# Out of the Qual Silo: Artificial Intelligence makes our Insights Measurable and Convincing

## Corroborate depth and validity of subjective interpretation with AI

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# 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?

# When Qual meets Tech

SÉISSMO

- 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

# 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 :

**TECHNOLOGY AND CONSULTING**

**AUTONOMY (SAAS) AND/OR MANAGED SERVICES**

**STRATEGIC AND OPERATIONAL CONSULTING SERVICES**

# Leveraging AI to bridge data and business questions


## Data collection

**COLLECTION**
Collect verbatim mentioning the notions about a subject and its lexical field

**SCOPE**
Country/language

**SOURCE**
Web, forums, social, etc

## Data processing

Data cleaning & structuration

## Analysis

**SIGNALS**
Identification of both strong and weak signals related to a subject: tendencies, drivers/obstacles, moments of life, ...

To define:

CONSUMER INSIGHTS

PERSONAE & BEHAVIORAL ANALYSIS

CUSTOMER JOURNEY MAPPING

## Activation

Product Innovation

Knowledge management

Marketing targeting

# Artificial intelligence to make the data explicit

**3 main assets**

1

## Salient themes

- Categorize the main topics
- Quantify and compare – allowing for checking KPIs in a consistent manner

2

## Cross-referencing

- Identify the variables that play an important role
- Characterize moments of life / persona

3

## Data visualization

- Easily and quickly visualize insights
- Sexy and synthetic delivery for internal and external use

# Types of research where the syntax analysis was applied

**3 types of research so far:**

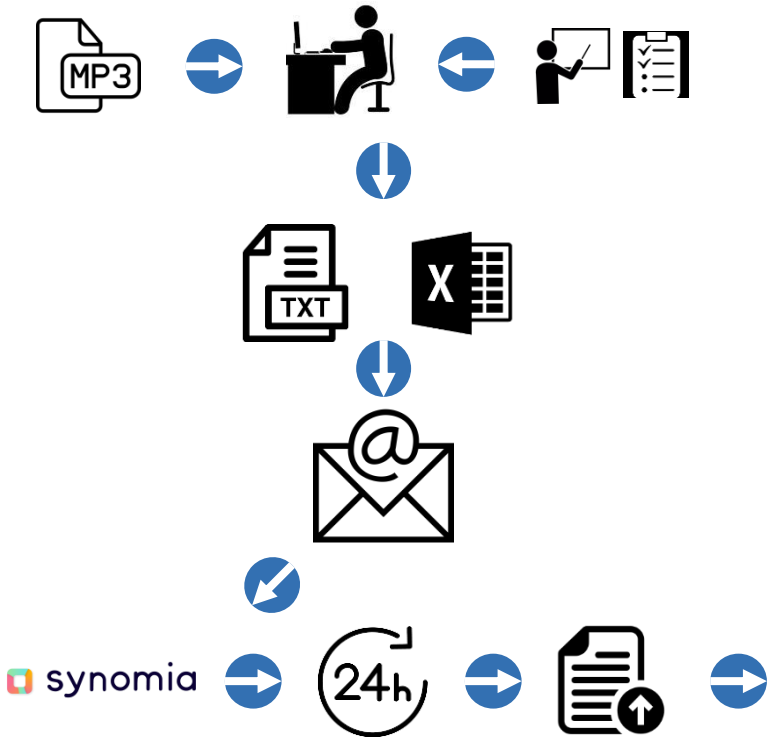
- Shopper research
- Product/ formula tests
- Exploratory research

