



# Chef-Etage sucht schlagfertige Quali-Ergebnisse!

**Tiefe und Validität der subjektiven Interpretation mit KI  
untermauern.**

R&R – Workshop – 24.10.2019

Have you ever heard from your internal stakeholders or clients...

Qualitative research  
is not representative

We need figures to  
convince our boss

You say: this target is  
more interested in  
our product – but  
how much more?

Please less text on  
your slides

But that's your  
subjective  
interpretation

Can we have an  
overview slide?



- ▶ Qualitative boutique specialist
- ▶ International: Need for German, English and French on a regular basis - and potentially many more
- ▶ Special methodology: The Cognitive Interview  
> 3 phases, requiring a special programming

**A prospective vision:  
Incorporate state-of-the-art technology**

- ▶ Increase sharpness/ acuity of analysis  
→ convincing insights
- ▶ Increase speed of analysis
- ▶ Increase capabilities for larger samples,  
for multi-country researches



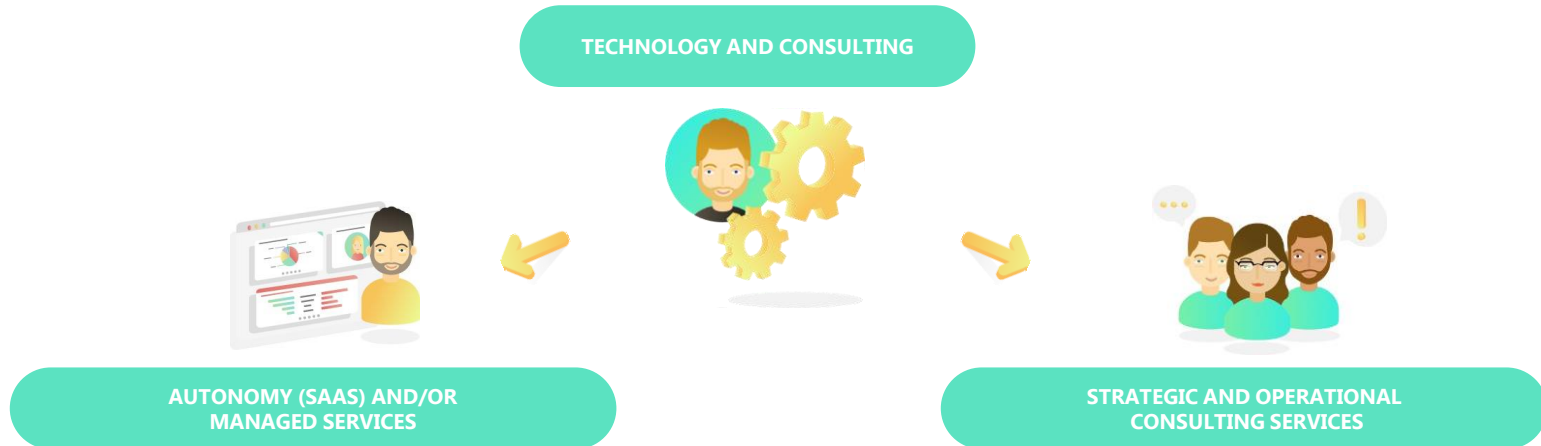
# Synomia : a pioneer in AI (NLP)

Synomia is a **pioneer in Artificial Intelligence**, owner of **multilingual semantic data processing technologies (NLP)**. By transforming text data into **insights**, the company allows brands to better understand their ecosystem and therefore build :

