

How to turn your IA function fully digital ?

... by using data analytics
and data visualization to be more
effective and efficient

Written by



Virginie DAVID
Associate Partner – Digitalization of Internal Audit



Skills needed



Design, an innovation methodology

“

Design is a **creative activity** that tends to establish all the properties of objects, processes, services and their associated systems; over their entire **life cycle**.

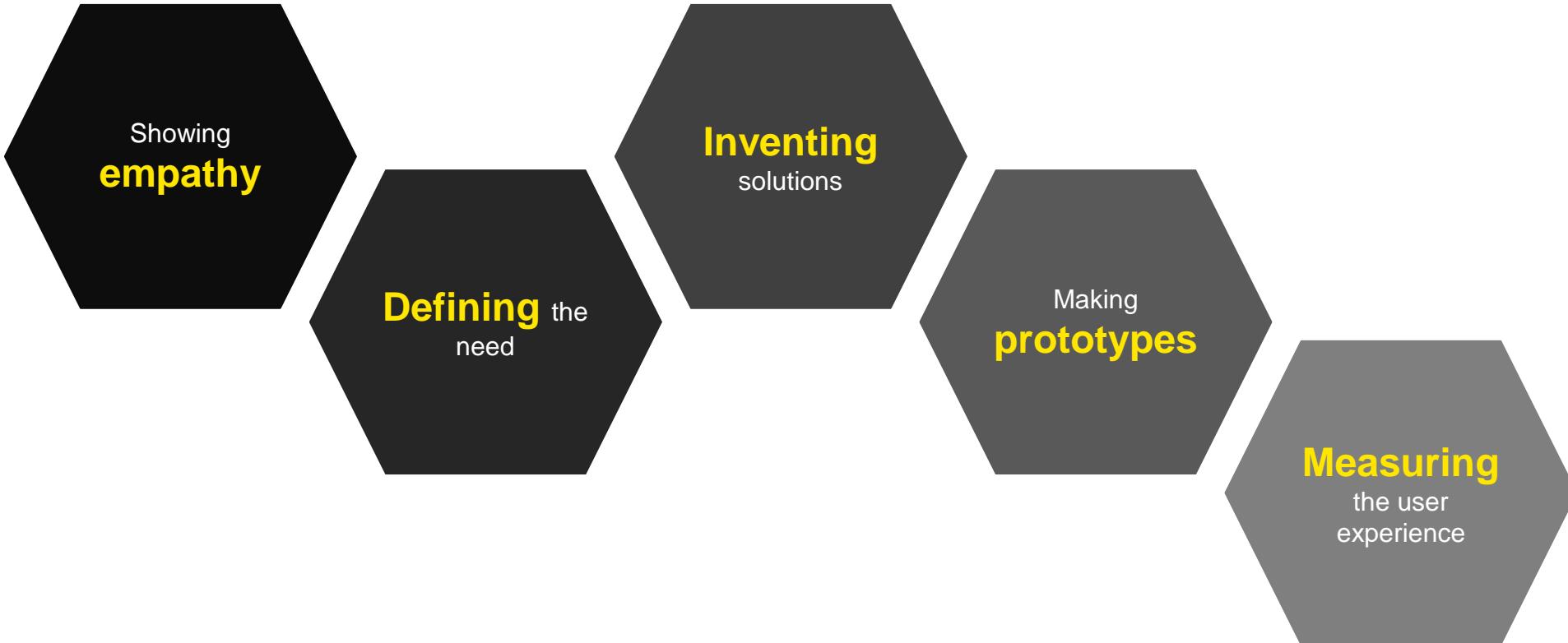
From ISCID definition

Therefore, design is an important factor of technological innovation, and it is crucial in cultural and economic exchanges

Design, a user-centric methodology

Processus

D. School, Stanford



Data, a manipulable source

“

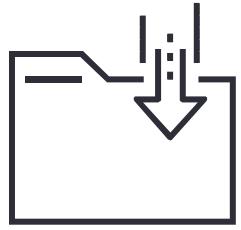
Statistical data is codified, frozen and transmissible information

“

A dataset is a set of values where each value is associated with a variable (column or attribute) and an observation (row or entity).

