

# NETWORK SCIENCE PROJECT

# BAKERY SELLS

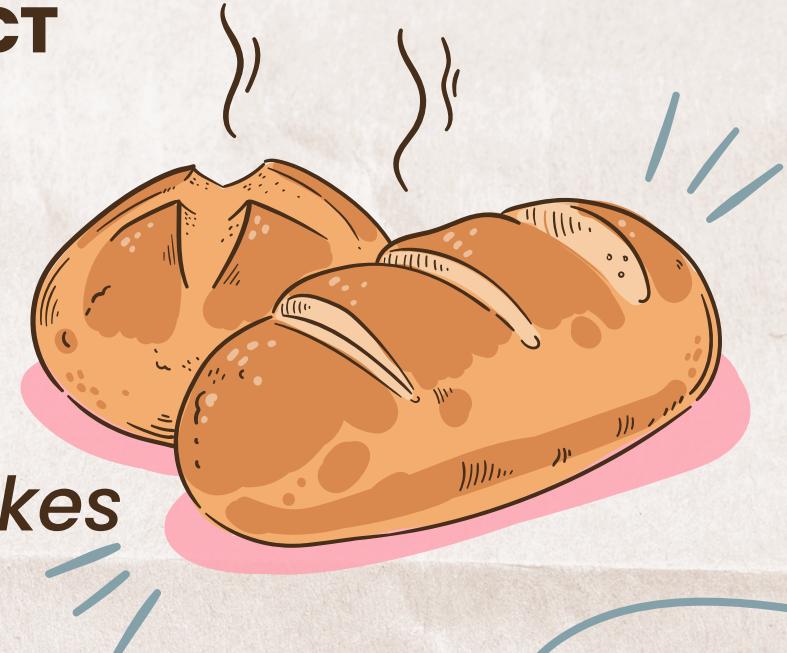
# STUDY

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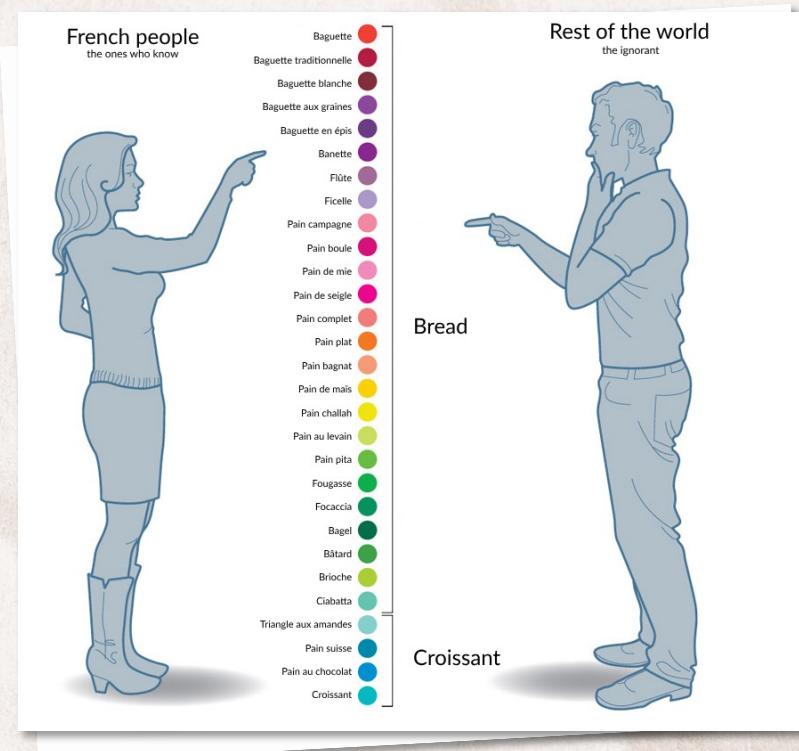
*How French people  
categorize bread & cakes*

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Arthur LECOCQ



# CONTEXT OF THE PROBLEM



## PURPOSE OF THE STUDY

How to exploit previous transactions  
of the bakery to maximize sales?