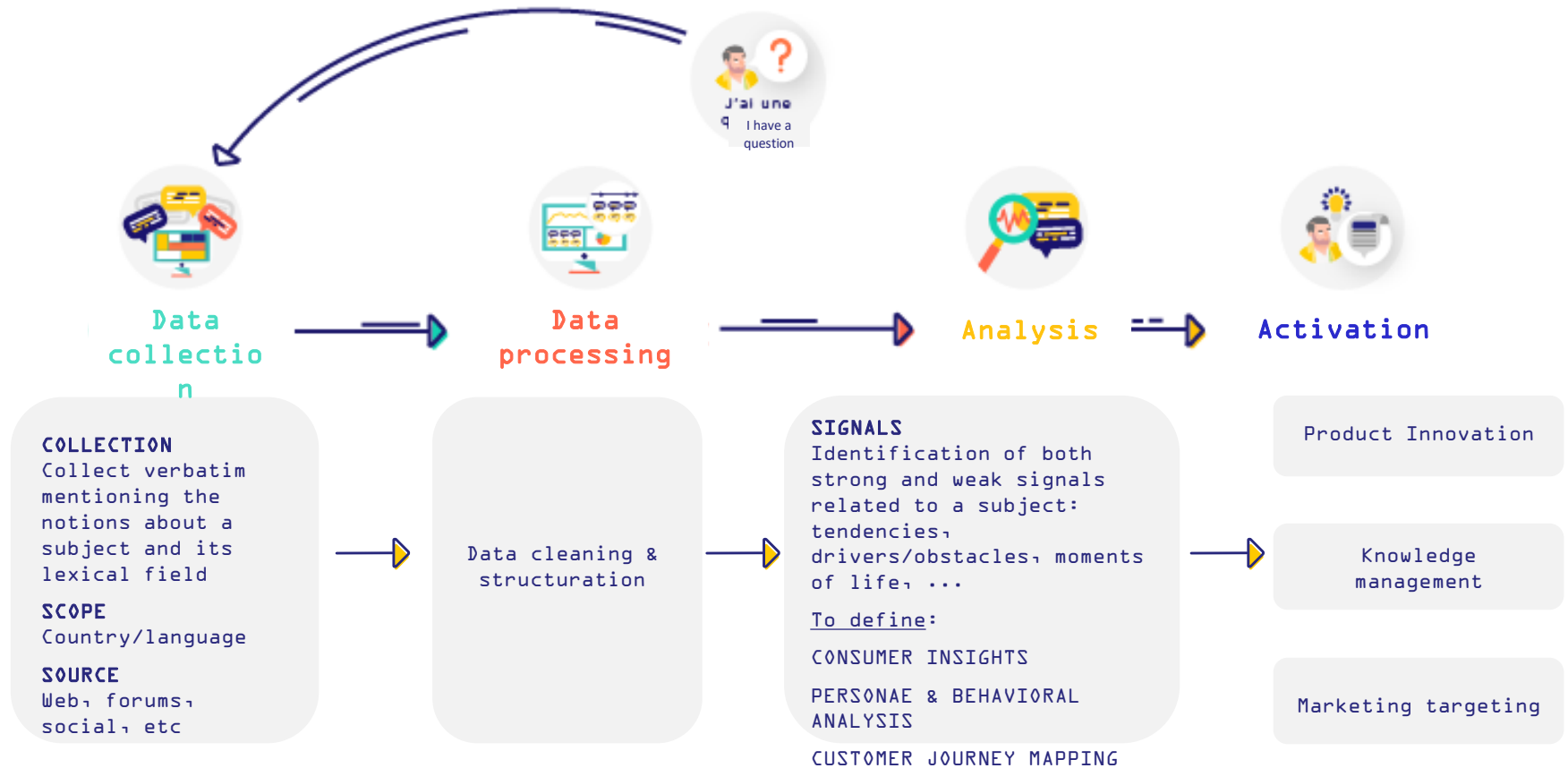
1 **Strategies**

2 **Activation plans**

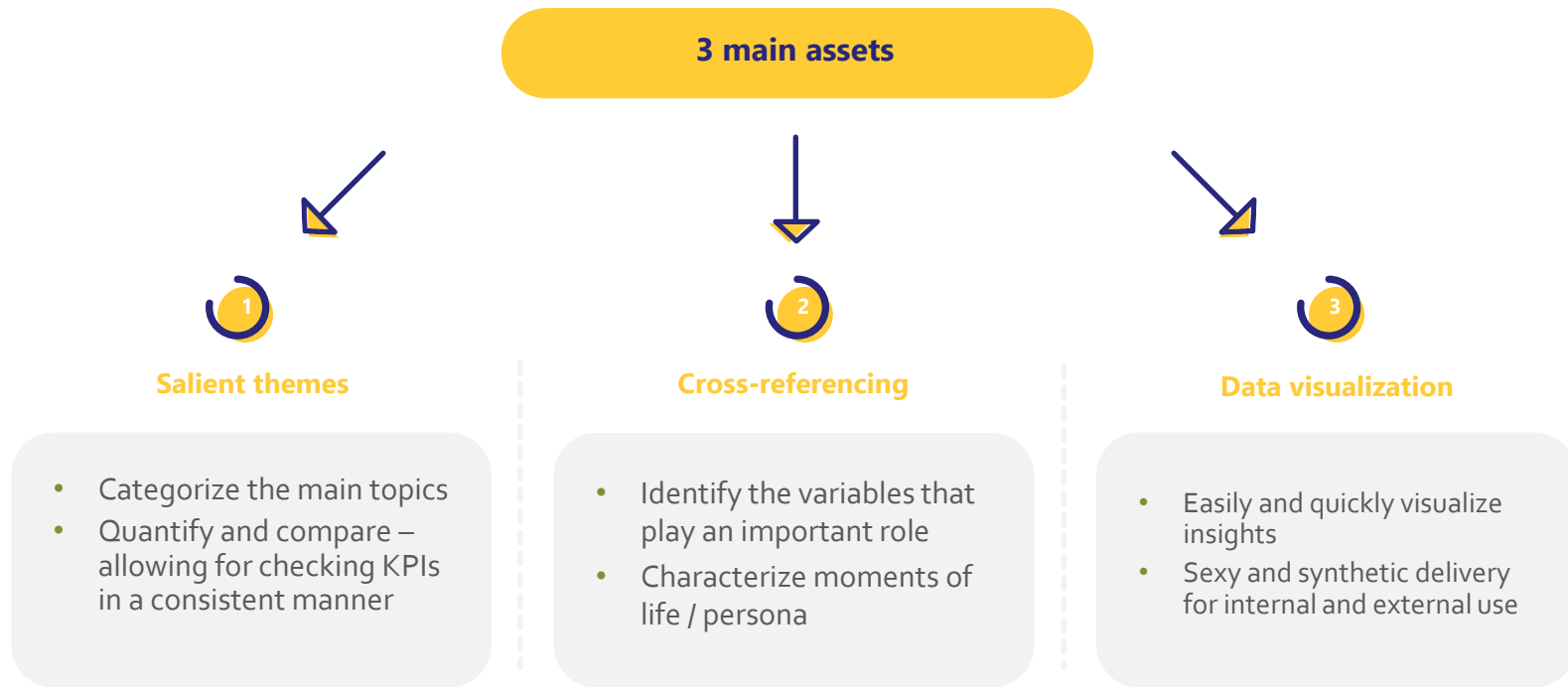
With both a technological and consulting expertise, Synomia gives access to insights in a 2-level offer :



