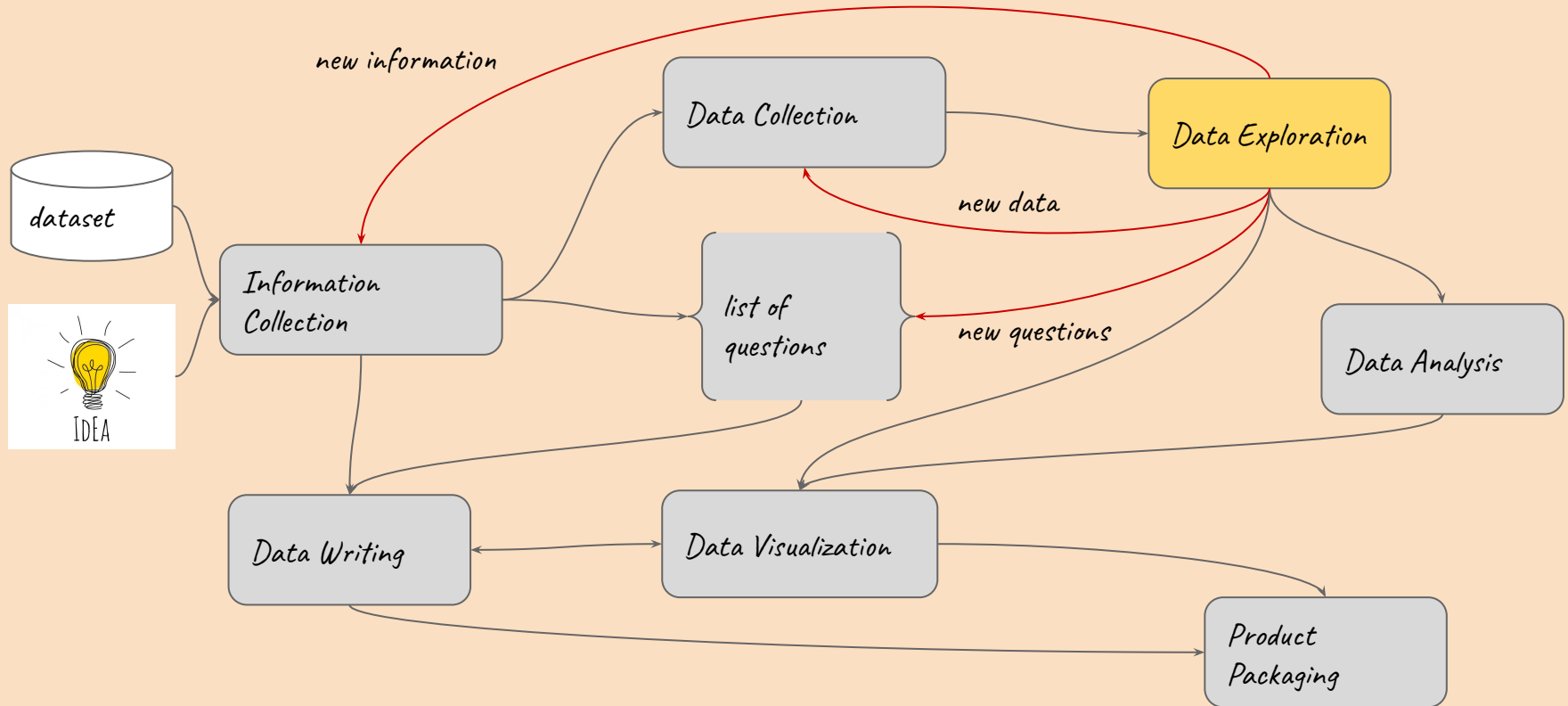




# Data Journalism Workflow

Project a DJ case - 2<sup>^</sup> Part

# Data Exploration



## WHAT

### Understand the datasets

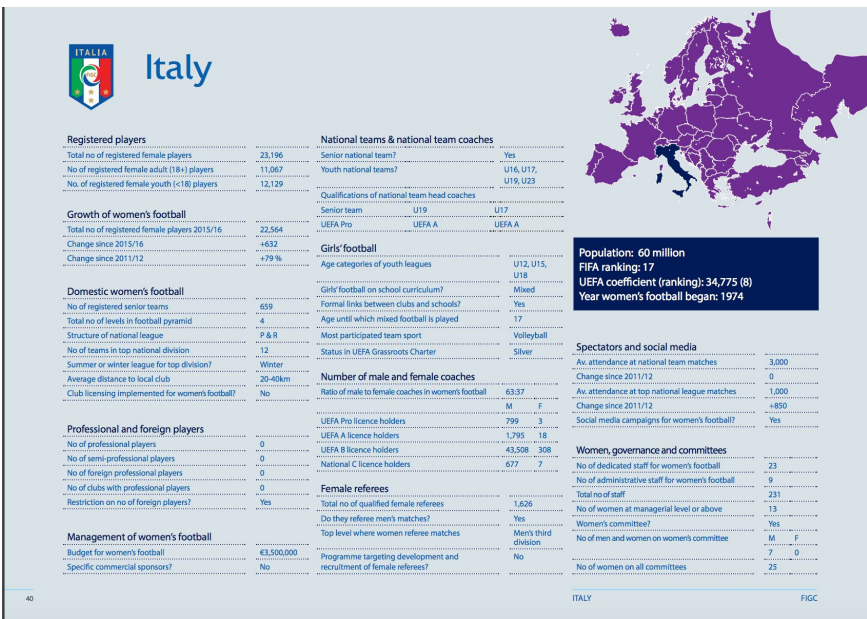
- size or amount of data
- completeness of data
- data correctness
- possible relationships between data elements or files / tables in the data.

## HOW

### Draw raw graphs

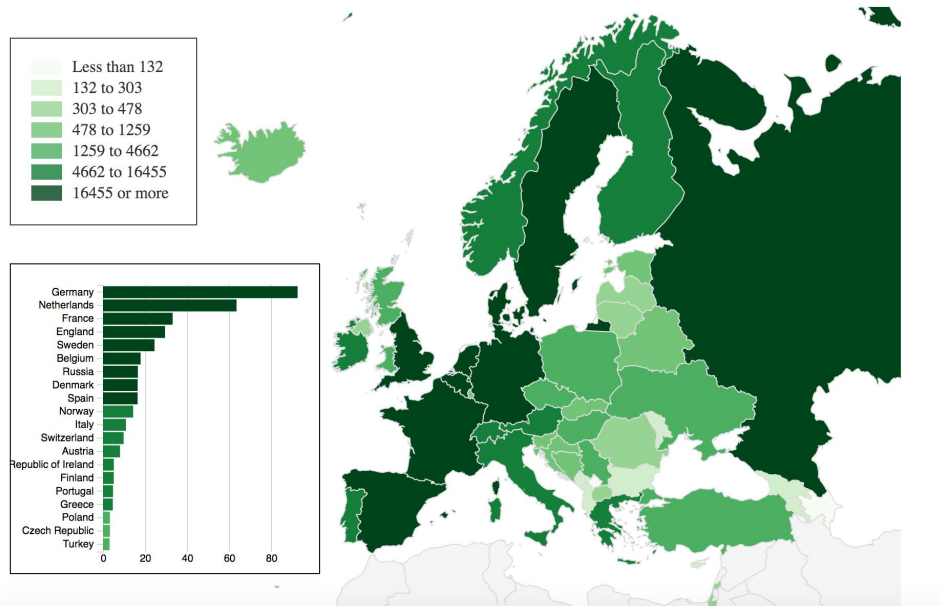
- exploit online/desktop tools to draw raw graphs
  - tableau
  - data wrapper
  - chart.io
  - ...