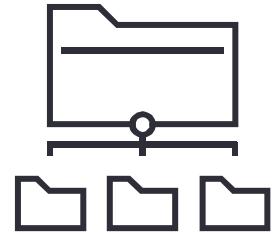
Data, a culture

3 major principles



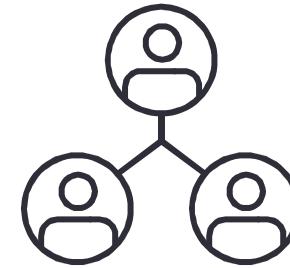
Collect

Why / What / How



Centralize

Where / How



Sharing

How / To whom

Visualization, a graphical tool

“

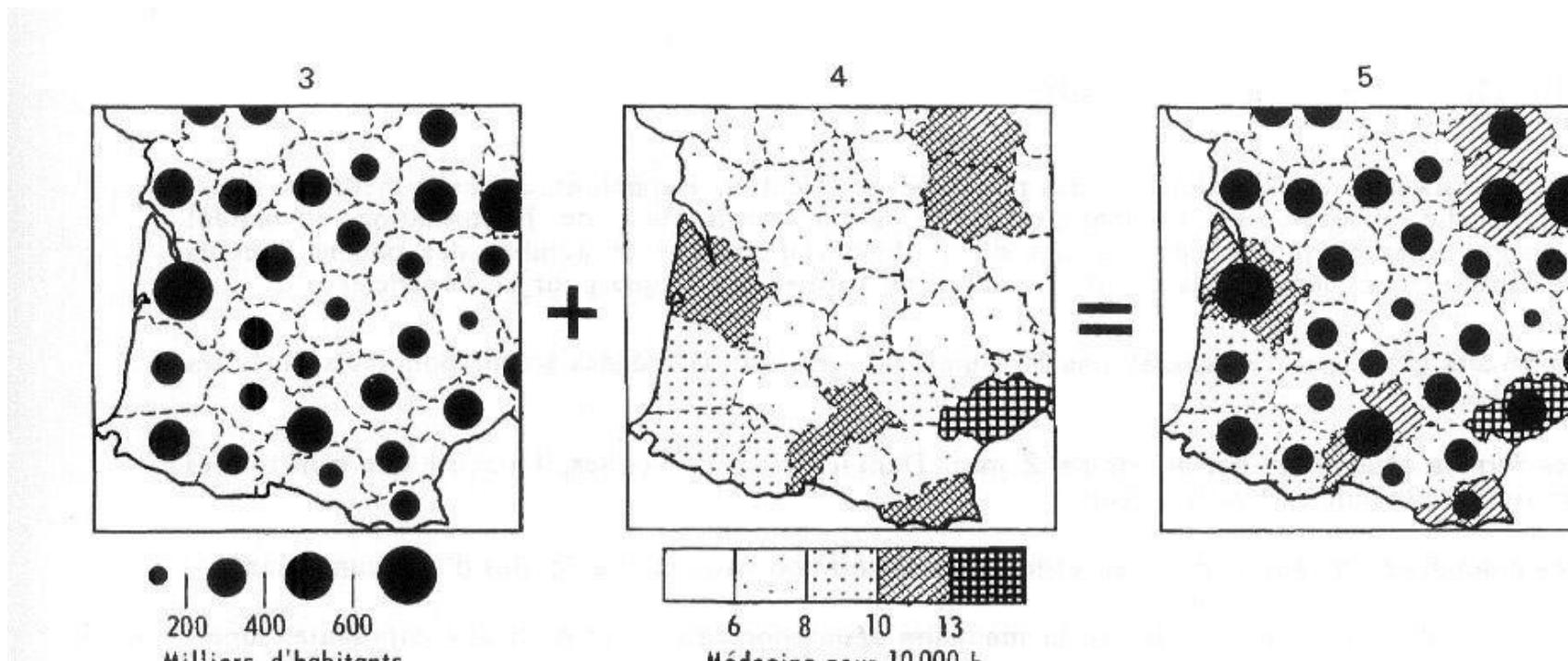
Datavizualisation supports to highlight seemingly complex information or embedded in a large number of parameters

