data ready to be consumed



Raw material: the raw data coming from the different Carrefour IS systems (e.g. PoS, Prolog, Apoline,etc.)



The business side



Vision: we need to put all the elements together so that Business can cook their very own excellent meal

In summary, to democratize data usage **we need 3 things:**

**Shop ingredients
effortlessly:**

Data



To be purchased in the
Supermarket

**Use a great kitchen with
utensiles & recipes:
BI, analytics platform etc.**



Via **Citizen Data Tooling**
beyond Excel / Google Sheet

**Acquire the
Chef skills:**

People with data training



Through Digital
Retail Academy