# Data Exploration - Women's soccer



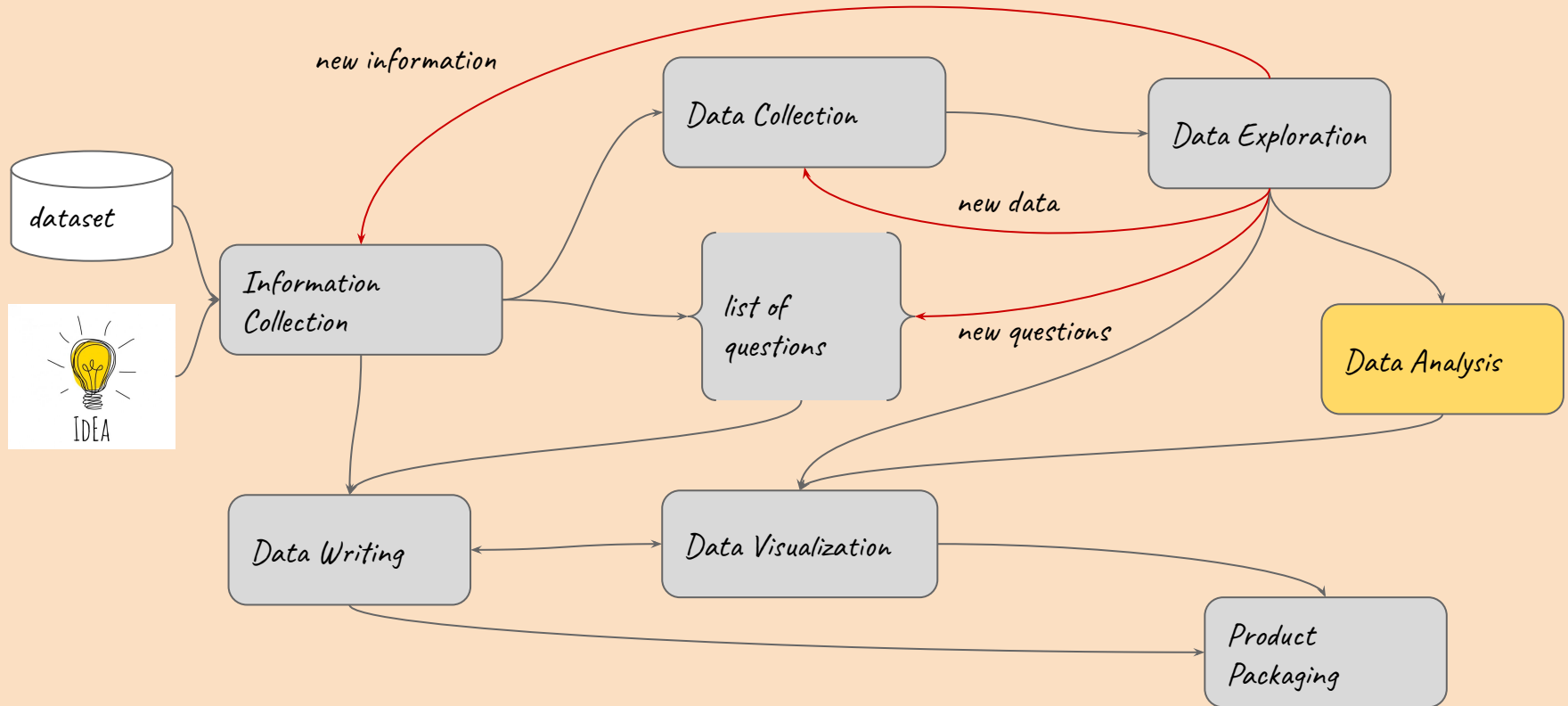
**Before Exploration**  
UEFA table (one for each country)