**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)

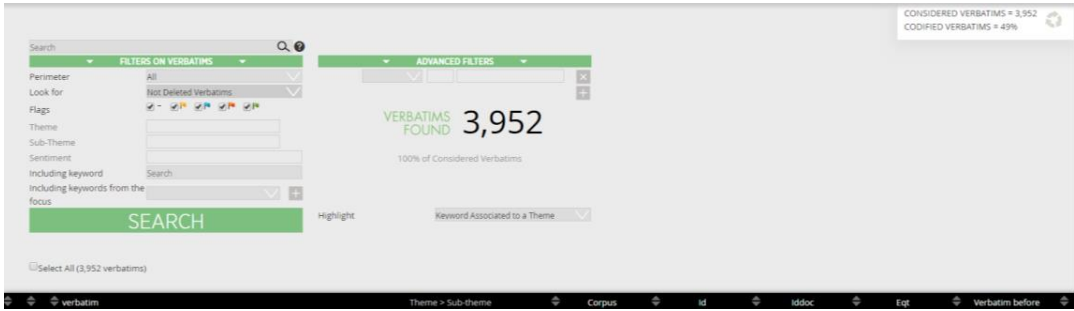
# Some technicalities

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

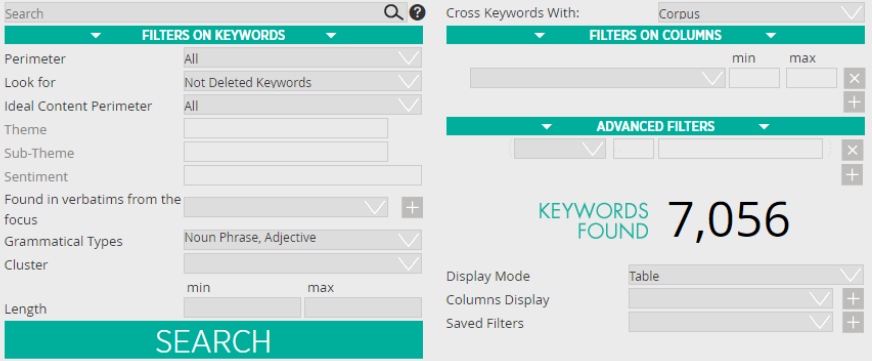



We learned a lot …

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

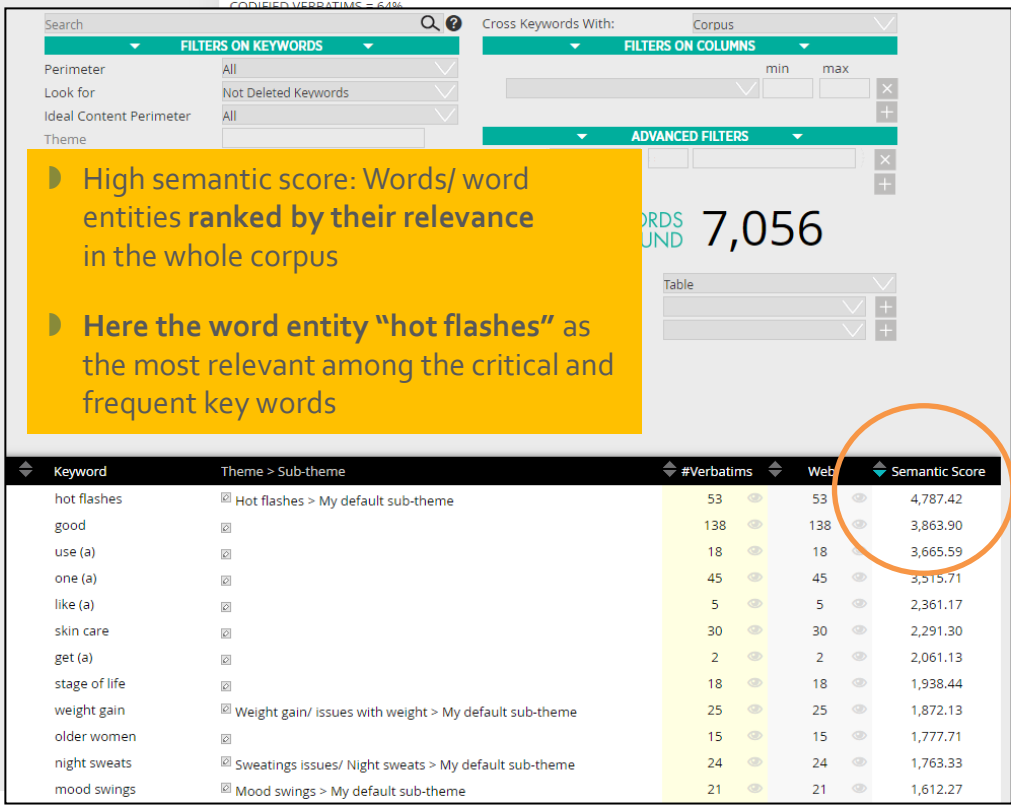


# The finesse lies in the semantic score, not in the counting in itself




| Keyword | Theme > Sub-theme | #Verbatims | Web | Semantic Score |
|---|---|---|---|---|
| more | | 250 | 250 | 0 |
| other | | 66 | 66 | 0 |
| do (a) | | 9 | 9 | 0 |
| unable | | 6 | 6 | 0 |
| irritable | | | | |
| glad | | | | |
| lucky | | | | |
| make (a) | | | | |
| necessary | | | | |