Dataset from  
**kaggle**

# QUESTIONS



## ***SELLING PERIODS***

Which periods are the most favourable to sell ?



## ***ARTICLES TO SELL***

What articles are the most cost-effective ?



## ***GROUPS & CATEGORIES***

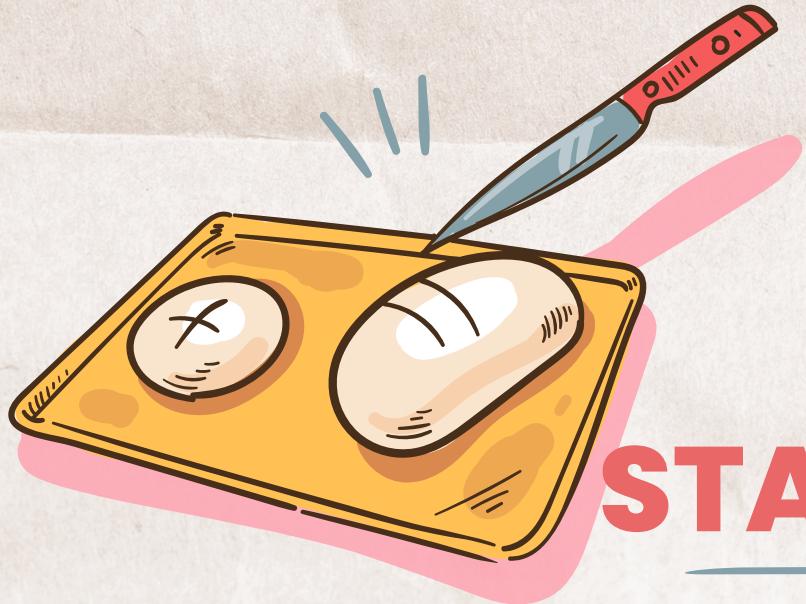
How can we group articles together ?



## ***LINK BETWEEN ARTICLES***

What are the links between each articles ?





## **STATISTICS PART**

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Few funny information about sells in a bakery

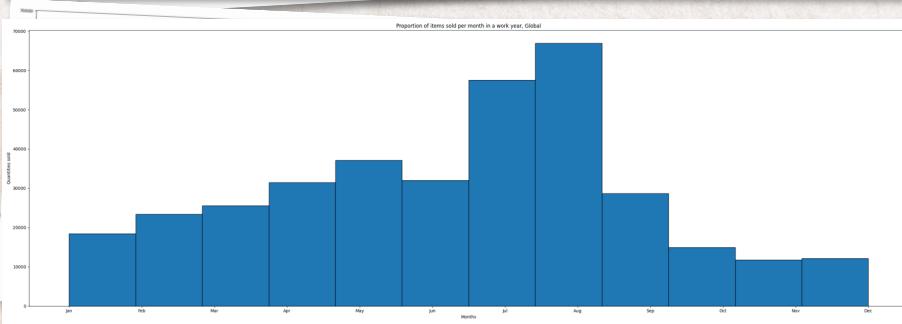
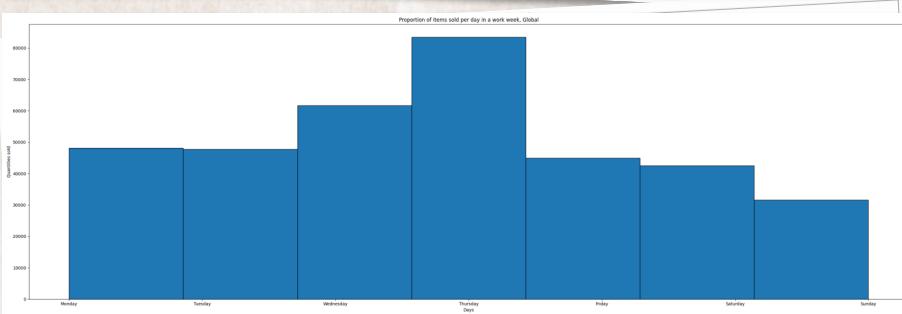
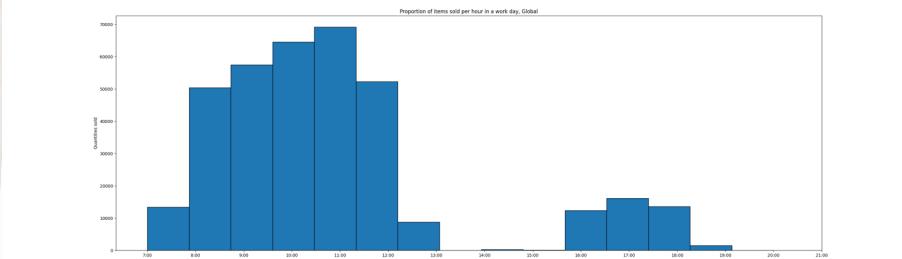
# QUICK STATS