Giocatrici  Numero normalizzato sulla popolazione

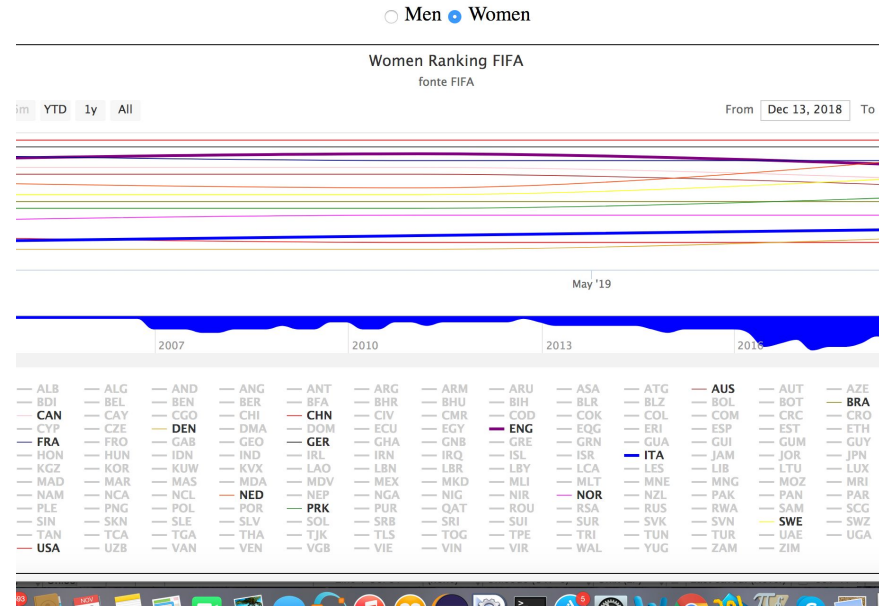


**After Exploration**  
UEFA map (one for all countries)

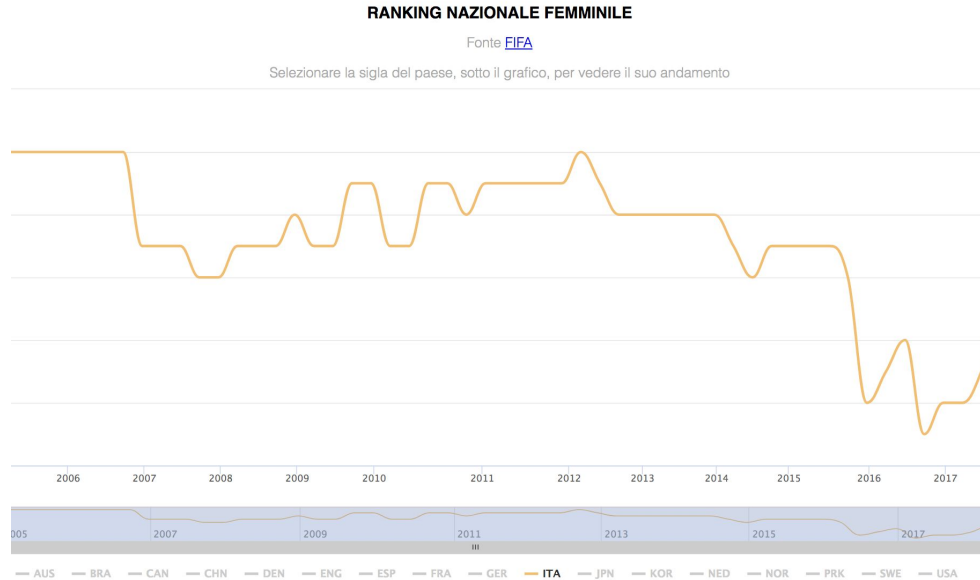
# Data Analysis



# Data Analysis - Women's soccer

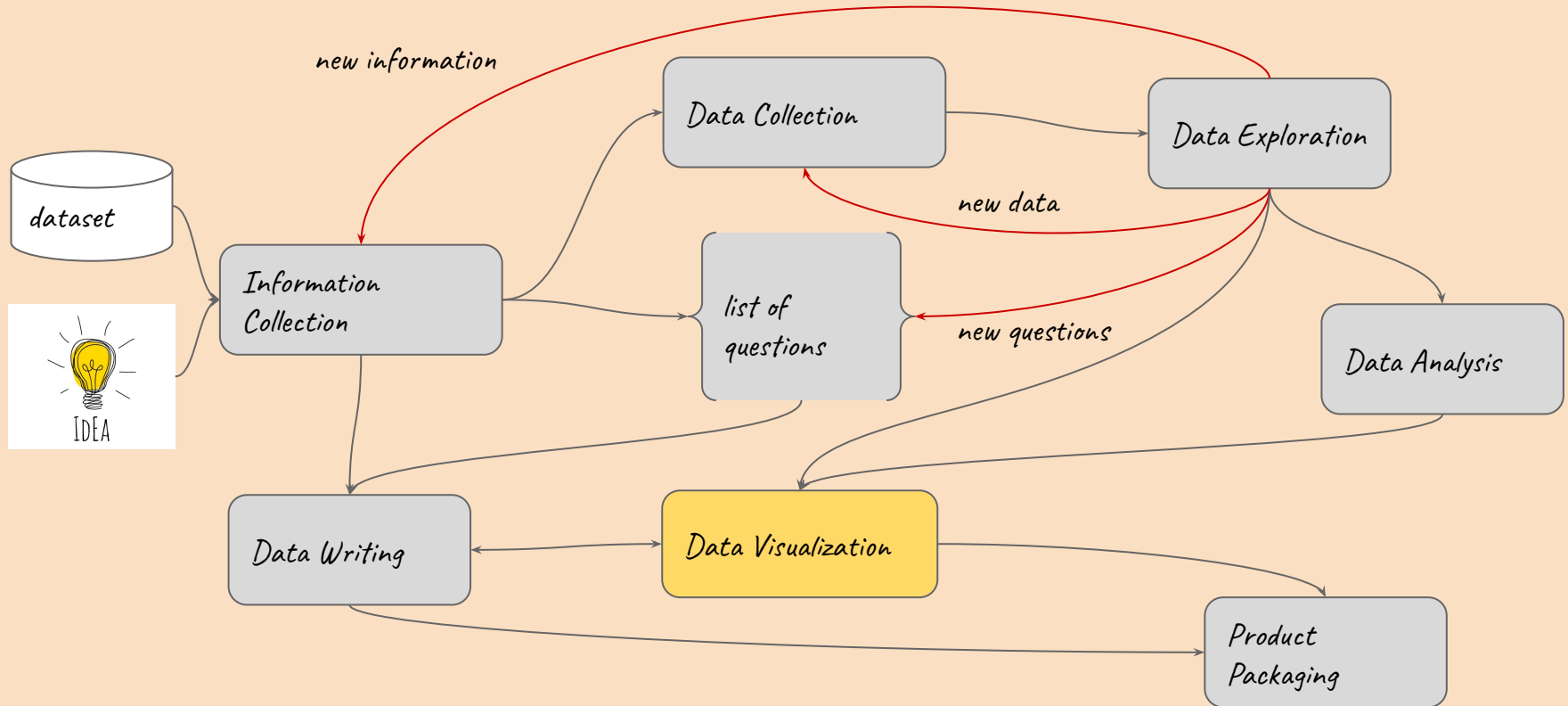


**Before Analysis**  
Ranking FIFA (all countries)



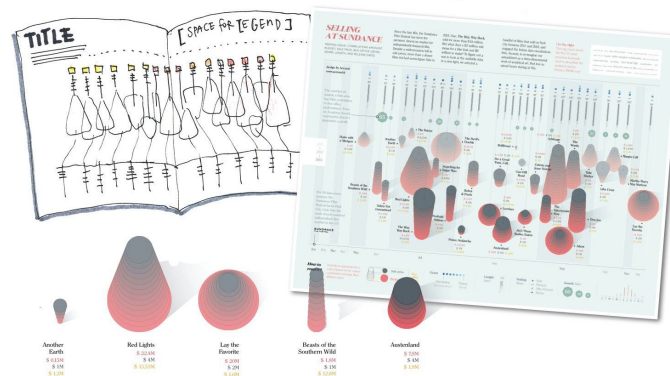
**After Analysis**  
Ranking FIFA (some countries)

# Data Visualization



# Designing and visualising

- Designers **plan** and **create** visualisations with the help of journalists and developers
- Sketch a visualization before realize it





