

CenterParcs - CapGemini

How to leverage data to increase client's satisfaction

CenterParcs

Our Agenda

Today's final meeting focusing on results and actionable insights



- 1. General presentation and contextualisation on our work**
- 2. Recap of the Steering committee we have made**
- 3. From NLP to NLU**
- 4. Our results**
- 5. Solutions**

The team

5 Data Scientist dedicated to add improve CenterParcs value proposition



Louis

Data Scientist
Intern



Augustin

PhD in
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adaboost



Alexis

Senior Data
Scientist



Alexandre

Expert Labeller -
Amazon Turk
freelance



Owen

Consultant

A complicated market

Broad vision on the market



- A fragmented market
- A unique value proposition
- Different competitors for different markets
- Launch of a camping brand - Maéva
- Adagio launched with Accor-Hotel for flat renting in major cities



PROMOTEUR **ET** GESTIONNAIRE - EXPLOITANT

SWOT Analysis

What can Center Parc leverage



Strengths

1. A unique offer
2. Financial strength thanks to Pierre & Vacances group



Weakness

1. A seasonal business
2. High rental expectation from real estate firms



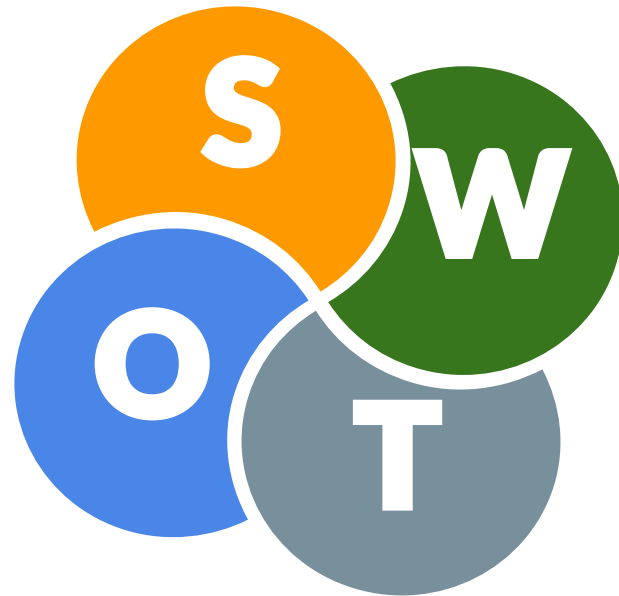
Opportunities

1. The middle class purchasing power is increasing (+2,0% en 2019)
2. Launch of Maeva (campings)
3. High Tourism level in France



Threats

1. Rise of new ways of travelling (city trips at Airbnb's, urban tourism)
2. Rise of luxury campings



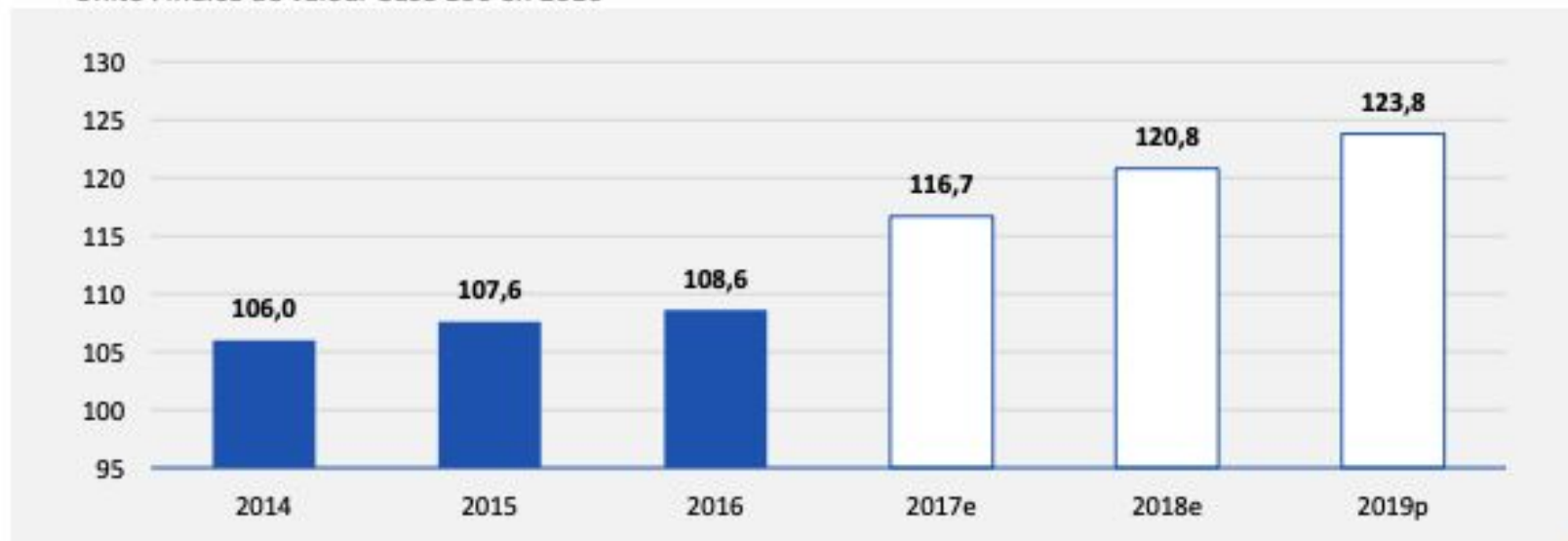
A bright future

Rising revenues in the sector



■ Chiffre d'affaires des exploitants de résidences de tourisme (panel Xerfi)