“

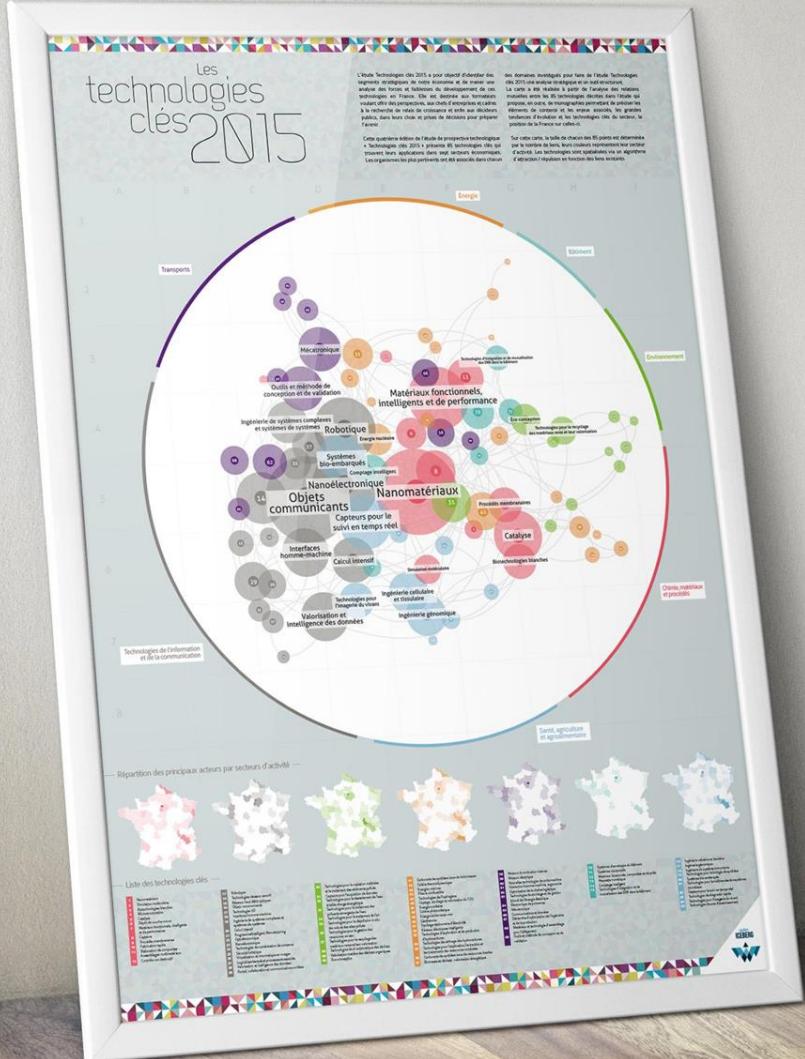
Jacques Bertin – Semiotics Graph - 1967

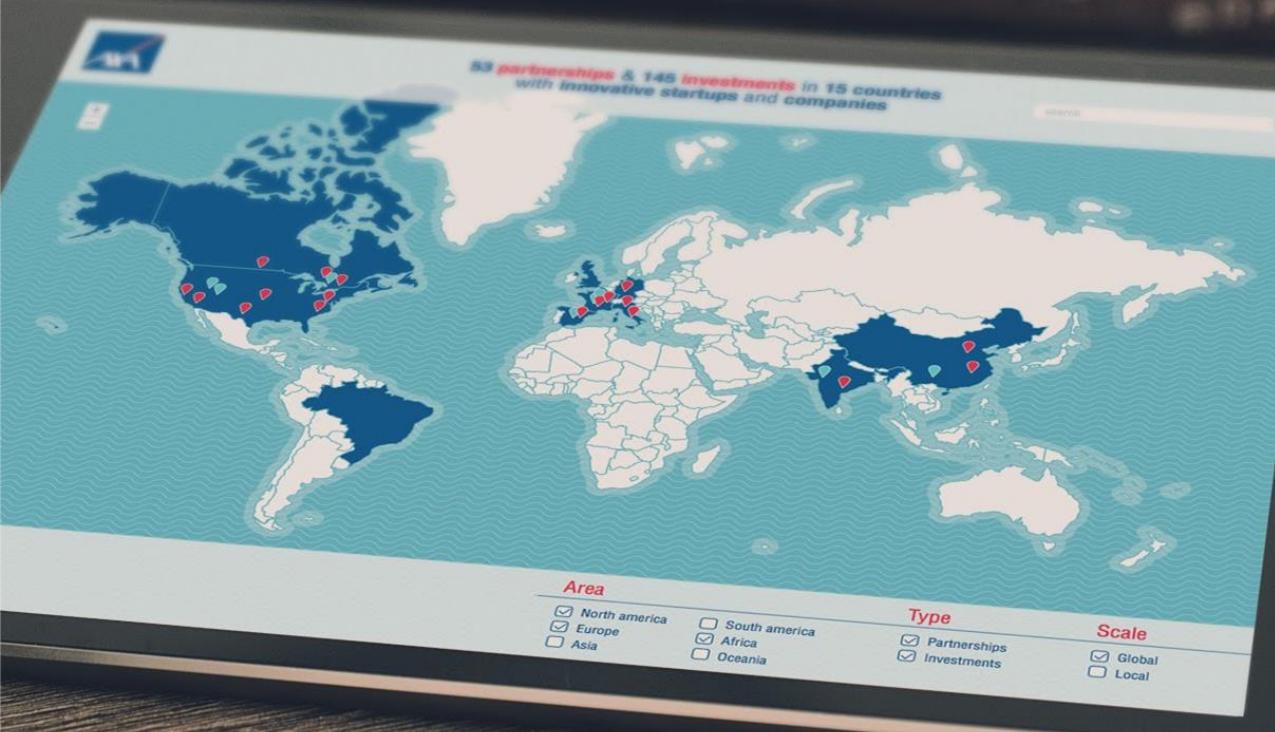
Cognitive Principles

J. Bertin



J. Bertin, Sémiologie graphique, EHESS, 1998, p189





Objective: Identify and build visuals to effectively communicate encrypted elements

1

Data-driven

- The purpose of datavisualization is to communicate the data



2

Visual impact

- The visual is the main means of communication



3

Effective results

- The most important criterion of visualization is to provide a way to learn something about the data (unconscious, not hidden)