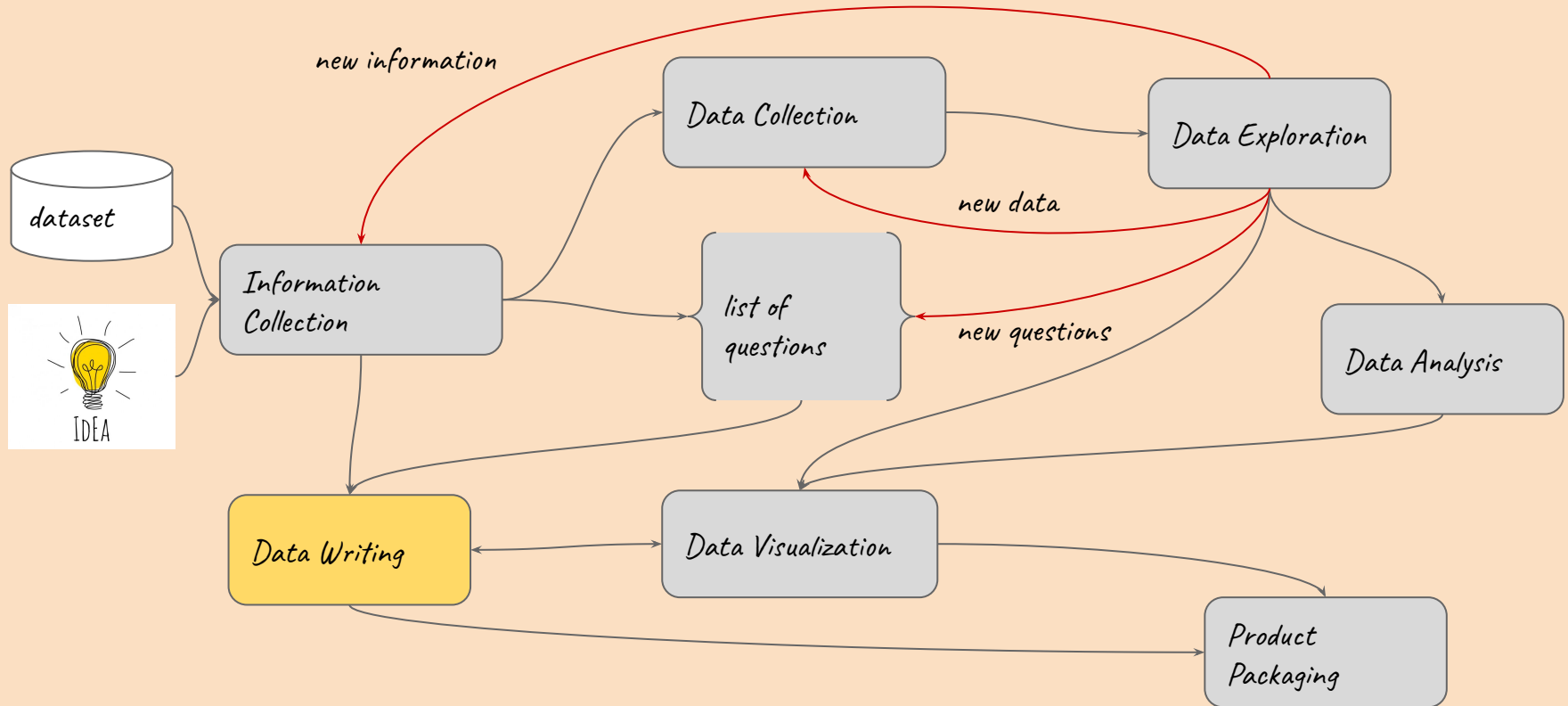


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# From Data to Viz

## *Types and categories of visualizations*

# Data Writing



# Writing

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- Numbers without context are just numbers, **words give context**
- Declare the sources, explain the charts, wrap a story around the numbers, ensure the numbers are clearly understood
- Enter real stories not just facts
- Sometimes words are enough

# Storyboard

---

- The List of questions will be our storyboard
- Try to guess the visualization useful for the story
- **The story it's the centre**

# What are you trying to say?

---

- Stories are aimed at the general public not academics.
- Imagine you are are telling the story to your grandmother.
- Your job is to bridge the gap between the data and the user
- Sometimes it's sufficient to present open data with simple visualization
  - Example: Art Market for Dummies ([Askmedia.fr](http://Askmedia.fr)).

# What is or isn't a story

---

How to choose what is interesting?

This is the million dollar question

Some questions can help:

- Is it straightforward?
- Can you explain it simply to someone who has never heard of it before?
- Is it newsworthy?
- How much time for producing this work?
- ...

# What is or isn't a story

---

Some questions can help:

- Will it be past its sell-by-date when it is published
- What is the best possible way to tell this story?
- How simple can I make it?

A great storyteller James Cameron from the Guardian said “The main thing is simplicity”

[James Cameron and the importance of the story](#) (simonrogers.net)

# Where

---

- GeoLocation of data is very important, it allows different sources of data to be integrated and “mashed up” to create a new story.
- Space and time are natural ways to mash up data.
  - The gun ownership and gun homicides murder map of the world (The Guardian)



# The source

---

- Where did the data come from? **The source**
- The most important W
- **Transparency** about the source is critical.
  - How do you know if the information is correct? We need to use data from reliable sources. We need to declare which modifications have been carried out in order to have reproducible results
- Do not blindly trust the accuracy of supplied data

# Causation Vs Correlation

---

- Data in the right hands can be extremely powerful and should a key element of any decision
- But too often data can be misunderstood
- Correlation is, “A statistical measure (expressed as a number) that describes the size and direction of a relationship between two or more variables
- causation “Indicates that one event is the result of the occurrence of the other event

smoking is correlated with alcoholism, but doesn't cause alcoholism.

