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## Enhancing Familial Satisfaction



## 30th Annual Meeting of the Royal Statistical Society of Belgium



RSBB 2023 - WeLoveDataScience  
Hackstathon: Stats / Data Science competition



# Table of Contents



Data



Problem



Recommendations



# 01 Data

Descriptive Analysis





## Clients



176 105 reservations

Friends  
**28.9%**

Family  
**51.9%**

Couples  
**18.2%**

Business  
**1.0%**





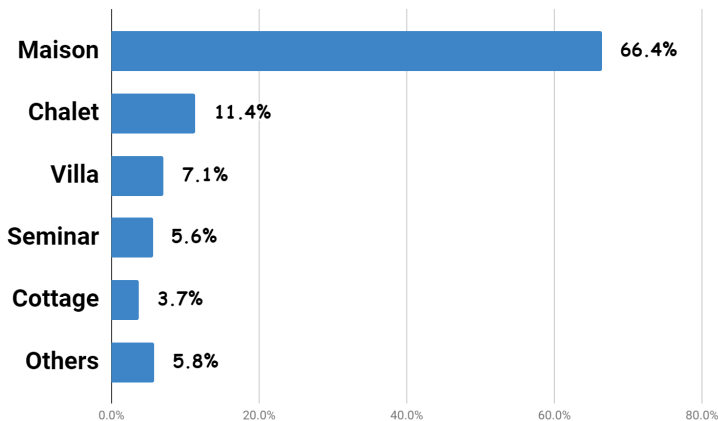
# Reservations



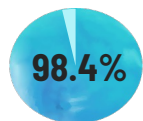
**2 881 accommodations**



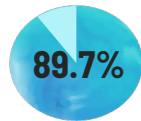
**Capacity: 9 (IQR = 6)**



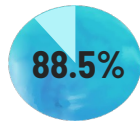
## Equipment



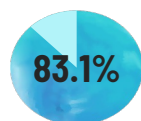
**Microwave**



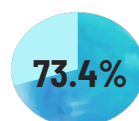
**Internet  
connexion**



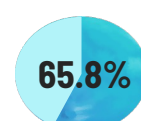
**Private  
parking**



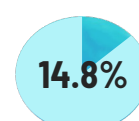
**Private  
garden**



**Open  
fire**



**Washing  
machine**



**Pool**



# Families



**7 persons (IQR = 6)**



**84.8% children**



**19.5% dog**



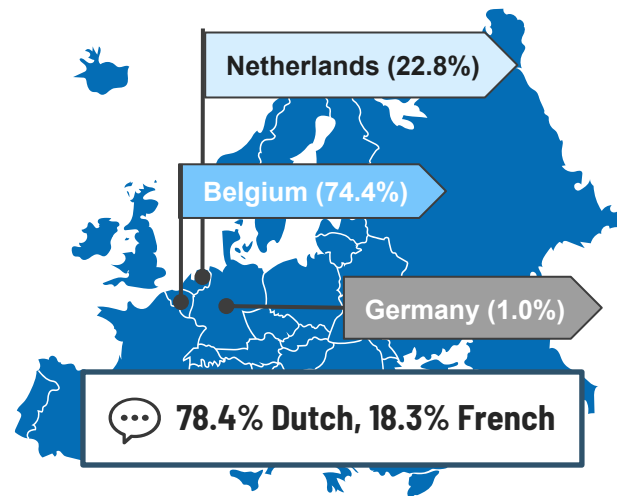
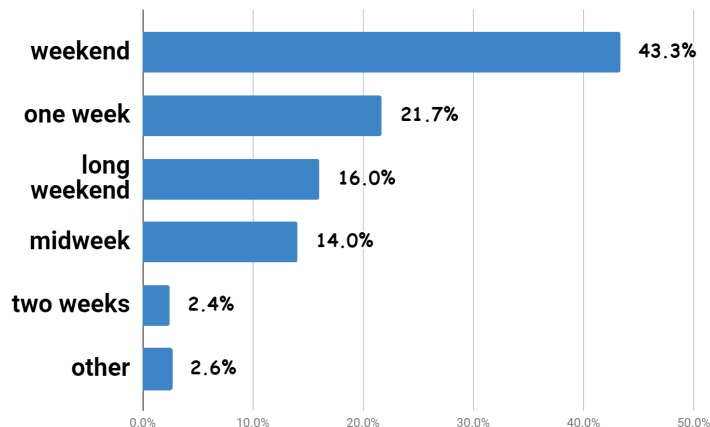
**3 nights (IQR = 5)**