6 788

Gross profit (k€)

14,05%

Gross profit (% CA)



Objective: *Datavisualization the new science of information*

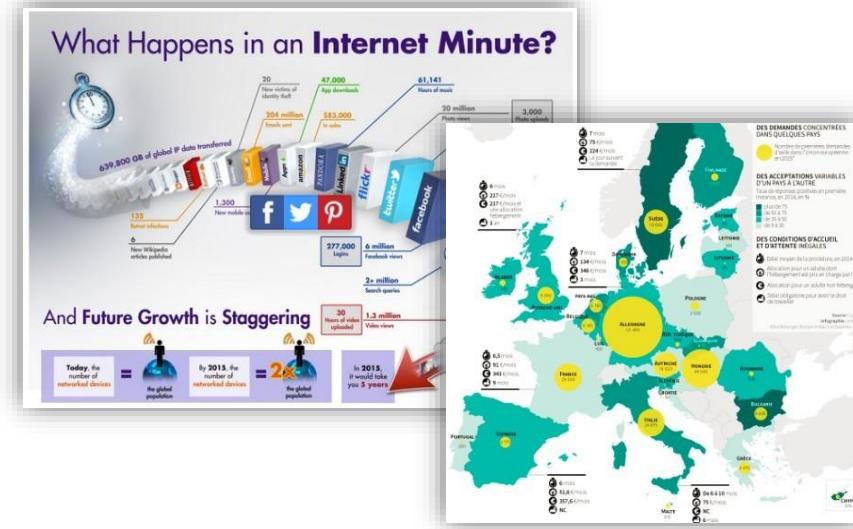
Visual expression of data conveying a message

Possibility of obtaining useful information that is not obvious at first sight

Opportunity to communicate effectively and guide certain decisions



Datavisualization through different format



Datavisualization for several uses

Big Data

Ability to manage a huge number of transactions / data hosted in big data ecosystems