| pregnant | | | | |
| supportive | | | | |
| lush | | | | |
| weak | | | | |

- **Low semantic score:** Words just "counted" according to their **frequency**
- Here the word MORE… not much to learn from!




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

# Don’t let yourself be fooled by “Captain Marvel”

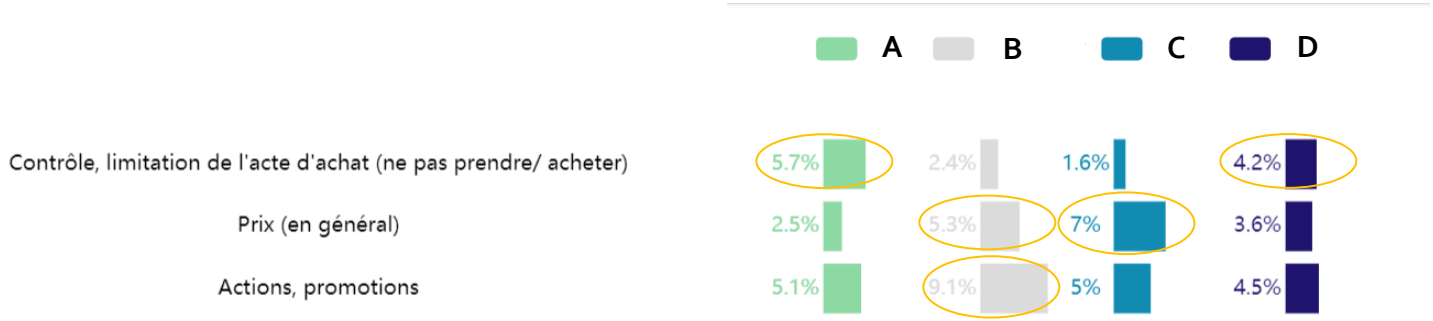
| | | | | | |
|---|---|---|---|---|---|
| olay & neutrogena & aveeno | | 1 | | 1 | 15.46 |
| captain marvel | | 1 | | 1 | 12.14 |
| malala yousifazi | Role Models > My default sub-theme | 1 | | | |
| alicia keys | Role Models > My default sub-theme | 1 | | | |
| lumiere bio-restorative | | 1 | | | |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