# Leveraging AI to bridge data and business questions



# Artificial intelligence to make the data explicit



## Types of research where the syntax analysis was applied



### 3 types of research so far:

- ▶ Shopper research
- ▶ Product/ formula tests
- ▶ Exploratory research



### Using 3 methodologies:

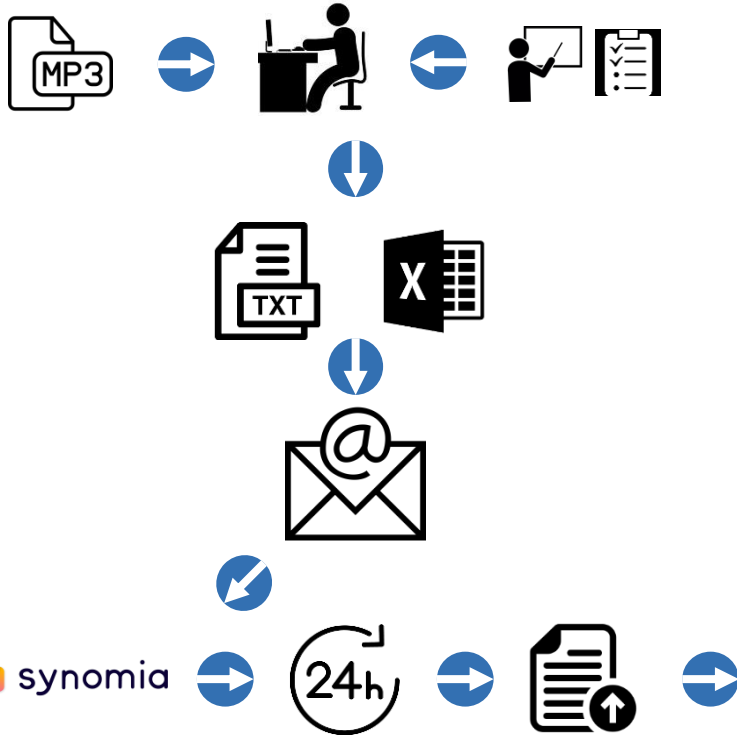
- ▶ Classic F-2-F interviews (long text; linear/ mp3 recording)
- ▶ Cognitive Interviews (long text; forward, backwards, sequences/ mp3 recording)
- ▶ Online blogs (short to medium sized texts; structured questions/ digital input)



**Some technicalities**

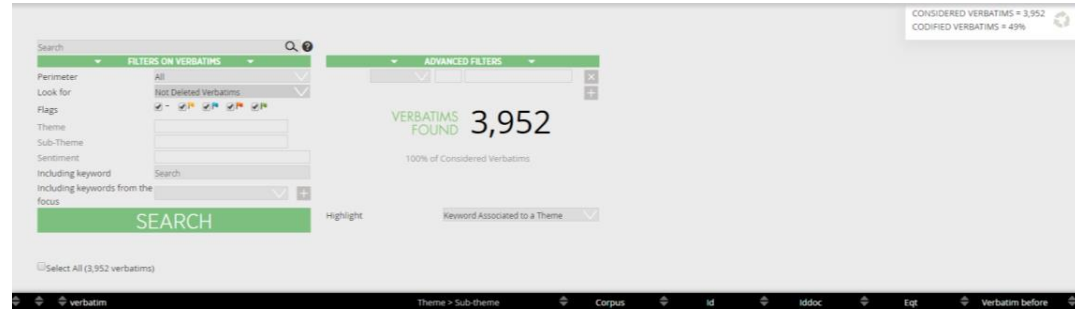


# The way of the interview into the platform requires rigorous transcription



We learned a lot ...

- about the importance of **punctuation!**
- that full transcripts are full of air
- and were exposed to our own bias/ influence and lack of standard



# The finesse lies in the semantic score, not in the counting in itself

Search  ?

Cross Keywords With:  Corpus

**FILTERS ON KEYWORDS**

Perimeter:  All

Look for:  Not Deleted Keywords

Ideal Content Perimeter:  All

Theme:

Sub-Theme:

Sentiment:

Found in verbatims from the focus:

Grammatical Types:  Noun Phrase, Adjective

Cluster:

Length:  min  max

**SEARCH**

**FILTERS ON COLUMNS**

min  max

**ADVANCED FILTERS**

**KEYWORDS FOUND 7,056**

Display Mode:  Table

Columns Display:

Saved Filters:

☐ Select All (7,056 keywords)

|   | Keyword    | Theme > Sub-theme                   | #Verbatims | Web | Semantic Score |
|---|------------|-------------------------------------|------------|-----|----------------|
| x | more       | <input checked="" type="checkbox"/> | 250        | 250 | 0              |
| x | other      | <input checked="" type="checkbox"/> | 66         | 66  | 0              |
| x | do (a)     | <input checked="" type="checkbox"/> | 9          | 9   | 0              |
| x | unable     | <input checked="" type="checkbox"/> | 6          | 6   | 0              |
| x | irritable  |                                     |            |     |                |
| x | glad       |                                     |            |     |                |
| x | lucky      |                                     |            |     |                |
| x | make (a)   |                                     |            |     |                |
| x | necessary  |                                     |            |     |                |
| x | pregnant   |                                     |            |     |                |
| x | supportive |                                     |            |     |                |
| x | lush       |                                     |            |     |                |
| x | weak       |                                     |            |     |                |

Low semantic score:  
Words just "counted" according to their frequency

Here the word MORE... not much to learn from!