Self Service

Autonomy and ease of handling by non-IT users

data

Graphical representation & valuation of the

Agile BI

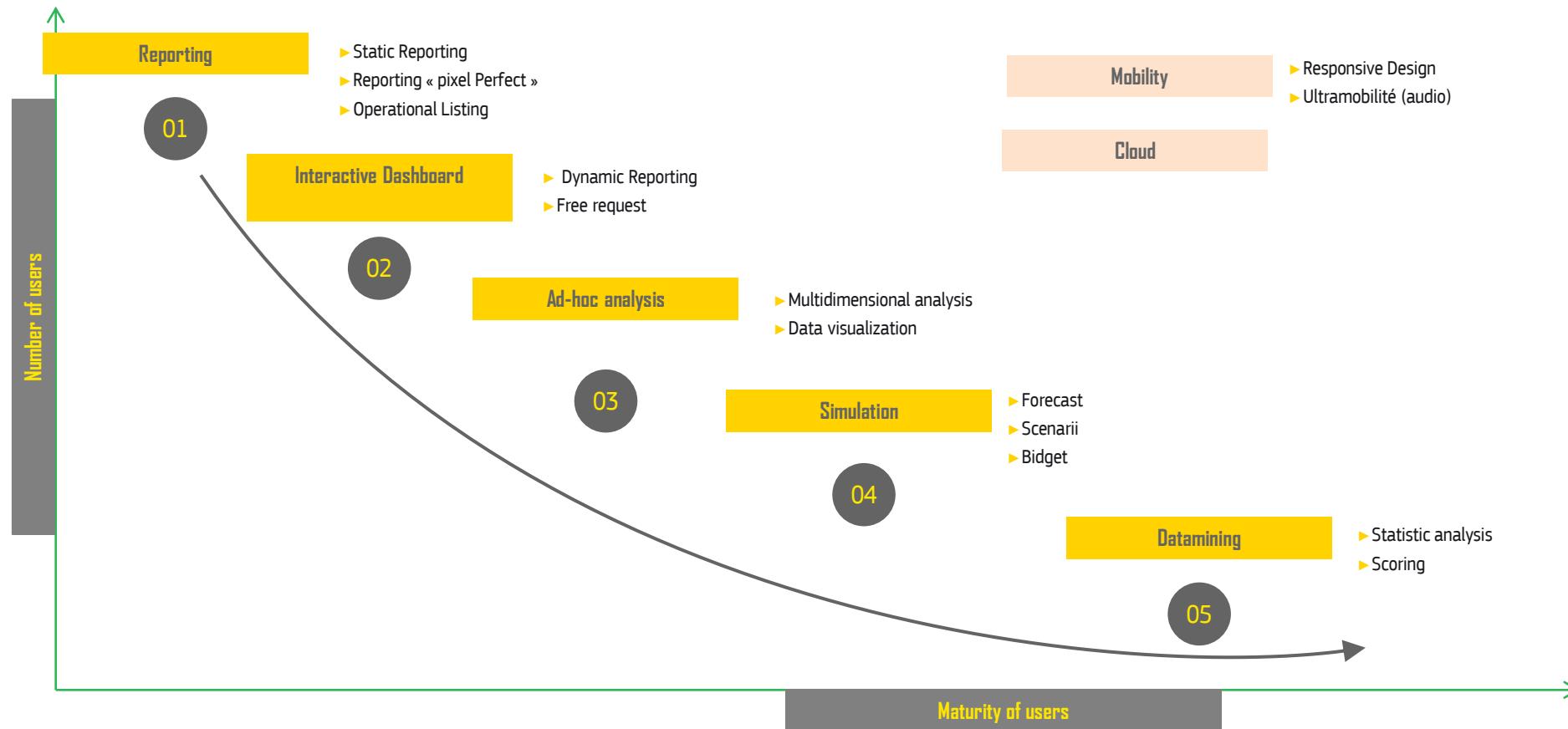
Time to complete and share information in line with business