smoking causes an increase in the risk of developing lung cancer

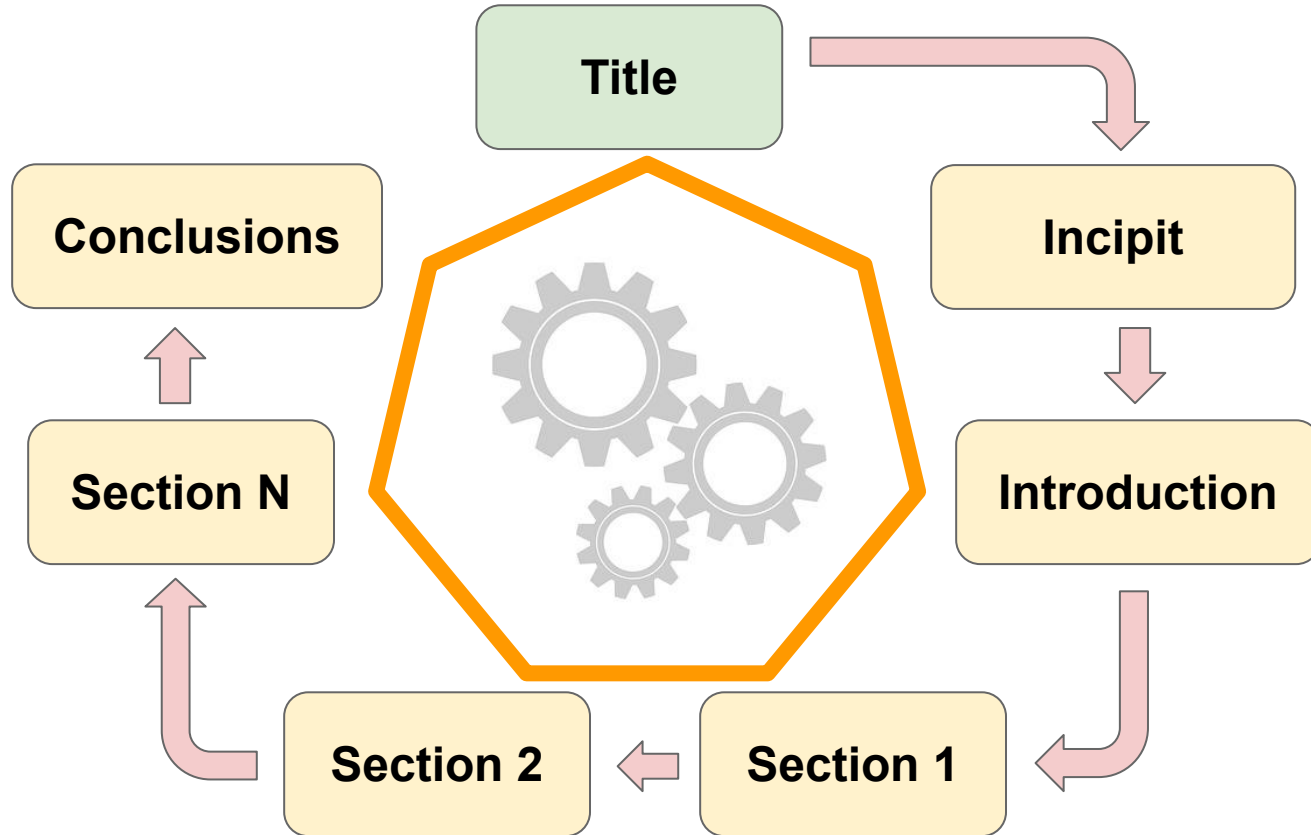
# Build the story on the basis of

---

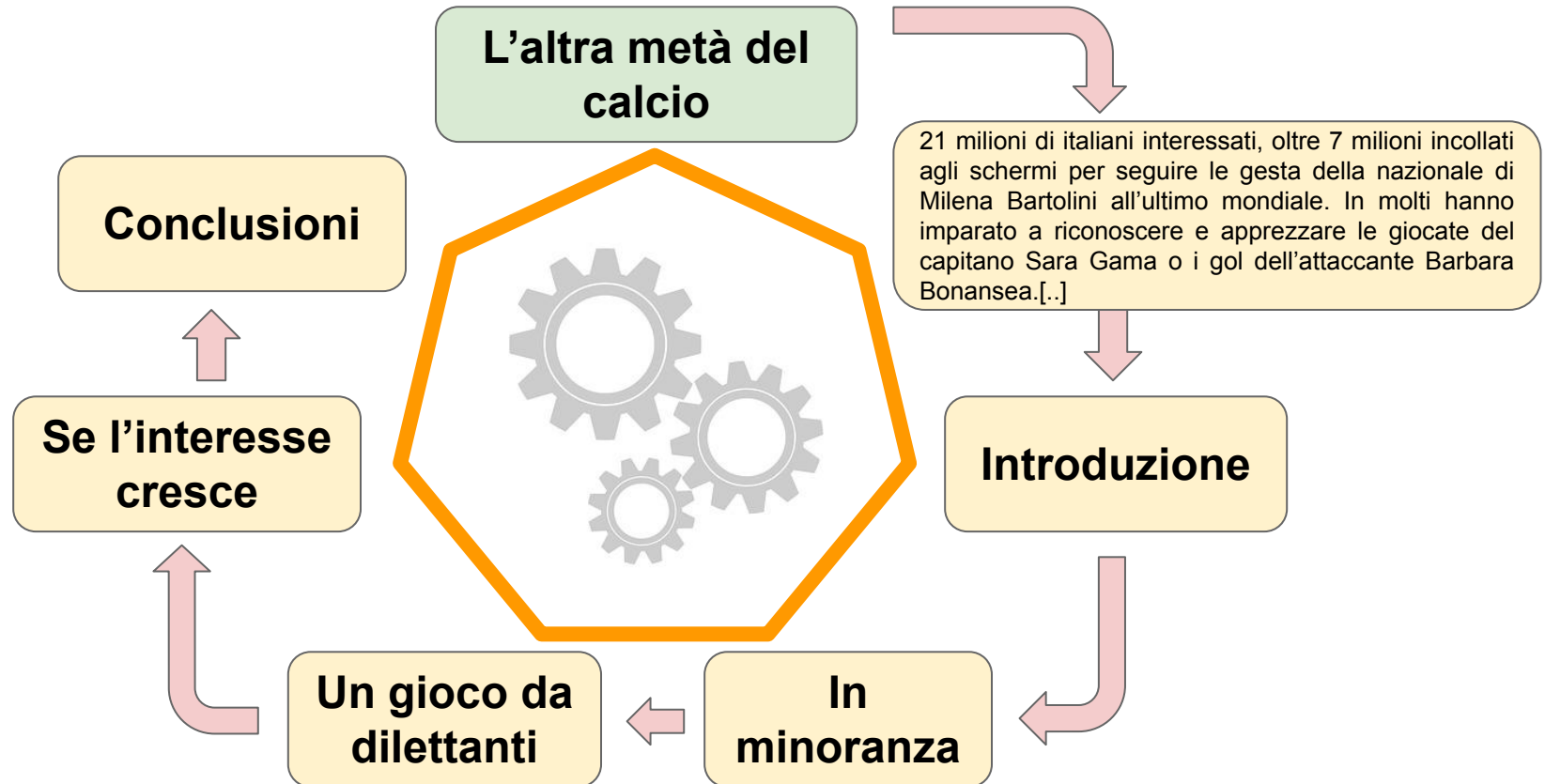
- interviews
  - report full interviews in the story
  - extract only useful information and quote the interviewed in the text
- information
- data
  - select only useful visualizations
  - if necessary, build new compact visualizations

# Story Board

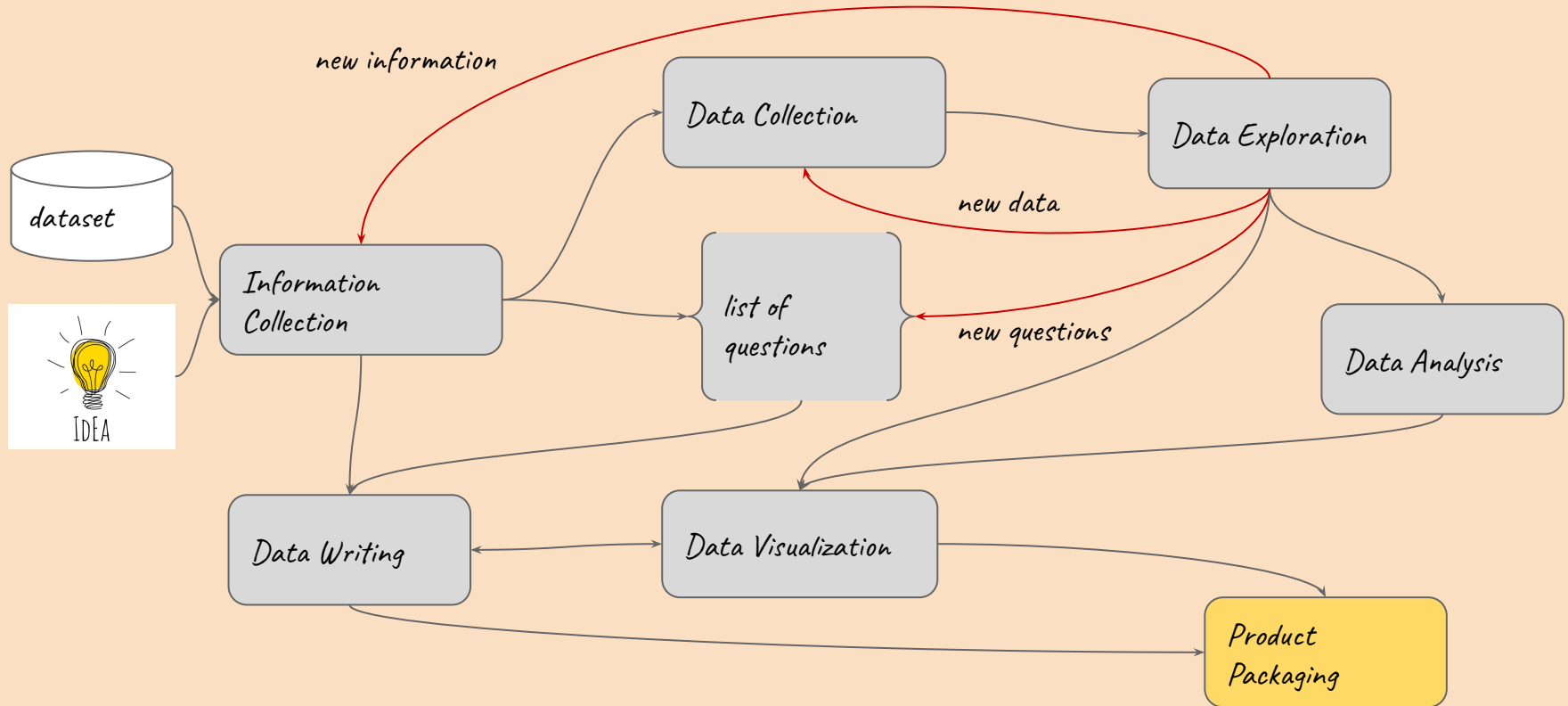
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# Story Board - Women's soccer