Search  ?

Cross Keywords With:  Corpus

CONSIDERED VERBATIMS = 815  
CODIFIED VERBATIMS = 64%

**FILTERS ON KEYWORDS**

Perimeter:  All

Look for:  Not Deleted Keywords

Ideal Content Perimeter:  All

Theme:

**FILTERS ON COLUMNS**

min  max

**ADVANCED FILTERS**

**KEYWORDS FOUND 7,056**

Display Mode:  Table

Columns Display:

Saved Filters:

High semantic score: Words/ word entities ranked by their relevance in the whole corpus

Here the word entity "hot flashes" as the most relevant among the critical and frequent key words

| Keyword       | Theme > Sub-theme  | #Verbatims | Web | Semantic Score |
|---------------|--|------------|-----|----------------|
| hot flashes   | <input checked="" type="checkbox"/> Hot flashes > My default sub-theme                     | 53         | 53  | 4,787.42       |
| good          | <input checked="" type="checkbox"/>  | 138        | 138 | 3,863.90       |
| use (a)       | <input checked="" type="checkbox"/>  | 18         | 18  | 3,665.59       |
| one (a)       | <input checked="" type="checkbox"/>  | 45         | 45  | 3,515.71       |
| like (a)      | <input checked="" type="checkbox"/>  | 5          | 5   | 2,361.17       |
| skin care     | <input checked="" type="checkbox"/>  | 30         | 30  | 2,291.30       |
| get (a)       | <input checked="" type="checkbox"/>  | 2          | 2   | 2,061.13       |
| stage of life | <input checked="" type="checkbox"/>  | 18         | 18  | 1,938.44       |
| weight gain   | <input checked="" type="checkbox"/> Weight gain/ issues with weight > My default sub-theme | 25         | 25  | 1,872.13       |
| older women   | <input checked="" type="checkbox"/>  | 15         | 15  | 1,777.71       |
| night sweats  | <input checked="" type="checkbox"/> Sweatings issues/ Night sweats > My default sub-theme  | 24         | 24  | 1,763.33       |
| mood swings   | <input checked="" type="checkbox"/> Mood swings > My default sub-theme                     | 21         | 21  | 1,612.27       |

# Don't let yourself be fooled by "Captain Marvel"

|                            |  |   |   |       |
|----------------------------|--|---|---|-------|
| olay & neutrogena & aveeno |  | 1 | 1 | 15.46 |
| captain marvel             | <input checked="" type="checkbox"/>                                    | 1 | 1 | 12.14 |
| malala yousufazi           | <input checked="" type="checkbox"/> Role Models > My default sub-theme | 1 |   |       |
| alicia keys                | <input checked="" type="checkbox"/> Role Models > My default sub-theme | 1 |   |       |
| lumiere bio-restorative    | <input checked="" type="checkbox"/>                                    | 1 |   |       |
| serena williams            | <input checked="" type="checkbox"/> Role Models > My default sub-theme | 6 |   |       |
| michelle obama             | <input checked="" type="checkbox"/> Role Models > My default sub-theme | 5 | 5 | 0     |
| helen mirren               | <input checked="" type="checkbox"/> Role Models > My default sub-theme | 3 | 3 | 0     |
| meryl streep               | <input checked="" type="checkbox"/> Role Models > My default sub-theme | 3 | 3 | 0     |
| warren buffet              | <input checked="" type="checkbox"/> Role Models > My default sub-theme | 1 | 1 | 0     |
| amal clooney               | <input checked="" type="checkbox"/> Role Models > My default sub-theme | 2 | 2 | 0     |
| dave ramsey                | <input checked="" type="checkbox"/> Role Models > My default sub-theme | 1 | 1 | 0     |
| jessica lange              | <input checked="" type="checkbox"/> Role Models > My default sub-theme | 2 | 2 | 0     |
| peter thomas roth          | <input checked="" type="checkbox"/>                                    | 2 | 2 | 0     |
| another.oprah winfry       | <input checked="" type="checkbox"/> Role Models > My default sub-theme | 1 | 1 | 0     |
| bethenny frankel           | <input checked="" type="checkbox"/> Role Models > My default sub-theme | 1 | 1 | 0     |
| camryn manheim             | <input checked="" type="checkbox"/> Role Models > My default sub-theme | 1 | 1 | 0     |
| cyndi crawford             | <input checked="" type="checkbox"/> Role Models > My default sub-theme | 1 | 1 | 0     |

- (...) Annette Bening in the new **Captain Marvel** movie sports short gray hair and looks terrific, she is embracing being older. Angela Bassett is 61 (yes (...))