Accessibility and sharing

Flexible uses cloud, mobile and collaborative

Datavisualization: different steps

Different types of datavisualization tools



Different needs, different tools

3 main uses

Explore



Share



Communicate

Often intended for data scientists to identify complex correlations and insights

Dashboard

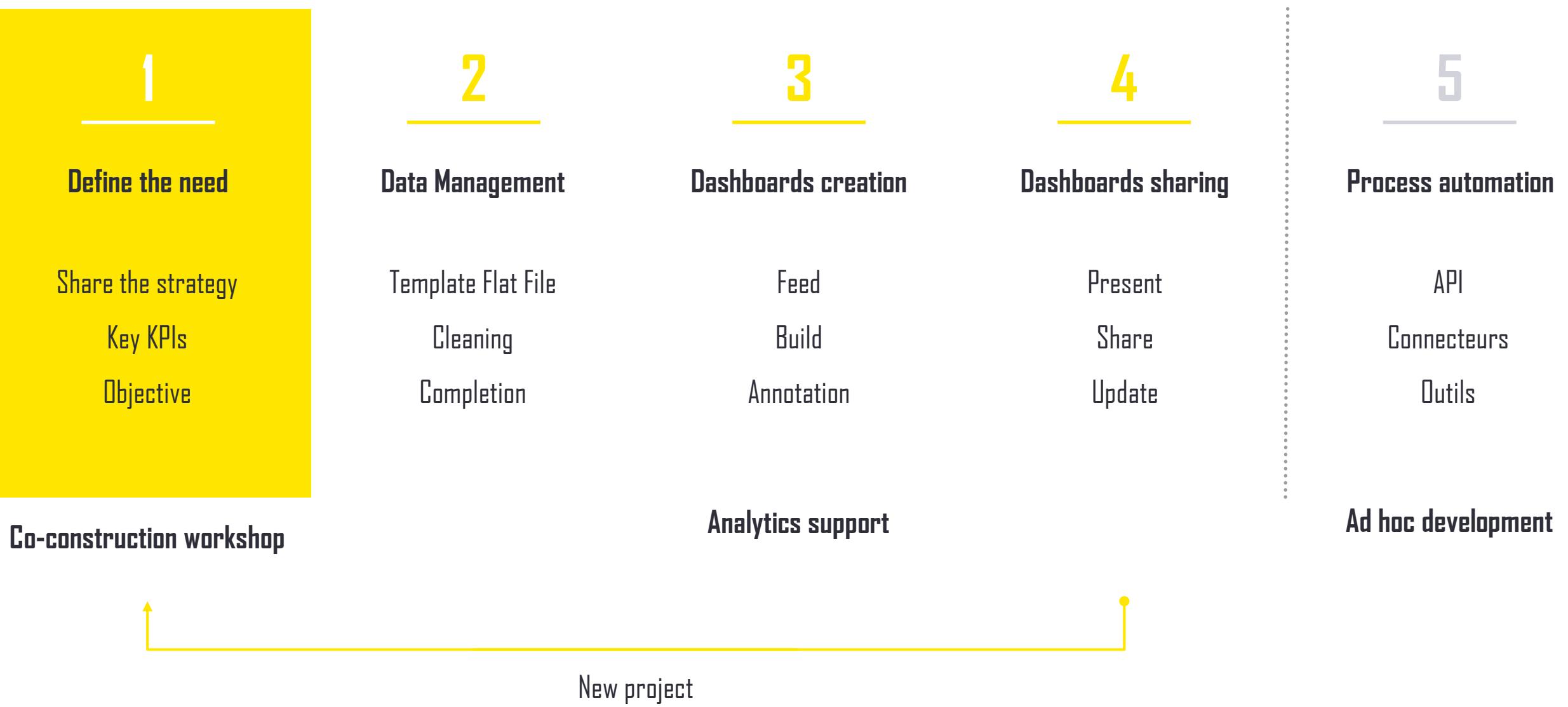
Allow easier graphical and interactive manipulation of the data for less expert people

Use data to convey ideas, processes, knowledge in an interactive or static way

Reporting

Share KPIs on a recurring basis to track changes and gaps

The methodology



MATLO by EY (demo)