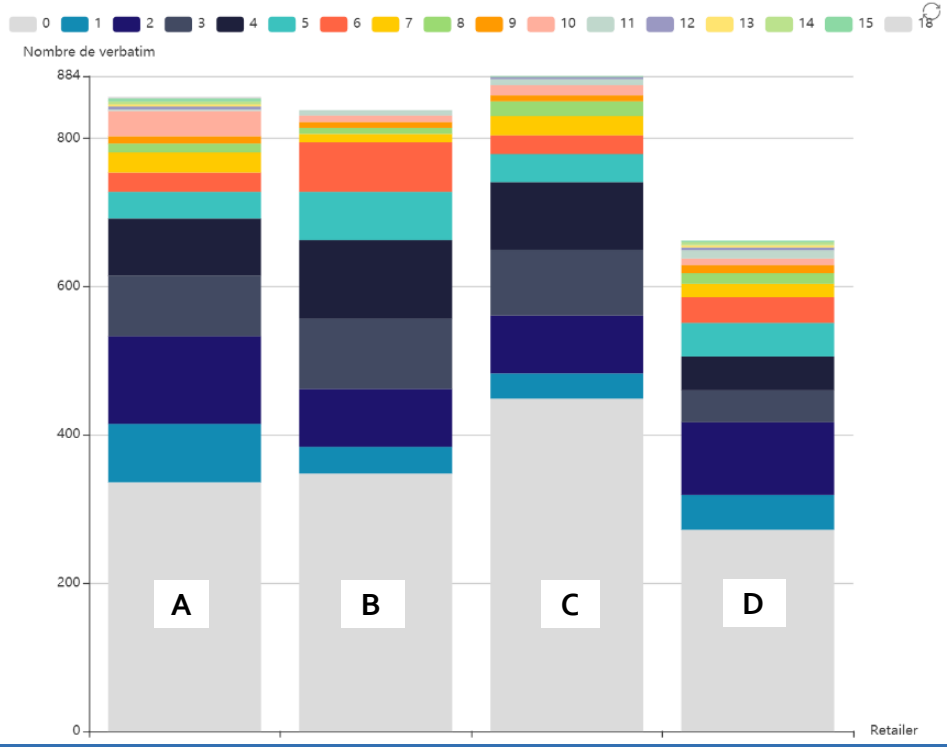
# SHOPPER EXPERIENCE
## How AI can help us detect the negation (to do or not to do)




**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

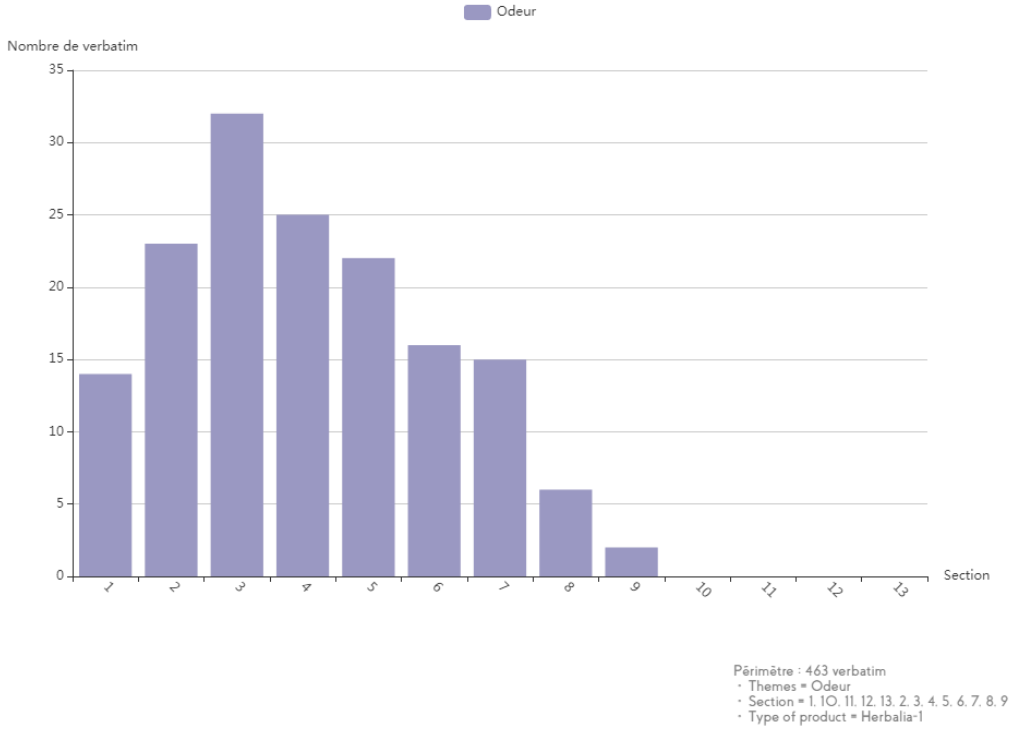
| Position | Libellé | Couleur | Nombre de verbatim | Actions |
|---|---|---|---|---|
| 1 | Application | | 711 | |
| 2 | Baume | | 59 | |
| 3 | Charlotte | | 151 | |
| 4 | Cuisine | | 89 | |
| 5 | Détente | | 63 | |
| 6 | Faire des taches | | 102 | |
| 7 | Henné | | 235 | |
| 8 | Laver les cheveux | | 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**