## BEST PERIOD TO SELL BREAD

- During the day :  
before noon

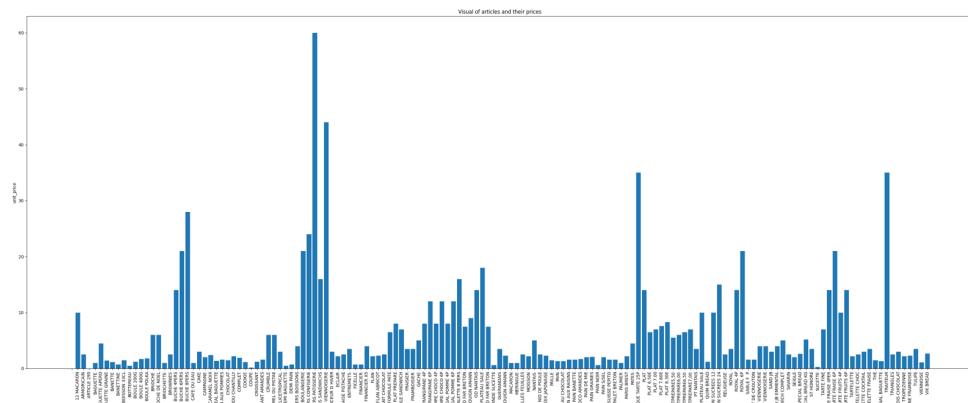
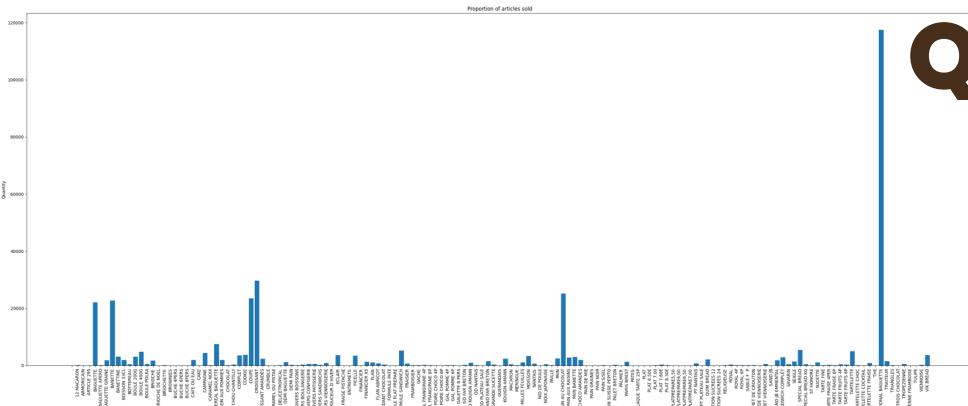
- During the week :  
in the beginning of the week