**26.8 % stays in summer**



**9.5% discount during stay**



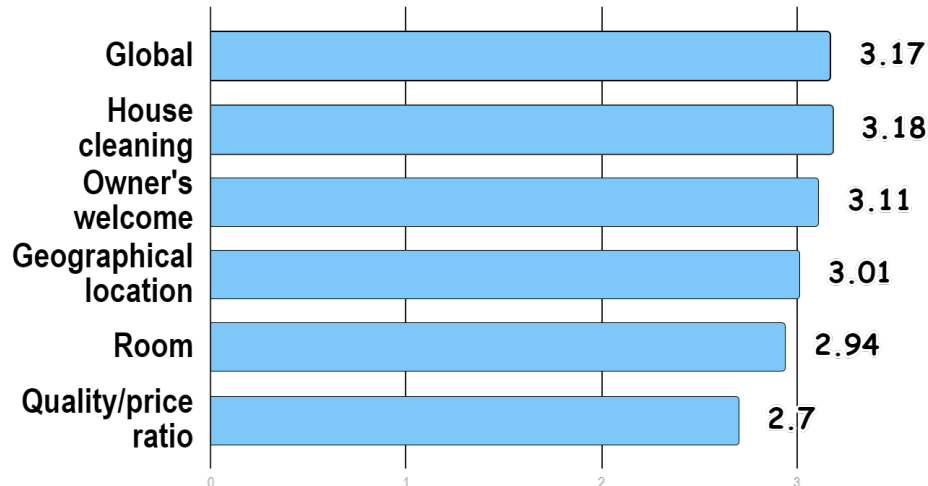




## Services

### Satisfaction

9.05/10



98.2% plan to reuse



### Potential issues



3.1% had prior complaints



1.5% complained during the stay



10.6% needed a reminder for the final payment



14.5% were clients with prior cancellation(s)



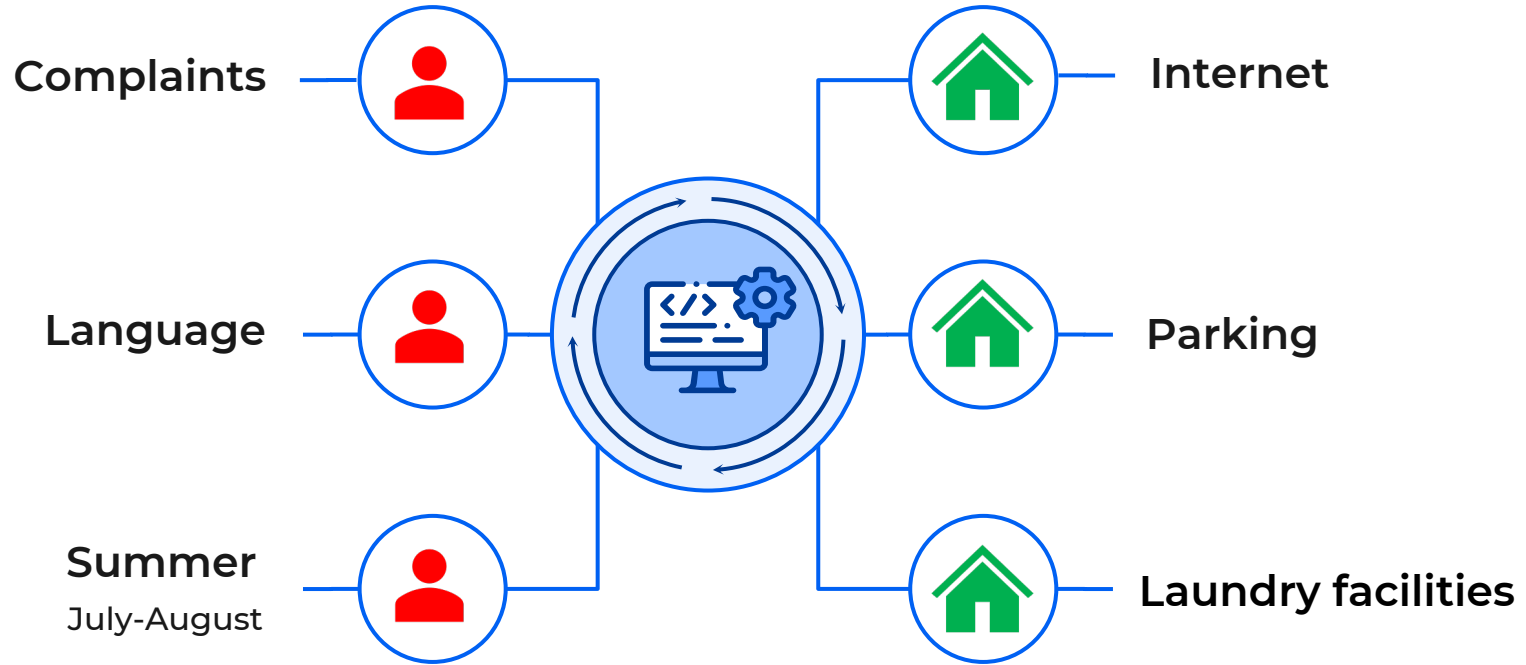
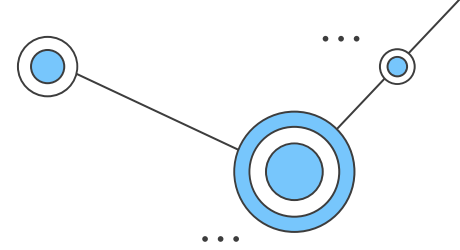
# 02 Problem