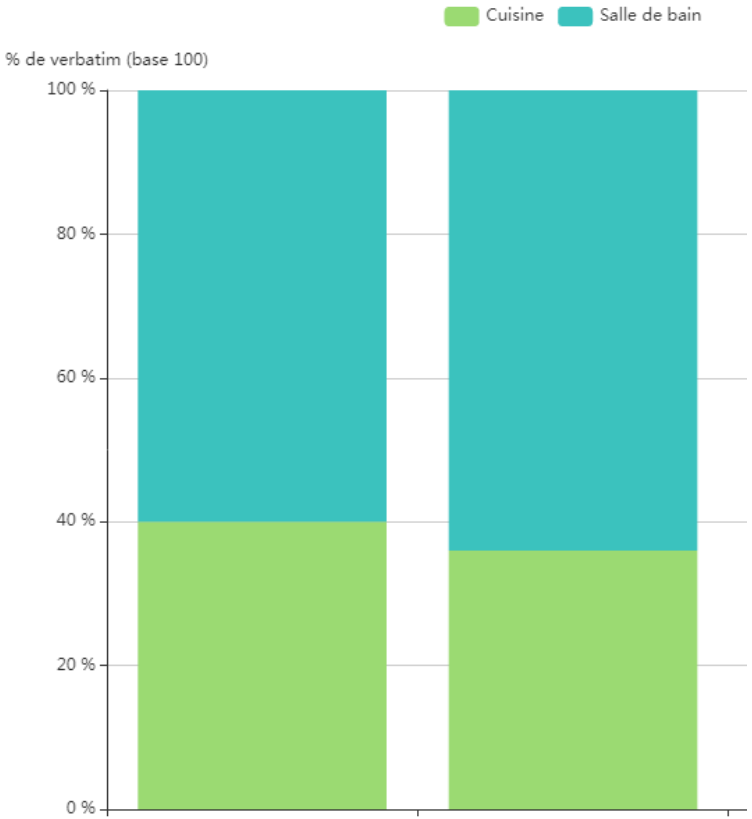
# The richness of the Cognitive Interview lays in the sequencing, allowing a better feeling along the consumer experience curve




**Smell very strong at the beginning**

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

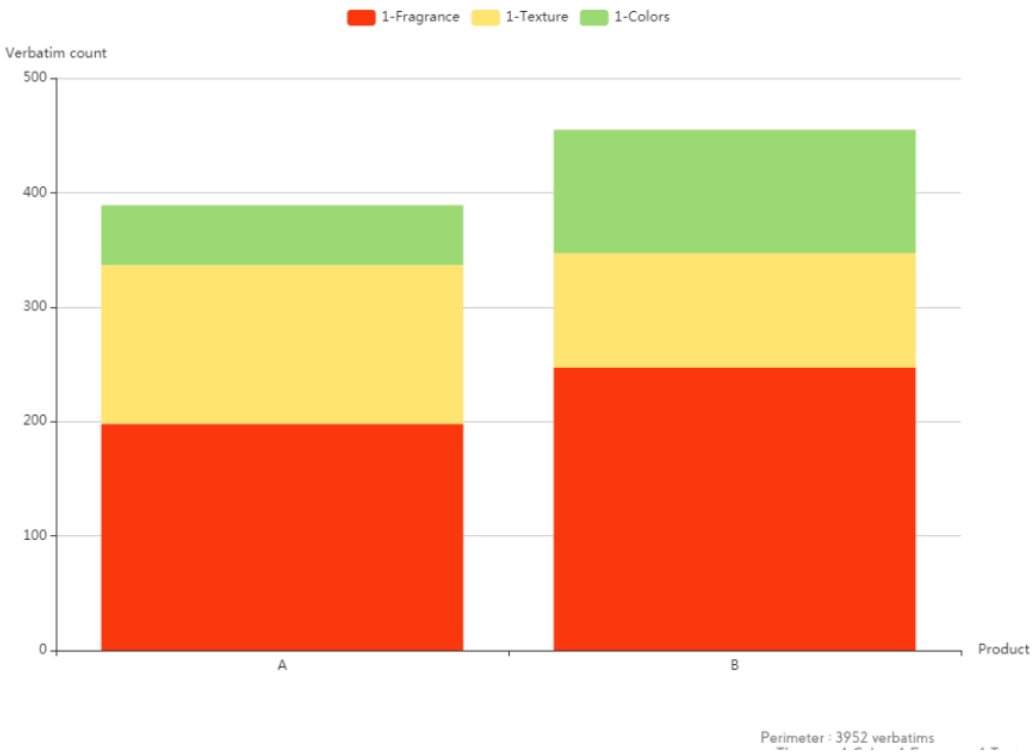
# Analyzing the "crime scene" becomes easy and visual: Kitchen vs. bathroom