# Product Packaging



# How to publish our story

---

Brochure - Pdf

Slides

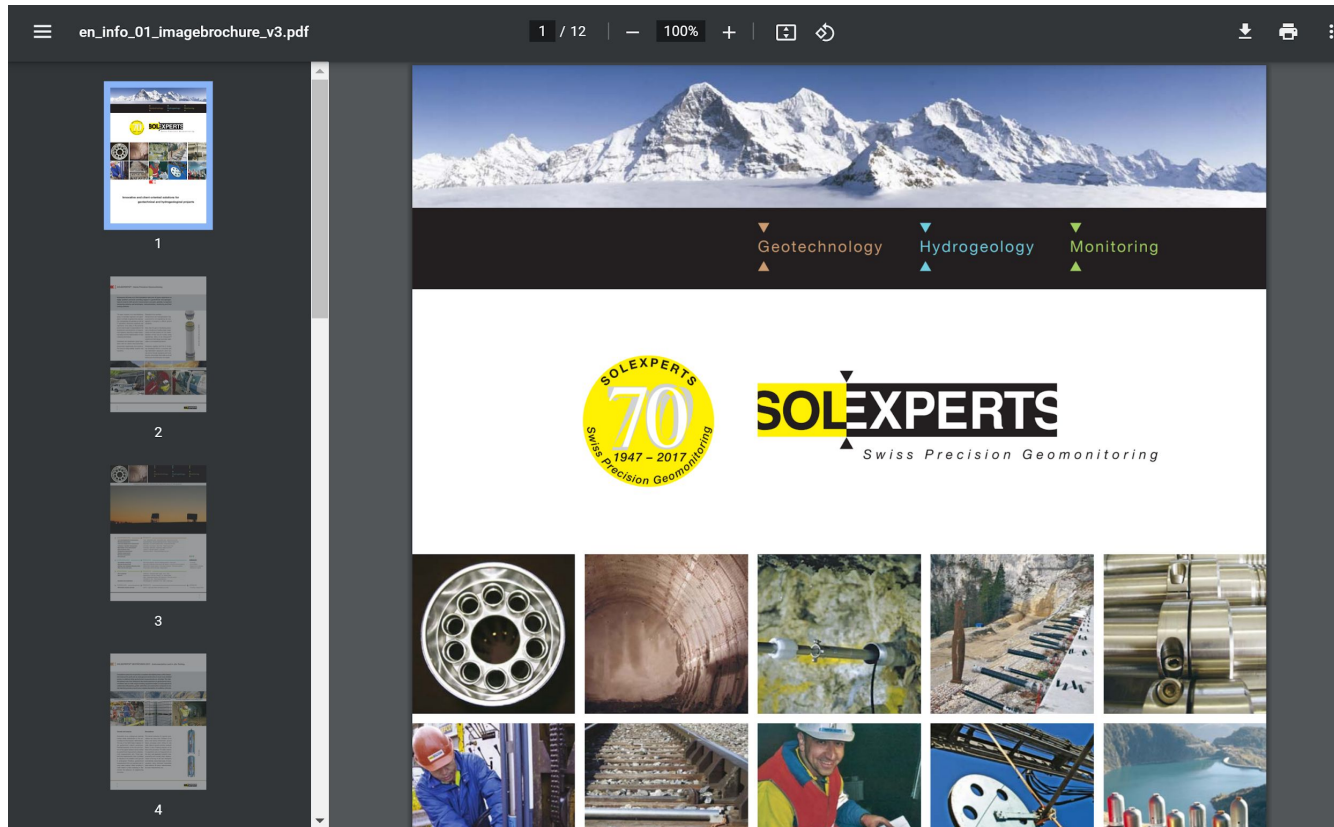
Video

Photos

Web Application

App

# Brochure





# Slides

---

4/11

artnet®news



Casa Vicens. Courtesy Casa Vicens and photographer Pol Viladoms.

[See Gorgeous Photos of the First House Designed by Antoni Gaudí](#)

# Video

---

Latest World News Videos



[This country still only has 1 reported death from Covid-19](#)

# Web User Interface Design Principles

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## Clarity

- What just happened
- Where you are
- What you can do
- What will happen when you do it
- What just happened, etc.—rinse and repeat

The Google logo is displayed in its characteristic multi-colored font (blue, red, yellow, green, blue).

Cerca su Google o digita l'URL



**Clarity goes side-by-side with simplicity**

# Web User Interface Design Principles

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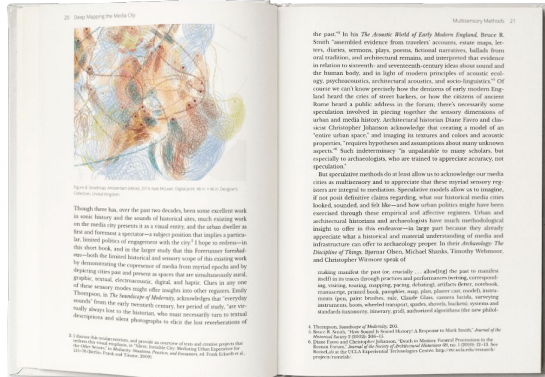
## Familiarity

Our eyes love seeing simple and familiar things

“spend less time reinventing a wheel, and use common solutions without feeling guilty”

conventional layouts will seem less complex just because they're familiar

# Conventional layouts to read a story



SECONDA EDIZIONI LOCALI CORRIERE TV ARCHIVIO SERVIZI CERCA LOGIN SCOPRI SOSTENITORI

LA CRISI

## Crisi in Siria, sarà una guerra vera? Il muro della Turchia sull'uso delle basi Trump e le bombe "nice and smart"

di Guido Rinaldi e Giuseppe Sestini

La due fide del governo americano: la prima in favore di un'azione limitata. La seconda per un colpo di maglio che ammonta sul serio Assad e con lui l'Iran | **LE MANOVRE L'INFORMATICA**

di **IL CAFFÈ**

### Il talento dell'aspirapolvere

Che cosa sogna un ragazzo? Di diventare un calciatore. Come Mikko Bertorello. Lui sì è arrampicato con pacienza sui

di Massimo Gaccioli

di Stefano Mostafaei

Hollande, elezioni di potere-dopo l'Eliseo

di D. Motta e R. Abisovod

La laurea serve ma nessuno ci crede



«La rapina del secolo»: le prime pagine dei quotidiani sportivi europei | **inmagini**

Anche alcuni quotidiani spagnoli attaccano apertamente le decisioni dell'arbitro che hanno deciso Susi Mielich, il serbo.