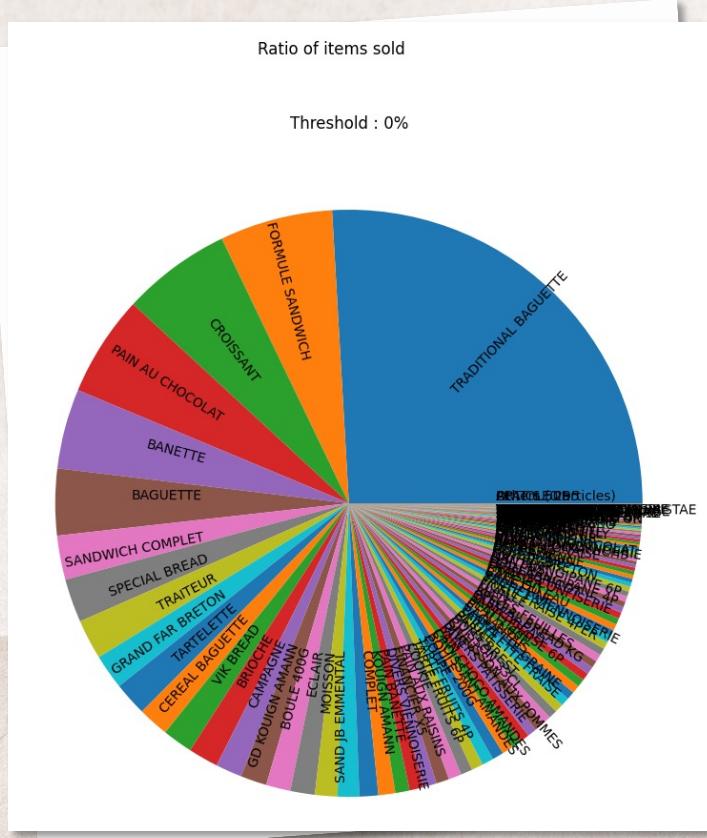
- During the year :  
during summer



# QUICK STATS

*ARTICLES, PRICES &  
QUANTITY SOLD*





# QUICK STATS

# ANNUAL