**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**

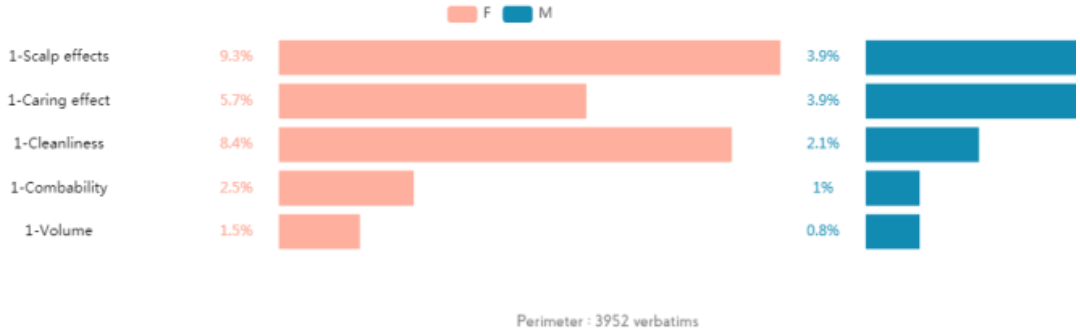
# ANTI-DANDRUFF SHAMPOO
## Synthetic profiling of 2 formulas