What affects familial satisfaction?



# Factors affecting satisfaction

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# 03 Recommendations

To improve families' experience



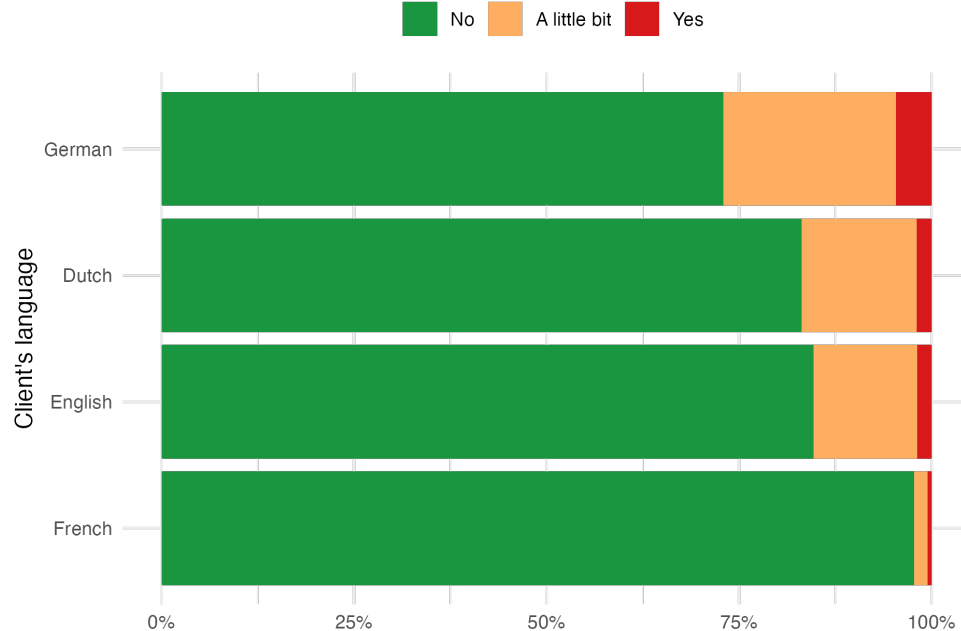
# Dealing with the customer

## Language

81.6% of reservations by non-French speaking people



Was language a barrier?