SALES

## TOP 5 Articles :

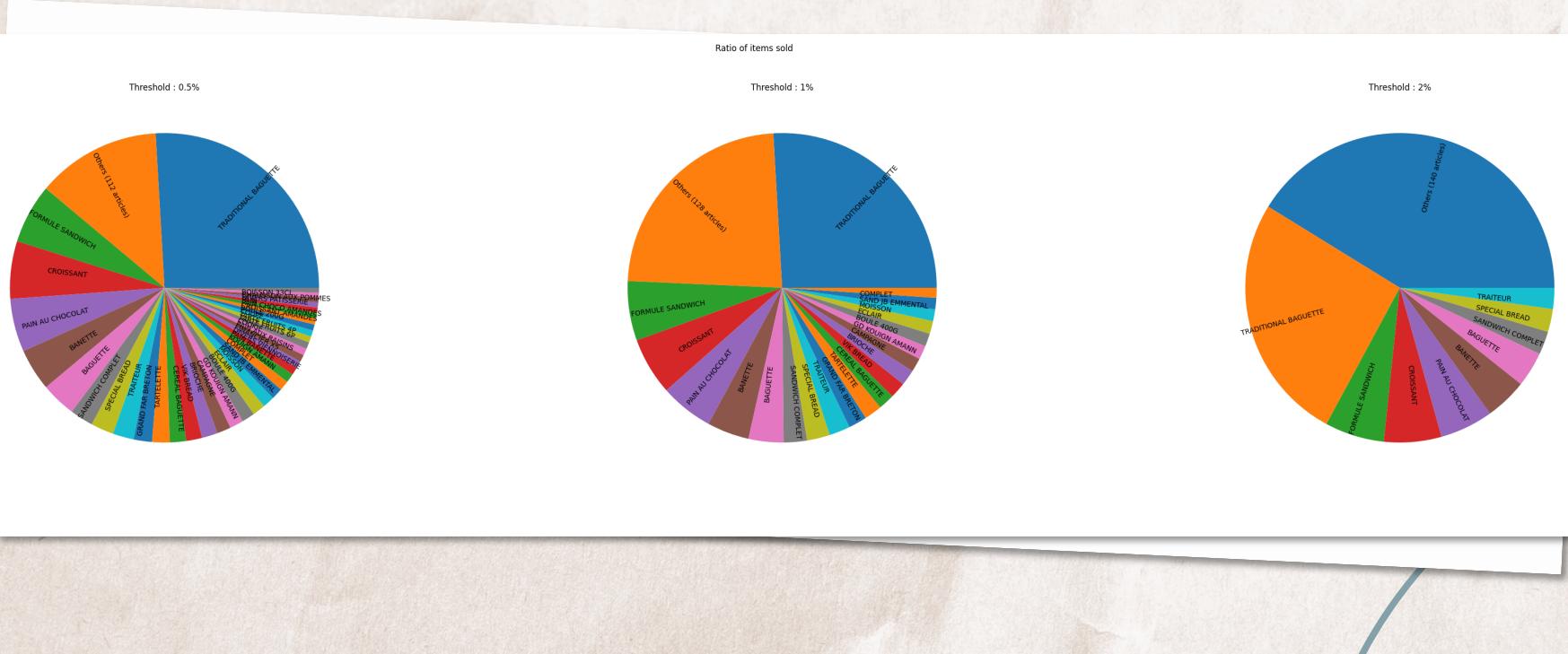
1. Traditional baguette
  2. Formule sandwich
  3. Croissant
  4. Pain au chocolat
  5. Banette