- The machine is able to detect names – we need to know who they refer to
- Thanks to the verbatim preview, we can always check the context to avoid wrong attribution/interpretation





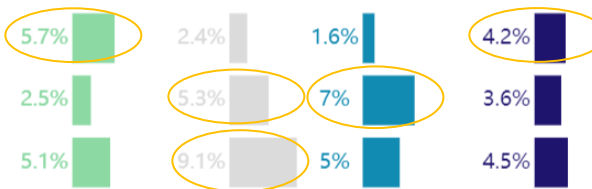
# Shopper research

A B C D

Contrôle, limitation de l'acte d'achat (ne pas prendre/ acheter)

Prix (en général)

Actions, promotions



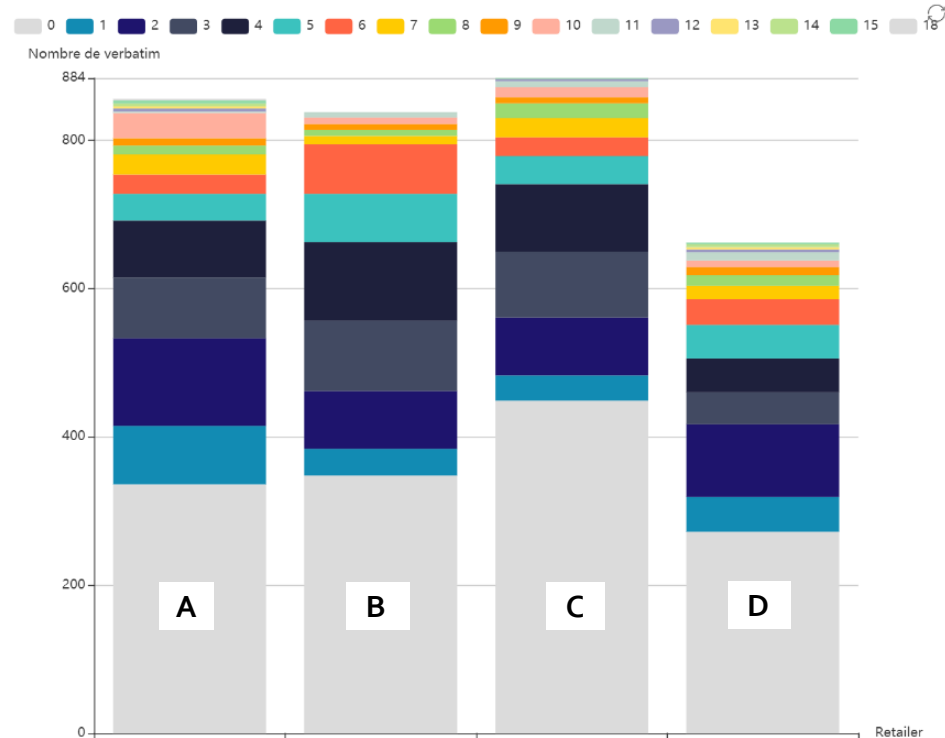
4 different retailers

2 inhibit spontaneous purchase  
while 2 encourage it



# SHOPPER EXPERIENCE

The sequencing of perceived steps/ singular moments tells a full story



Retailer D shows a **structural weakness...**

- in their ability to offer strong, memorable experiences at each step
- and to keep shoppers inside the shop





# Analysis of product/ formula tests

# NATURAL COLORATION (qual in-home use test)

During the coding phase, we notice the salient semantic fields



| Position ^ | Libellé             | Couleur   | Nombre de verbatim | Actions   |
|------------|---------------------|---|--------------------|---|
| 1          | Application         |    | 711                |       |
| 2          | Baume               |    | 59                 |       |
| 3          | Charlotte           |    | 151                |       |
| 4          | Cuisine             |    | 89                 |       |
| 5          | Détente             |    | 63                 |       |
| 6          | Faire des taches    |    | 102                |       |
| 7          | Henné               |    | 235                |       |
| 8          | Laver les cheveux   |    | 252                |       |
| 9          | Naturel             |    | 258                |       |
| 10         | Odeur               |    | 475                |       |
| 11         | Peur                |    | 226                |       |
| 12         | Préparation         |    | 575                |       |
| 13         | Résultat couleur    |    | 322                |       |
| 14         | Rincage             |    | 380                |       |
| 15         | Salle de bain       |    | 147                |       |
| 16         | Soin                |    | 178                |       |
| 17         | Température (chaud) |    | 170                |       |
| 18         | Temps de pose       |    | 303                |       |
| 19         | Texture             |  | 409                |   |

Emergence of classic topics (bathroom, stains, applying procedure, rinsing...)

...but also of less expected ones like

► SHOWER CAP (*CHARLOTTE*)