Indicate the language of the owner on the company website



Ask owners to provide house instructions in each language

# Dealing with the customer

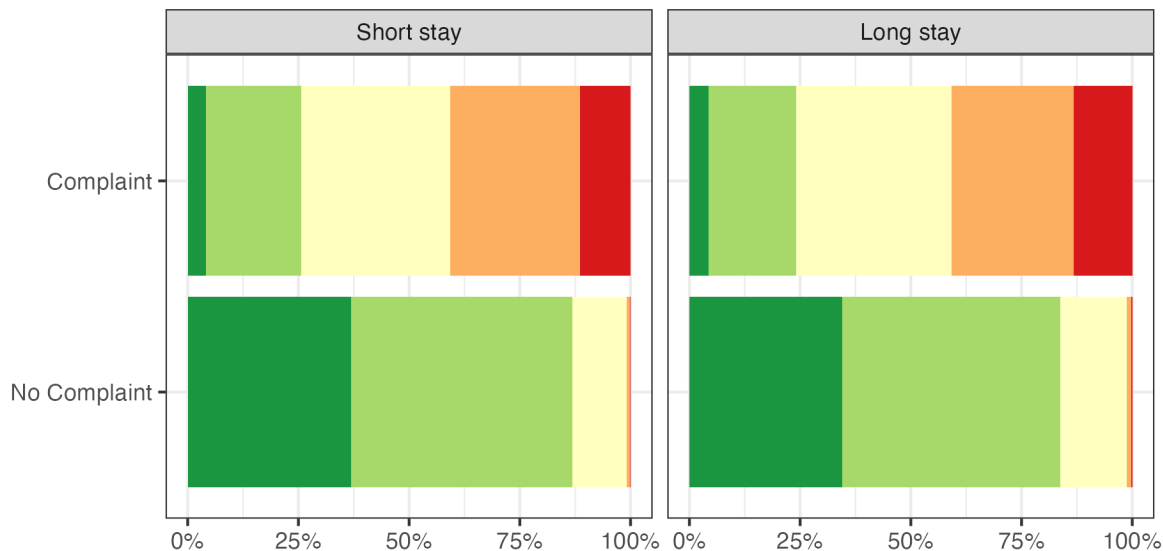
## Complaints

- 73% of complaints occurred during long stays
- Less than 10% of people who complained got a discount during the stay



How was your stay?