## QUESTIONS :

- All articles ?
  - Maybe groups ?

# QUICK STATS

# THRESHOLDS



02

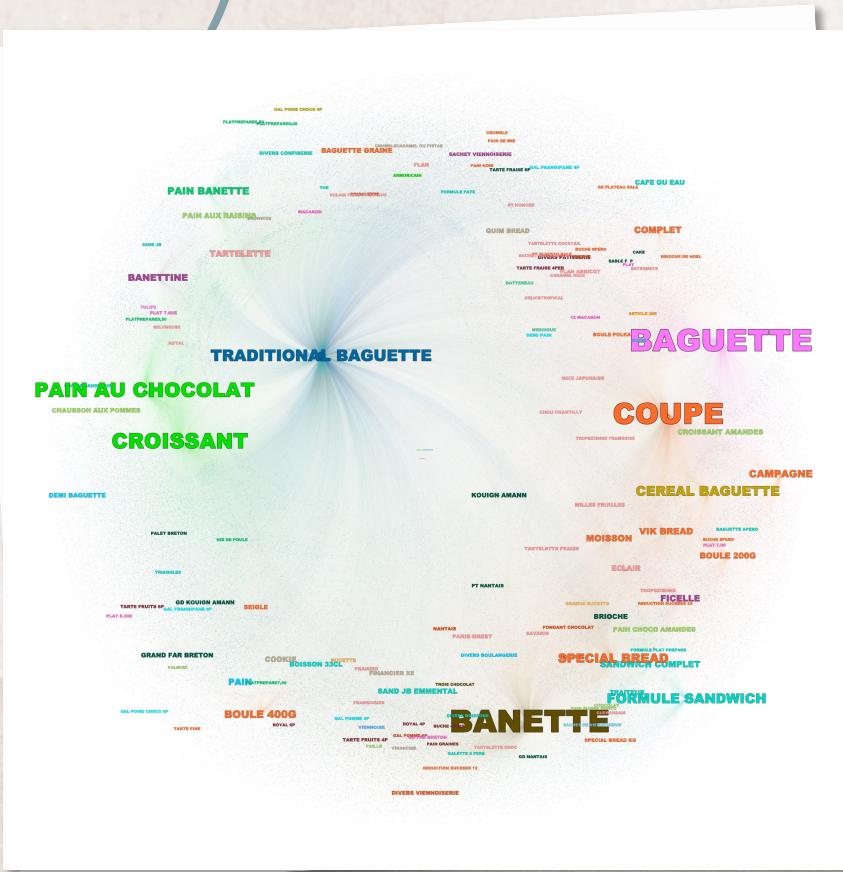
## COMMUNITIES

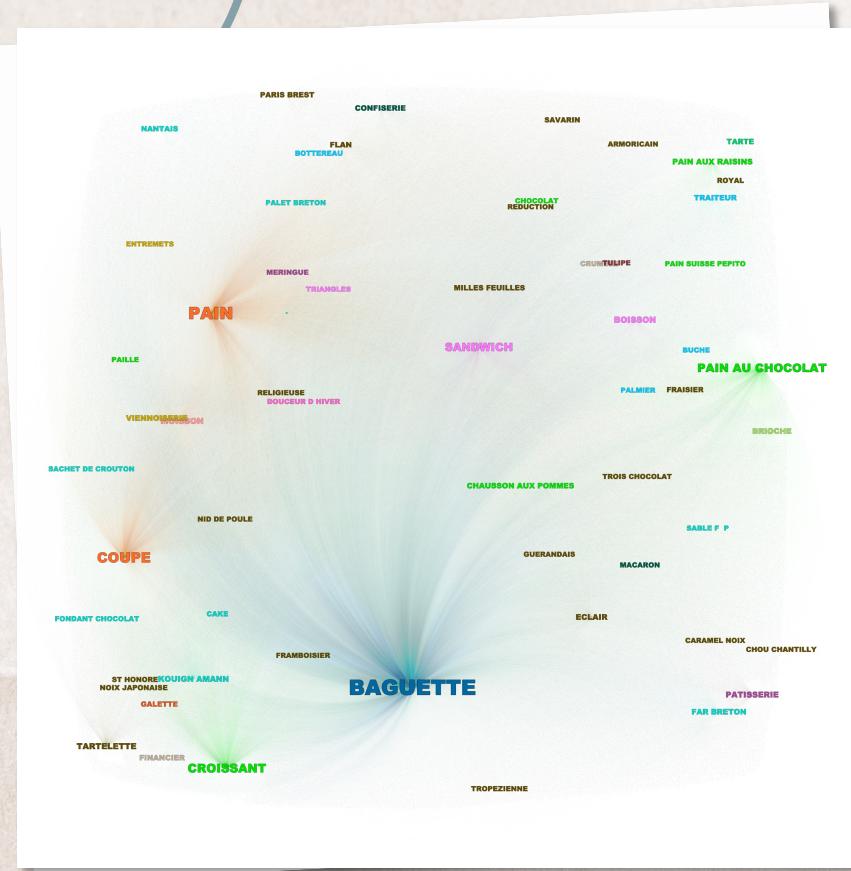
The great madness of French to distinguish breads