► KITCHEN

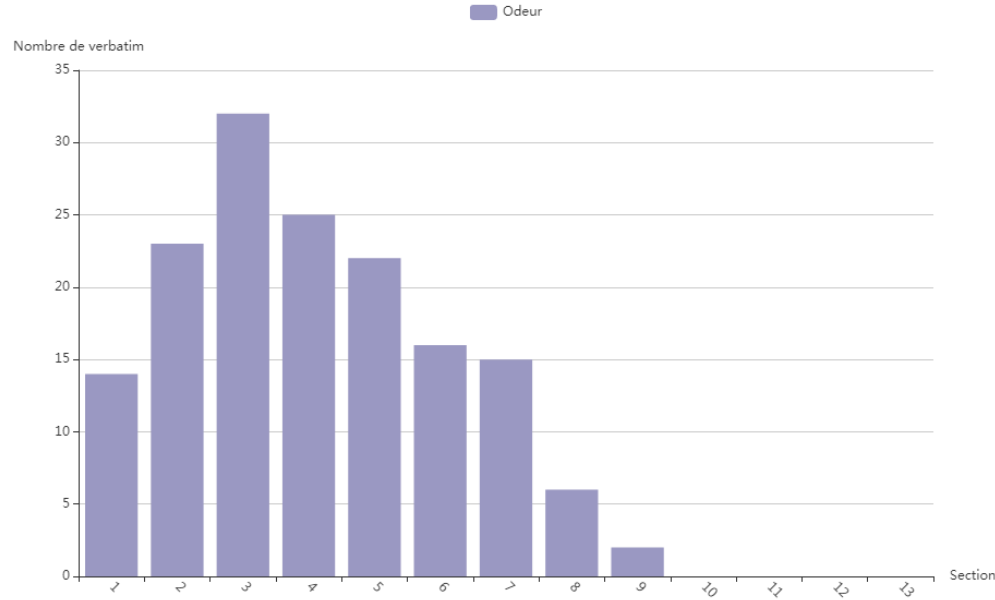
► (WARM) TEMPERATURE

► RELAXATION





# The richness of the Cognitive Interview lays in the sequencing, allowing a better feeling along the consumer experience curve



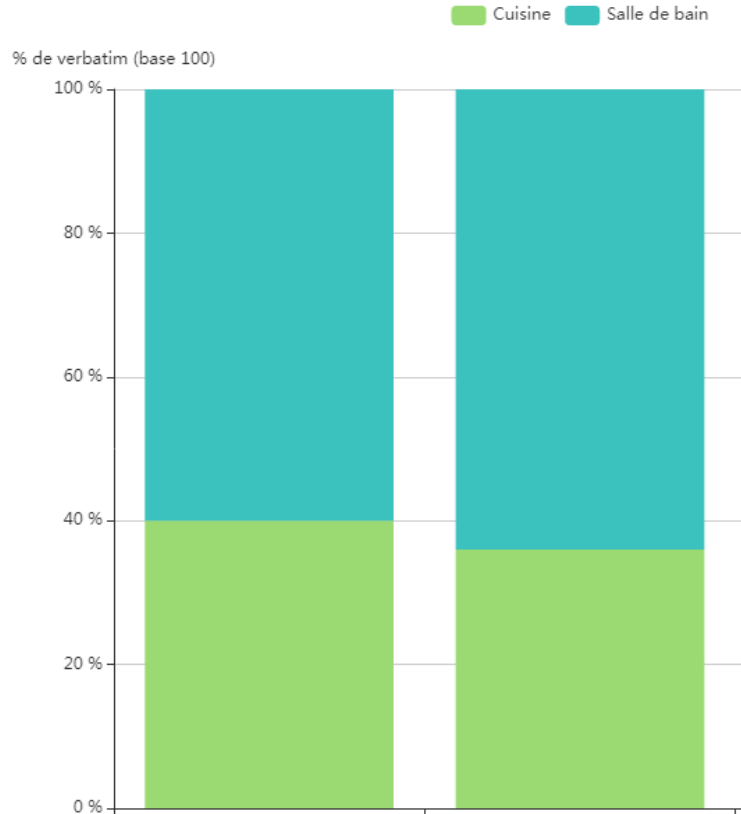
**Smell very strong at the beginning**

- While mixing of powder and water
- But gets less invasive and noticed over time

Périmètre : 463 verbatim  
• Themes = Odeur  
• Section = 1, 10, 11, 12, 13, 2, 3, 4, 5, 6, 7, 8, 9  
• Type of product = Herbalia-1



## Analyzing the “crime scene” becomes easy and visual: Kitchen vs. bathroom



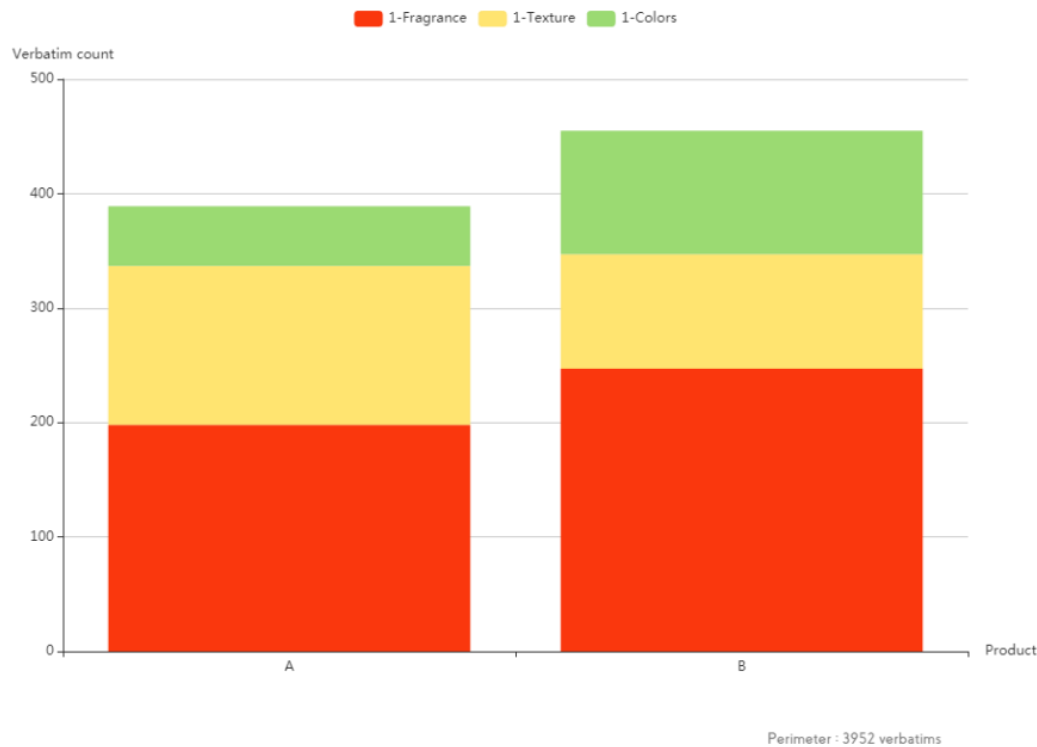
### Visualizing the customer experience!