Provide a direct access to the operations

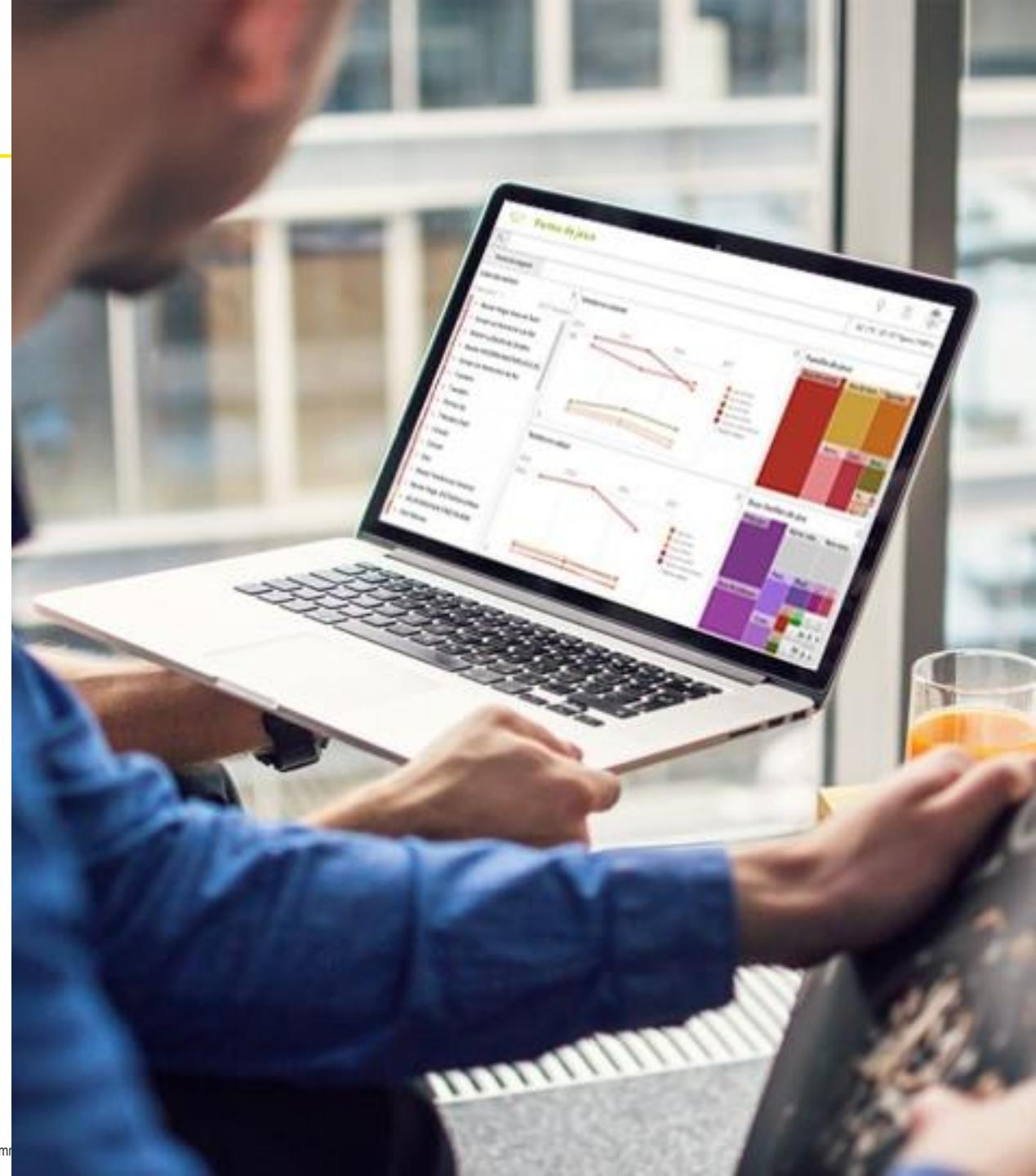
B to B secured Plateform to share data visualization