### 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)



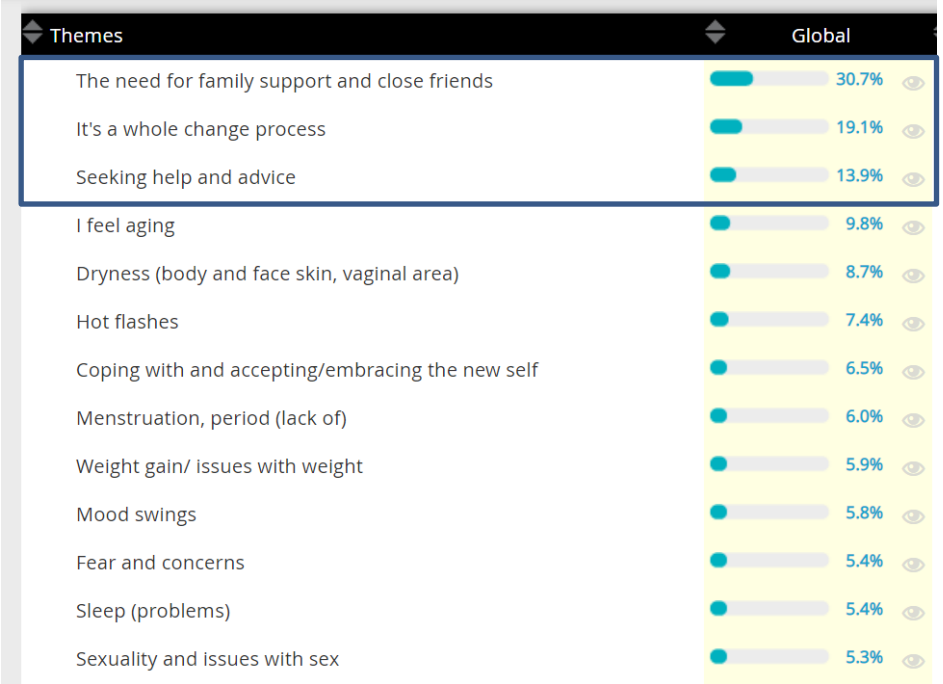

**Target group differences are tangible**

- **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

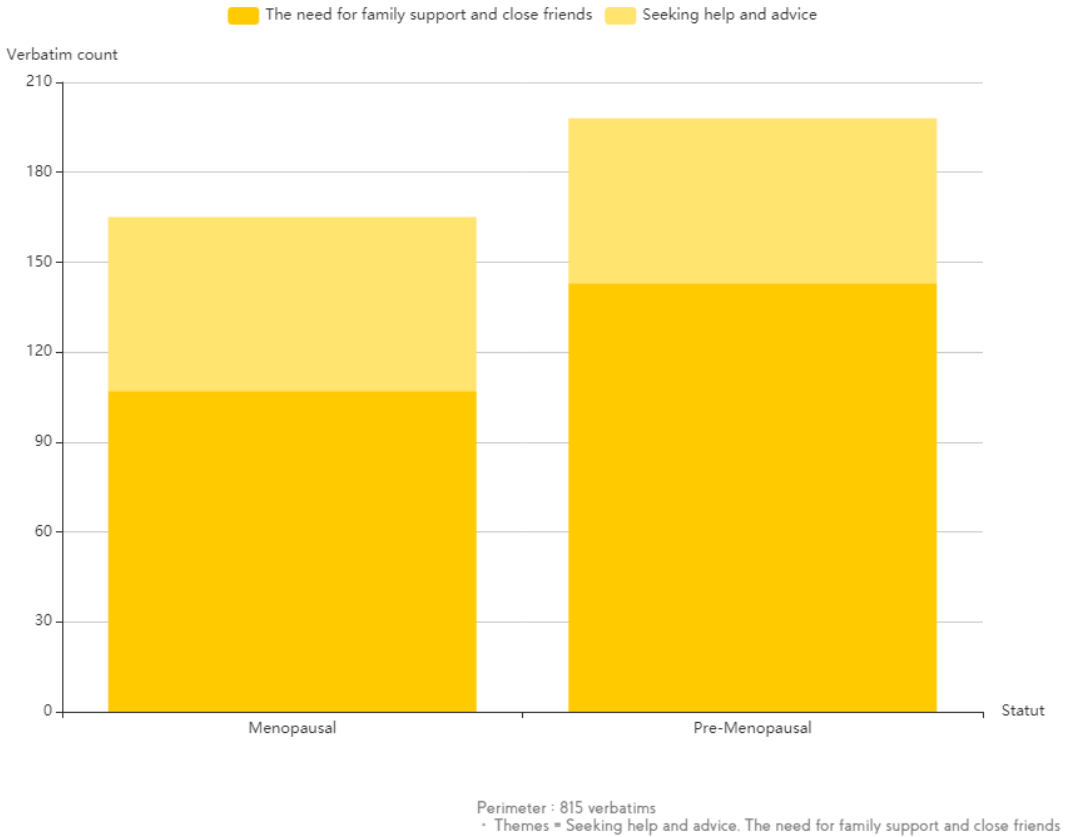
# MENOPAUSE

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



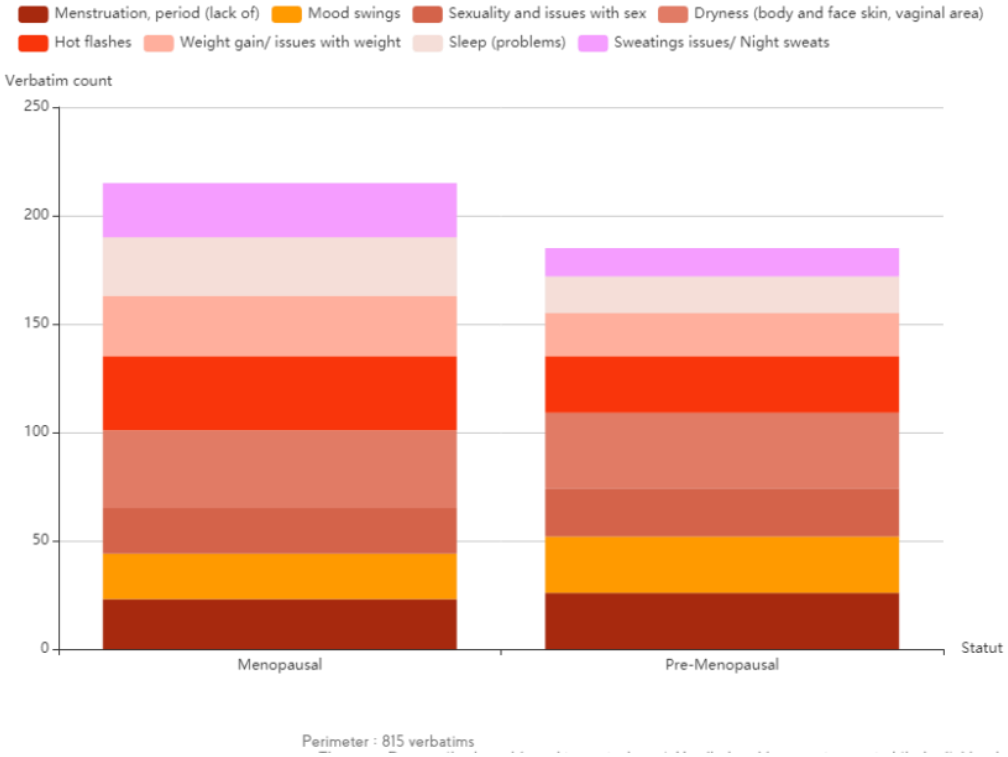
| Themes | Global |
|---|---|
| The need for family support and close friends | 30.7% |
| It's a whole change process | 19.1% |
| Seeking help and advice | 13.9% |
| I feel aging | 9.8% |
| Dryness (body and face skin, vaginal area) | 8.7% |
| Hot flashes | 7.4% |
| Coping with and accepting/embracing the new self | 6.5% |
| Menstruation, period (lack of) | 6.0% |