- By the mention of the locations, we derive where participants **spent their time**
- The bathroom remains the main “crime scene” but the natural coloration makes a new space at home: The **kitchen**



# ANTI-DANDRUFF SHAMPOO

## Synthetic profiling of 2 formulas

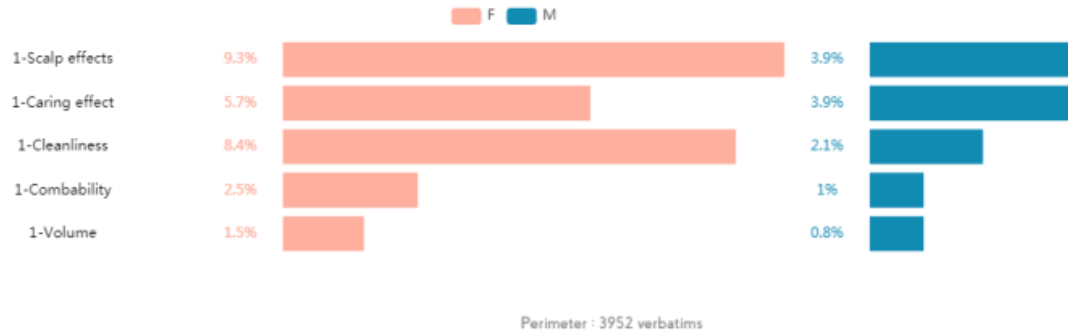


### Identifying the impactful candidate

- ▶ The **orange** color of product B was not expected and caused high **impact** among the participants, who **spoke a lot about it**, in comparison with product A which has a “normal white color”.
- ▶ This in return feeds the idea of a **creamy** texture (in yellow).
- ▶ Also the **fragrance is more striking for product B** – there is more to say about it.



## Assessment of product performance: the male/ female difference is striking (and less obvious when analysed by hand)



Target group differences are tangible

- Women are much more susceptible to perceive the effects of the products (A and B)
- For men, a shampoo is a shampoo is a shampoo... 😊