# Online layout to read a story

SEZIONI EDIZIONI LOCALI CORRIERE TV ARCHIVIO SERVIZI CERCA LOGIN SCOPRI SOTTOSCRIVI

f t g+ in

LA CRISI

## Crisi in Siria, sarà una guerra vera? Il muro della Turchia sull'uso delle basi Trump e le bombe "nice and smart"



di Guido Olimpio e Giuseppe Sarcina

Le due linee del governo americano: la prima in favore di un'azione limitata. La seconda per un colpo di maglio che ammonisca sul serio Assad e con lui l'Iran [LE MANOVRE: L'INFOGRAFICA](#)


f t g+ in

**IL CAFFÈ**

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di Massimo Gramellini



di Stefano Montefiori

Hollande, «lezioni di potere» dopo l'Eliseo



di D. Manca e R. Abravanel

La laurea serve ma nessuno ci crede

DOPO REAL-JUVENTUS



«La rapina del secolo»: le prime pagine dei quotidiani sportivi europei [Immagini](#)

Anche alcuni quotidiani spagnoli attaccano apertamente le decisioni dell'arbitro che hanno deciso Real Madrid-Juventus



Scrolling bar

# Horizontal Layout

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Samples

[hotel oxford](#)



Karl-Erivan Haub è scomparso sabato sul Cervino. È arrivato a Zermatt venerdì pomeriggio. Sabato alle 8.30 ha passato il badge di ingresso alle piste del Piccolo Cervino. E' stato visto l'ultima volta alle 9.20 nella piccola baita accanto agli impianti di risalita. Le nuvole nere che avvolgono il Cervino non inducono alla speranza.

E neppure le parole delle persone sedute dietro un tavolo del Soccorso alpino di Zermatt, che invece sono qui solo per questo, recitare una parte, non spezzare un esile filo. «Abbiamo fatto tutto il possibile» dice allargando le braccia Romy Biner Hauser, la sindaca, mentre gli altri le rivolgono occhiate di rimprovero, quasi stesse bestemmiando.

Il procuratore cantonale Dominic Lehner sembra smarrito, quasi si stesse chiedendo cosa ci fa in questa stanza spoglia. «Al momento non si può stabilire se siamo davanti a un reato o a un tragico incidente» afferma con aria non troppo convinta. Gli altri, i soccorritori, abbassano lo sguardo.



# Vertical Layout

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Karl-Erivan Haub è scomparso sabato sul Cervino. È arrivato a Zermatt venerdì pomeriggio. Sabato alle 8.30 ha passato il badge di ingresso alle piste del Piccolo Cervino. E' stato visto l'ultima volta alle 9.20 nella piccola baita accanto agli impianti di risalita

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## Samples

[Barrel & Barc](#)  
[Vanity Claire](#)  
[Eshbeata](#)

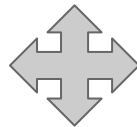
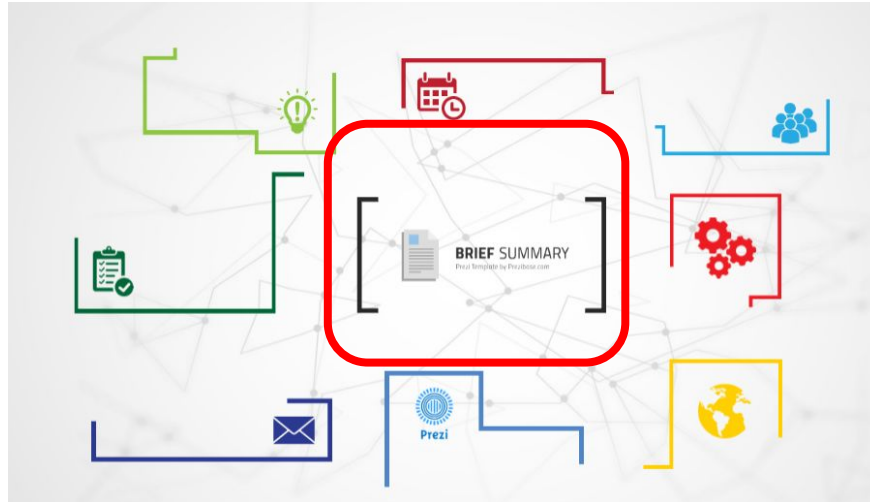


# Zoom & Panning Layout

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Samples

[King Zog](#)



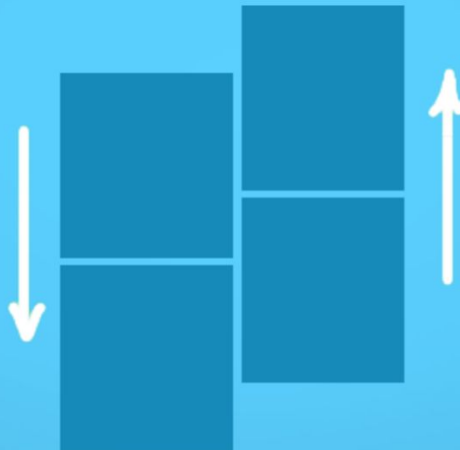
# Multiscroll

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## multiScroll.js

Create divided multi-scrolling pages.