| Weight gain/ issues with weight | 5.9% |
| Mood swings | 5.8% |
| Fear and concerns | 5.4% |
| Sleep (problems) | 5.4% |
| Sexuality and issues with sex | 5.3% |

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




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

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

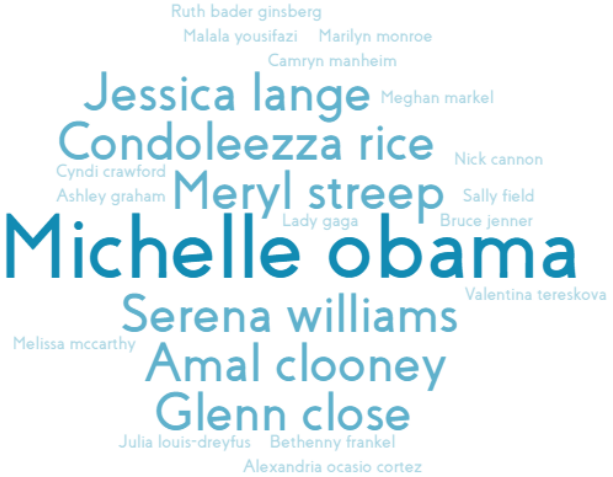



- **More visual and holistic** than a tedious enumeration

# Word clouds showing age differences in the aspirational role models

**Pre-Menopause**


**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?

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## 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**