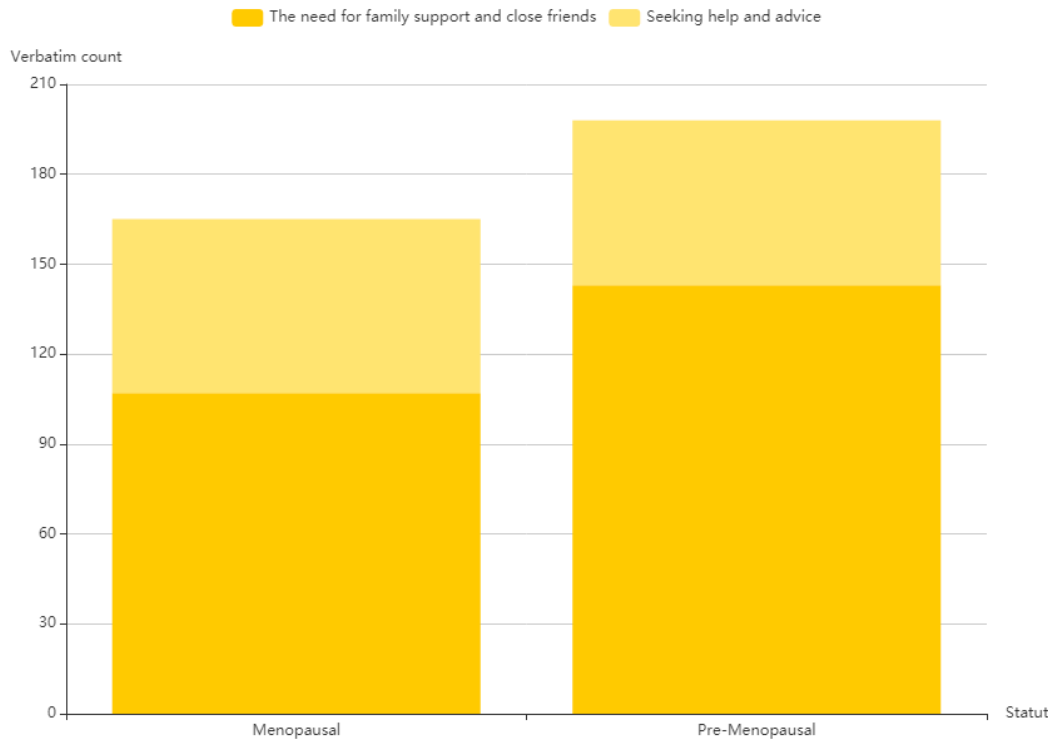
# Analysis of online diaries/ blogs

# MENOPAUSE

The code plan weighs the respective importance of topics within the corpus



## Qualitative Data can show by “how much more” a phenomenon occurs



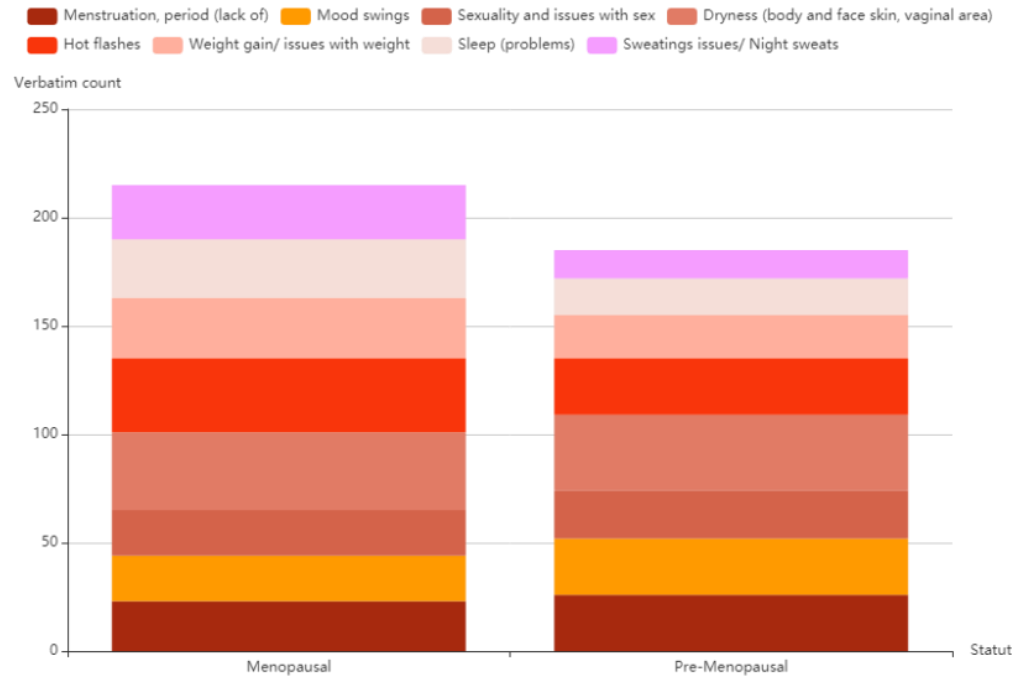
Perimeter : 815 verbatims

• Themes = Seeking help and advice, The need for family support and close friends

- A similar phenomenon but with a **larger amplitude** in a specific target group



# The platform consolidates complex content in a digestible and didactic way



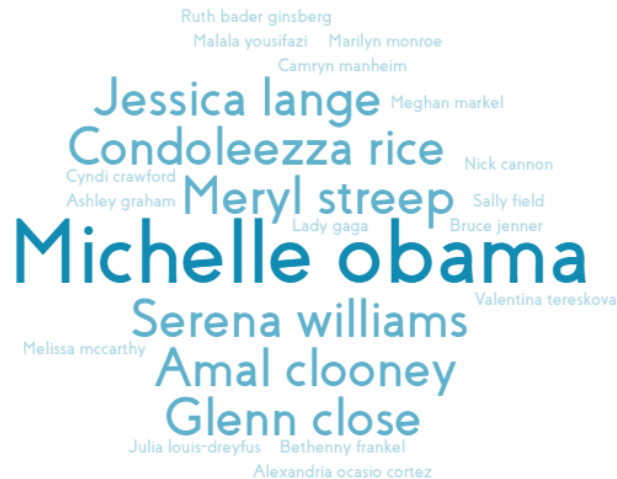
- More visual and holistic than a tedious enumeration

Perimeter : 815 verbatims





## Menopause



- While coding, we also discovered many **male role models (mainly successful business men over 50)** which we tended to **overlook** during the analysis





Summary, Q&A

# Where is the enhancement for our daily job in Qual?



## In PRODUCT/ FORMULA TESTS

- Establishing **“objective” measurement of KPIs** and being able – progressively – to establish **standards and benchmarks/** references
- Crossing variables** (which are difficult to do or hardly visible) and **discovering discriminating variables**



## In EXPLORATORY ONLINE DIARIES

- Managing a **huge quantity** (189 Office-Word pages) of verbatim and making **sense** out of it
- Identifying quickly and visually** some trends/ aggregation of data makes phenomena more visible
- Potentially allowing us to **increase** the **number** of participants without losing the **finesse** of analysis



## In SHOPPER RESEARCH

- Extreme diversity** and quantity of items/ merchandise **easy to code**
- Behavior and **NON behavior** made visible: **“To buy or not to buy”!**
- Using systematically and quantifying the **sequencing** from the Cognitive Interview, allowing us to understand the retailer’s appeal/ **browsing activity**

# The AI platform is not a super hero but will help “the Qual Empire to Strike Back”

At **Séissmo**, we are convinced  
that we can achieve...

- More **credibility** for Qual
  - less discussions about ‘how representative’
- More **objectivity**
  - without losing any of our subjectivity
- More acuity, **sharpness**, subtle differences
  - via easy crossing of variables
- Faster **processing of insights** via **vizualisation**
  - vs. long text and sentences

At **Synomia**, we are convinced that...

- AI is gradually becoming a **necessity** for market research
- But Artificial Intelligence can’t stand on its own, it works together **with Human Intelligence**