for intuitive, interactive drilldown and data provision

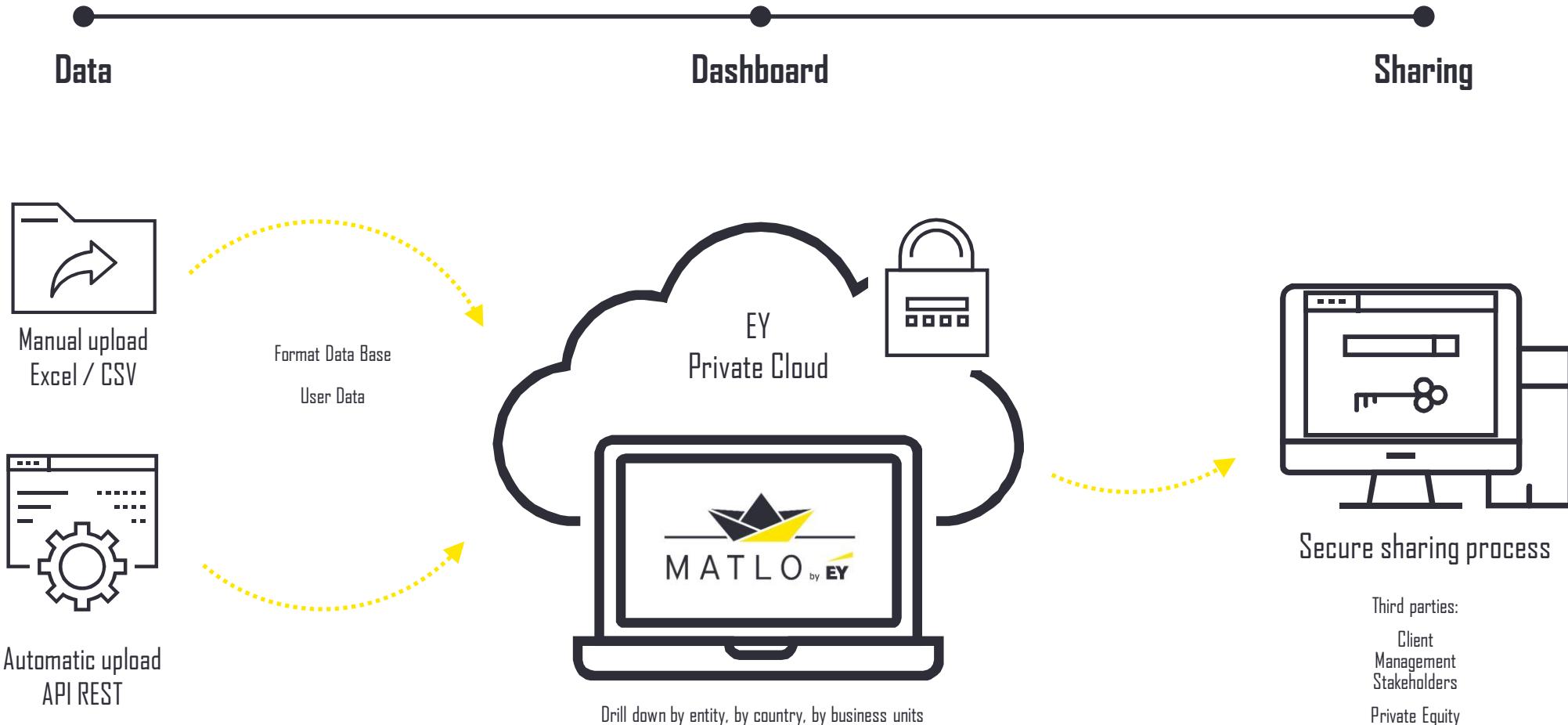


The benefits of Matlo by EY

- Platform for creating, collaborating and sharing dynamic and interactive dashboards
- Unique space to work in collaboration and co-construction with EY teams
- Intuitive tool for getting started and designed for C-Levels without training or prerequisites to navigate your data
- Data referencing tool referent property of EY and hosted on its secure private cloud
- One-click sharing of your dashboards within your company or with guests
- Easy updating of your data manually or automatically



An easy process



Are you ready to start with data design ?



Virginie DAVID
Associate Partner