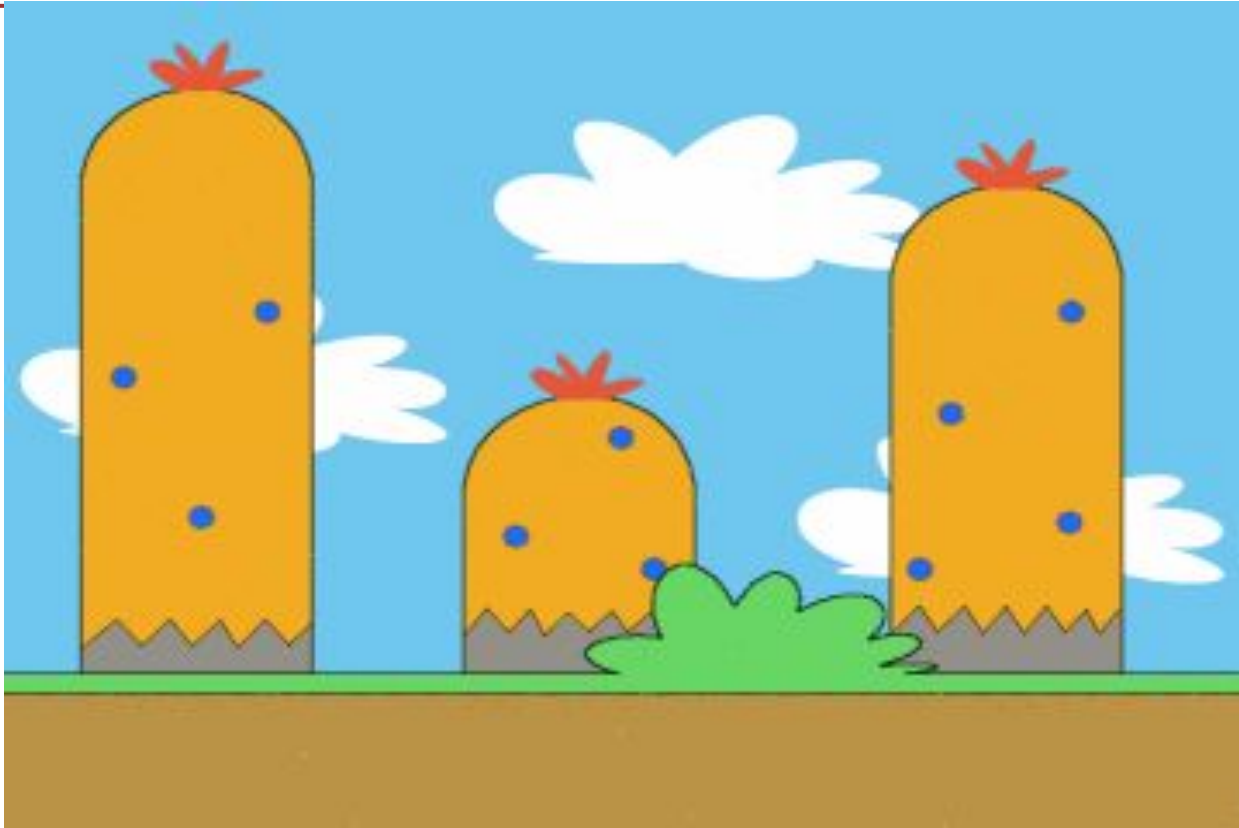
Download



[Samples](#)

# Parallax Effect

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# Parallax Website

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[Demo without parrallax](#)

[Demo with parallax](#)

[Tutorial on how to build parallax website](#)

Many samples on internet

- [Parallax](#)
- [Storytelling](#)
- [Collections](#)

# Final check

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Check the results with domain experts

Check the sources

Check the rights of data, images and video collected

# Newsroom composition and organization

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# What kind of teams are there?

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## 1. Lone rangers

- one person does everything
- possible using all the tools of the DDJ ecosystem: [OpenRefine](#), [Datawrapper](#), [Tableau](#), [Google Fusion Tables](#), [CartoDB](#).

## 2) Two/Three-person teams

- The Guardian US's two person DDJ team created the award winning [Guide to gay rights in the US](#).

## 3) Small scale team (less than 25)

- Able to produce innovative projects quickly
- Part of the newsdesk
- Example: ['Flooding and Flood Zones' map Hurricane Sandy](#) (WNYC)

## 4) Large team (more than 25)

- Has a deliberate strategy to create a new kind of online journalism
- They help with finding ways to tell the story better
- Part of the newsdesk
- Example: [2012 Olympic Experience](#) (New York Times)

# DJ Newsroom roles

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1. **data finder:** find relevant data sets
2. **analyst:** carry out good analysis
3. **data visualizer:** create appealing visualizations
4. **designer:** adapt the story to the target users
5. **journalist: identify** the breaking news and then **interview and write it up**



# Data Journalism fundamentals roles

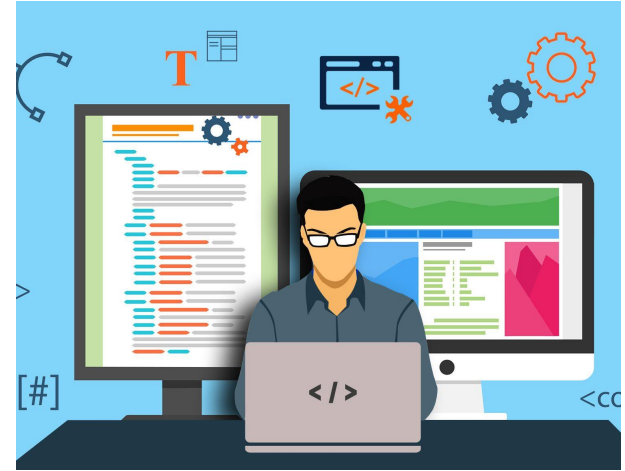
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**JOURNALIST**  
(Humanist)



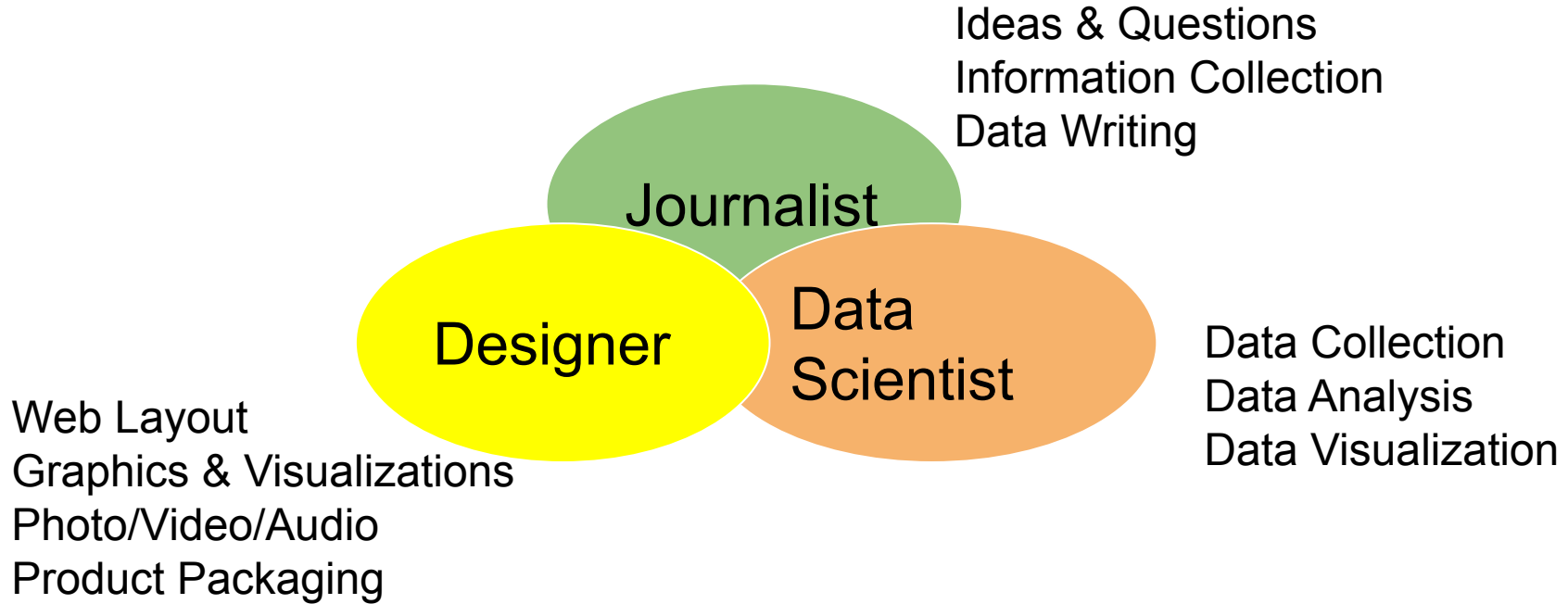
**WEB DESIGNER**



**DATA SCIENTIST**  
(Computer science)

# Small DJ Newsroom

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# Coordination

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- Journalist, designer and data scientist must cooperate
- The journalist is the coordinator
- Responsible Vs Executor