Very good Good Neutral Bad Very bad



Provide faster reactions to complaints



Offer a discount on next reservation to mitigate the impact of the complaint

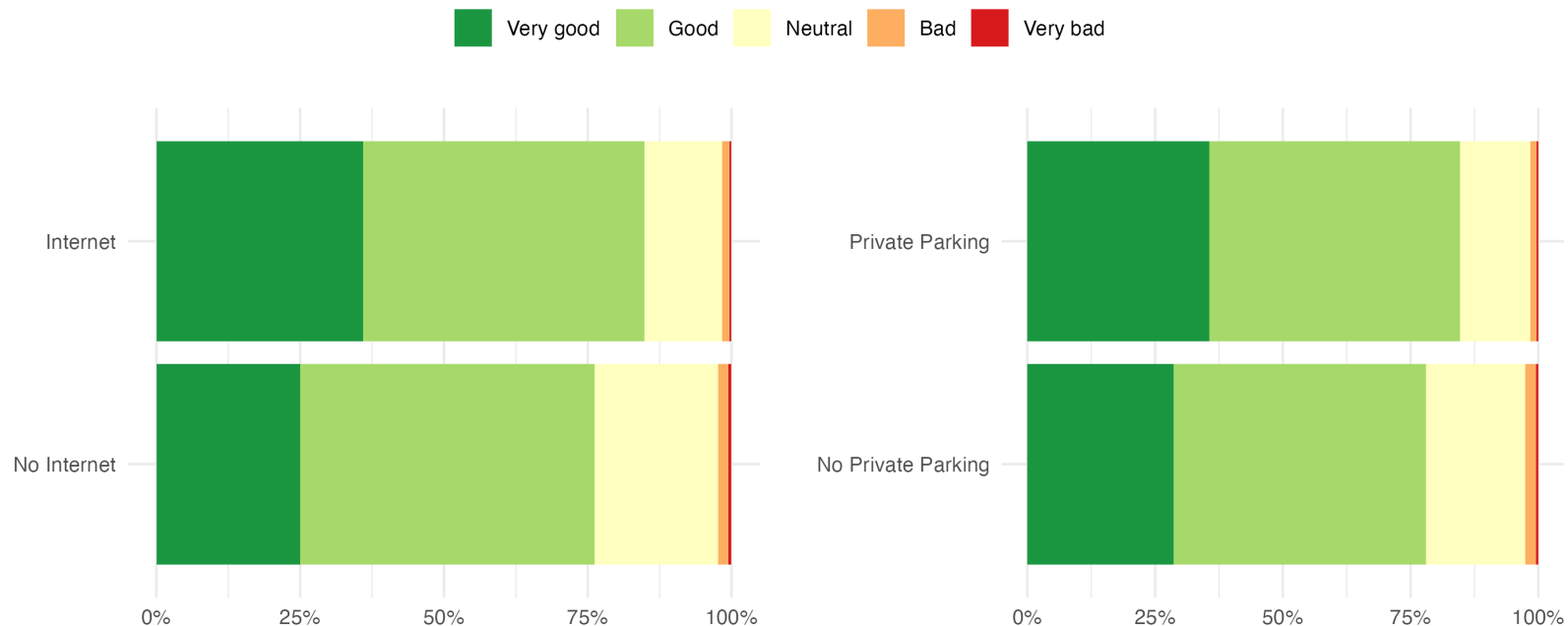
# Dealing with the accomodation



Ask owners to provide internet access when possible

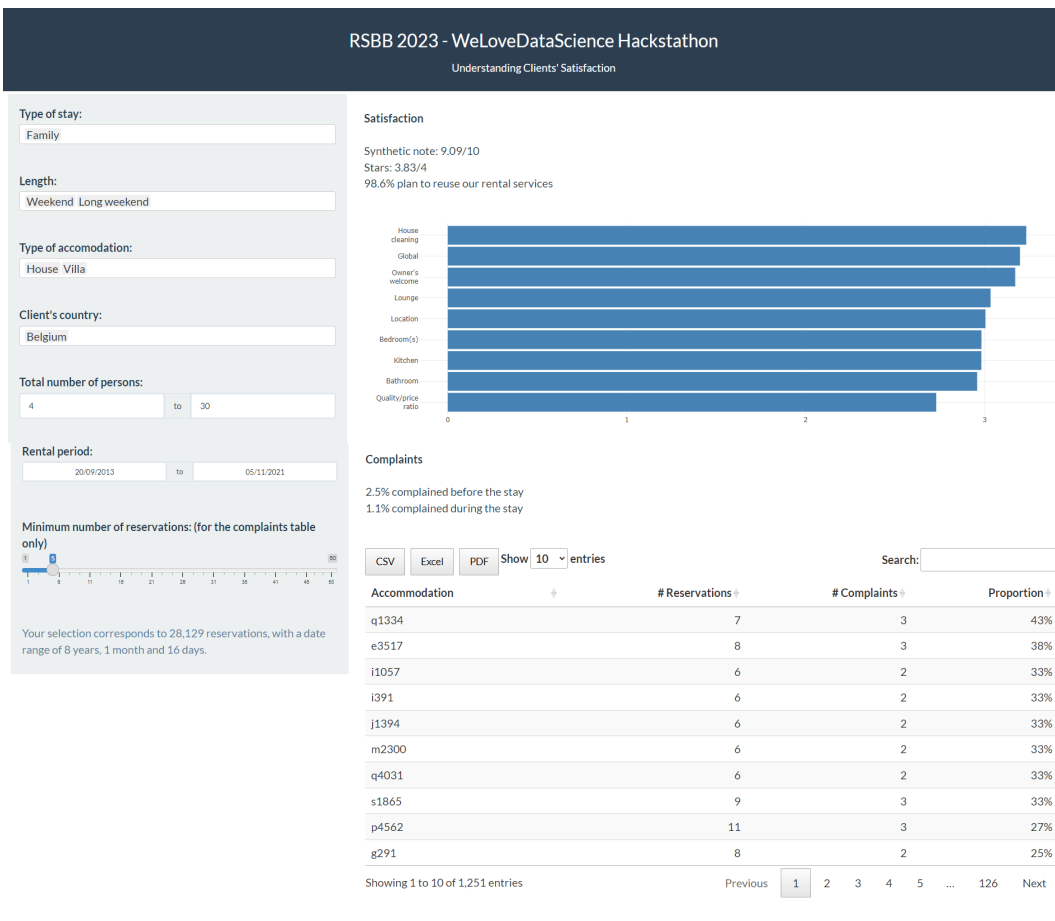
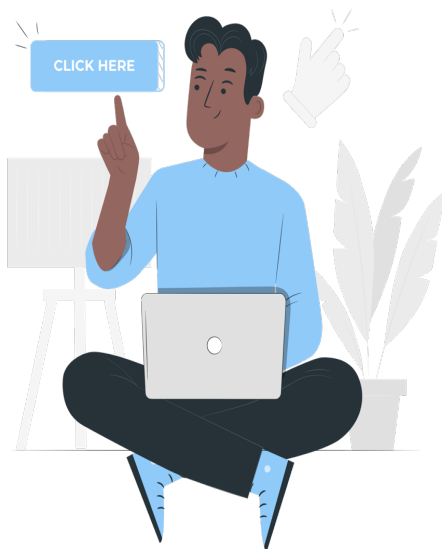


Provide recommendations or discounts on nearby parkings



For reproducibility...

# Shiny app





A decorative network diagram with blue nodes and lines. The nodes are represented by concentric circles, with some having a solid blue center and others being hollow. They are connected by thin grey lines. The diagram is spread across the top, bottom, and sides of the slide, with some nodes having three dots next to them, indicating a larger network.

# Thanks!

Do you have any questions?