# COMMUNITIES

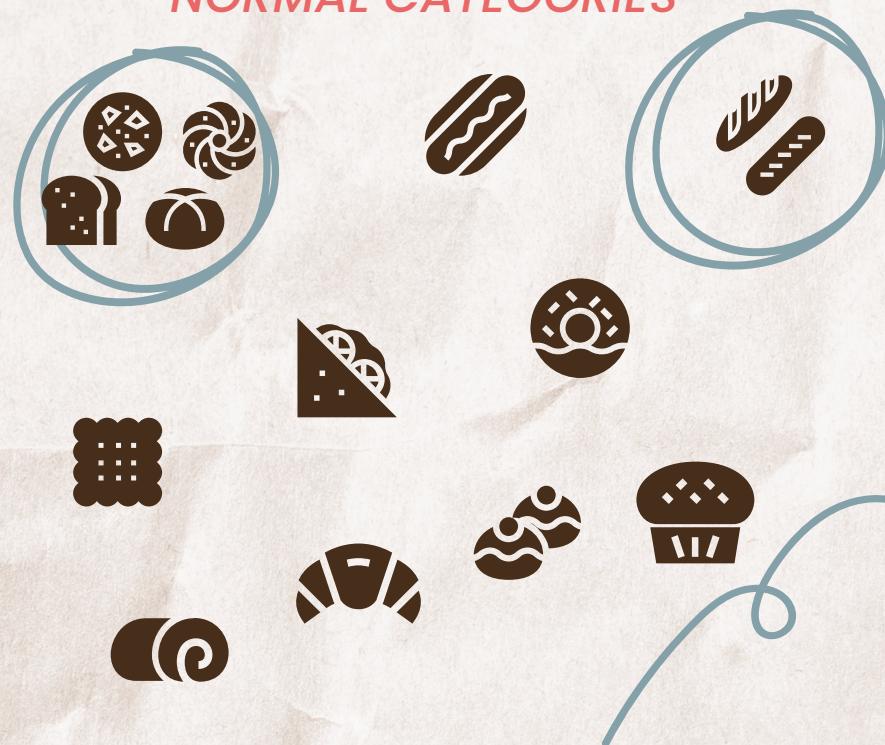
NO CATEGORIES





# COMMUNITIES

## NORMAL CATEGORIES





# COMMUNITIES

LARGE CATEGORIES





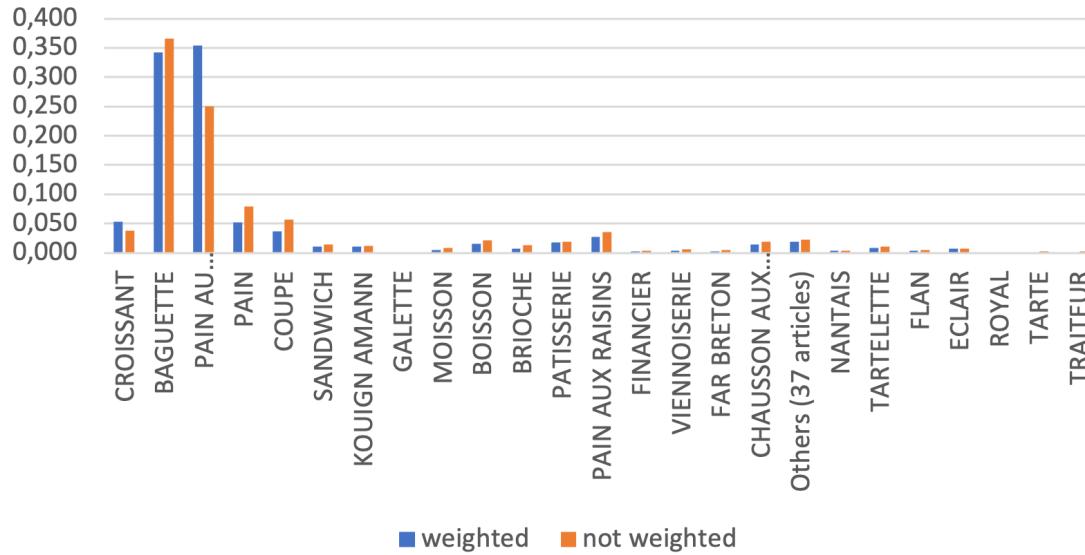
## RANKING

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The big dilemma when entering in a bakery

# RANKING

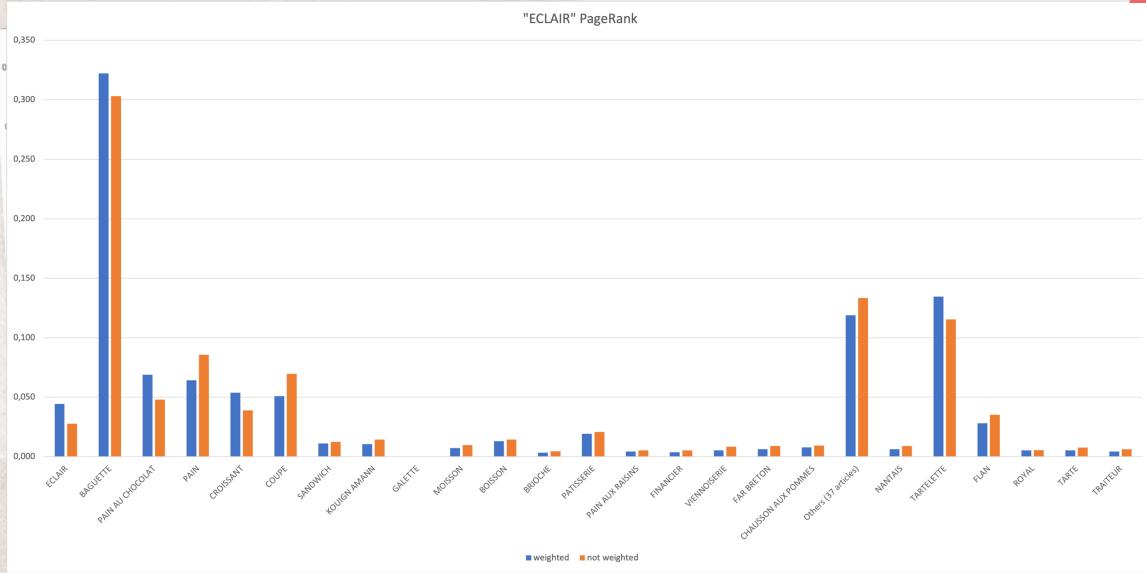
"CROISSANT" PageRank



"CROISSANT" example

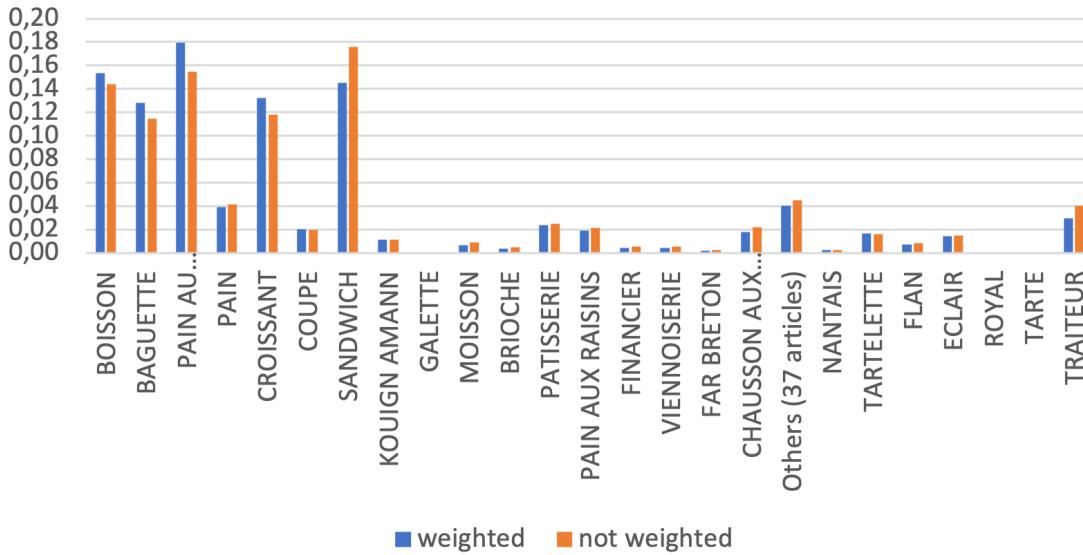
# RANKING

*"ECLAIR" example*



# RANKING

"BOISSON" PageRank



"BOISSON" example

# 04

## CONCLUSIONS

The way to manage our imaginary bakery



# INCOMPLETE STUDY

Some remarks to continue the study :

- Sells among timetable
- Subsitution articles
- Lack of information



# THANKS!

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Do you have any questions?

GitHub project :  
<https://github.com/superbionicle/NSP>

CREDITS: This presentation template was created by **Slidesgo**, and includes icons by **Flaticon** and infographics & images by **Freepik**

# CREDITS & THANKS



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*THOSE WHO HELPED  
ON THIS PROJECT*

Tomaso Erseghe  
Lejla Dzanko  
Luca Hammer  
Florent Lefebvre  
Quantmetry  
Alexandre Lecocq

*SOURCE OF DATASET* Kaggle  
*POWERPOINT TEMPLATE* <https://slidesgo.com>