Unité : indice de valeur base 100 en 2010



Traitement et estimations Xerfi / Source : Xerfi, modèle Mapsis

Propose immersive stays as strategic diversification

A new trend appears



- “Rendez vous chez nous” is a marketplace launched in 2014, which met holidaymakers with local hosts for authentic experiences
- Practice caving in the Ardèche, experience the canoe downhill in Avignon, participate in an aquatic treasure hunt in Fréjus ... These are some of the 1,300 experiments offered by the start-up.
- This acquisition is part of Pierre & Vacances' strategy to enrich its offering by offering its customers an immersive vacation experience and experiential stays
- It enters into frontal competition with the experiences offer of the Airbnb platform

RENDEZ
VOUS (CHEZ
NOUS)

Propose immersive stays as strategic diversification

Necessity of understanding customer's expectations to operate this change



- The 2019 year starts with **the creation of an innovation center**
- This department will lead innovative experiments, **breaking with existing models**, based on the startup ecosystem
- For 2019, **four priority themes** of reflection were retained:
 - The seniors
 - The millennials
 - The personalization of the offer
 - The customer experience during the stay



→ Need to understand what the customers want to actually do this diversification

Steering co recap



- 1. Webscrapping to retrieve reviews online
- 2. Use NLP methods to retrieve valuable information
- 3. From LDA to Word2Vec

Mahendra's



LET'S RECAP

1. Webscrapping to retrieve reviews online



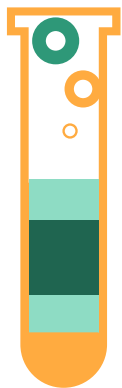
- No internal review/rating platform
- Webscrapping as a solution
- Messy data retrieved



2. NLP Methods for valuable information

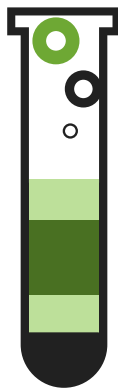


Pre-Processing



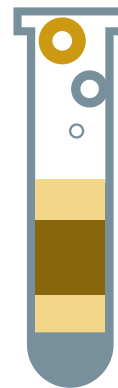
Messy data needs to be dealt with

Prepare the data



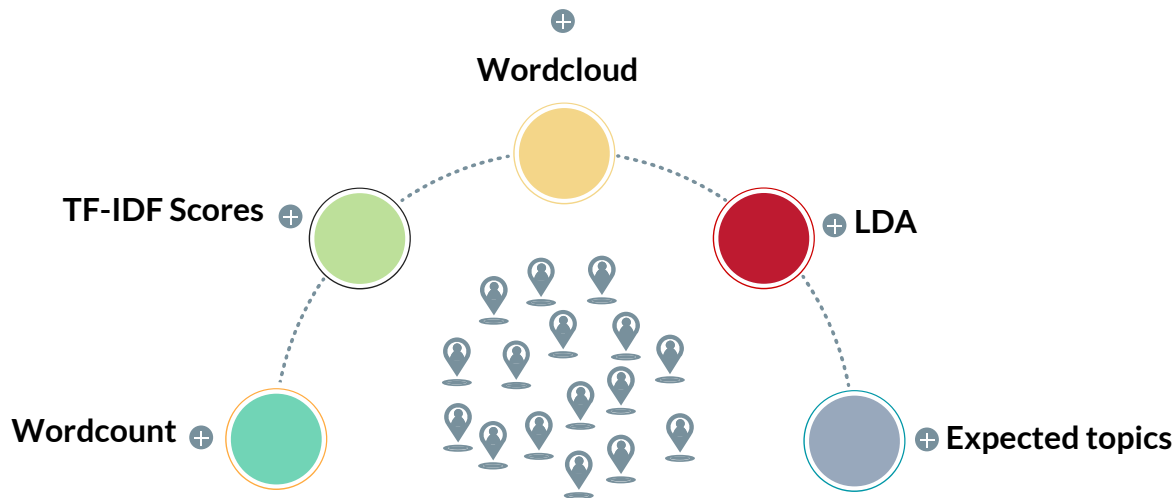
Get corpus of unique words after pre-processing

Vectorization



Pre-analytics to reverse engineer pre-processing and NLP methods to apply

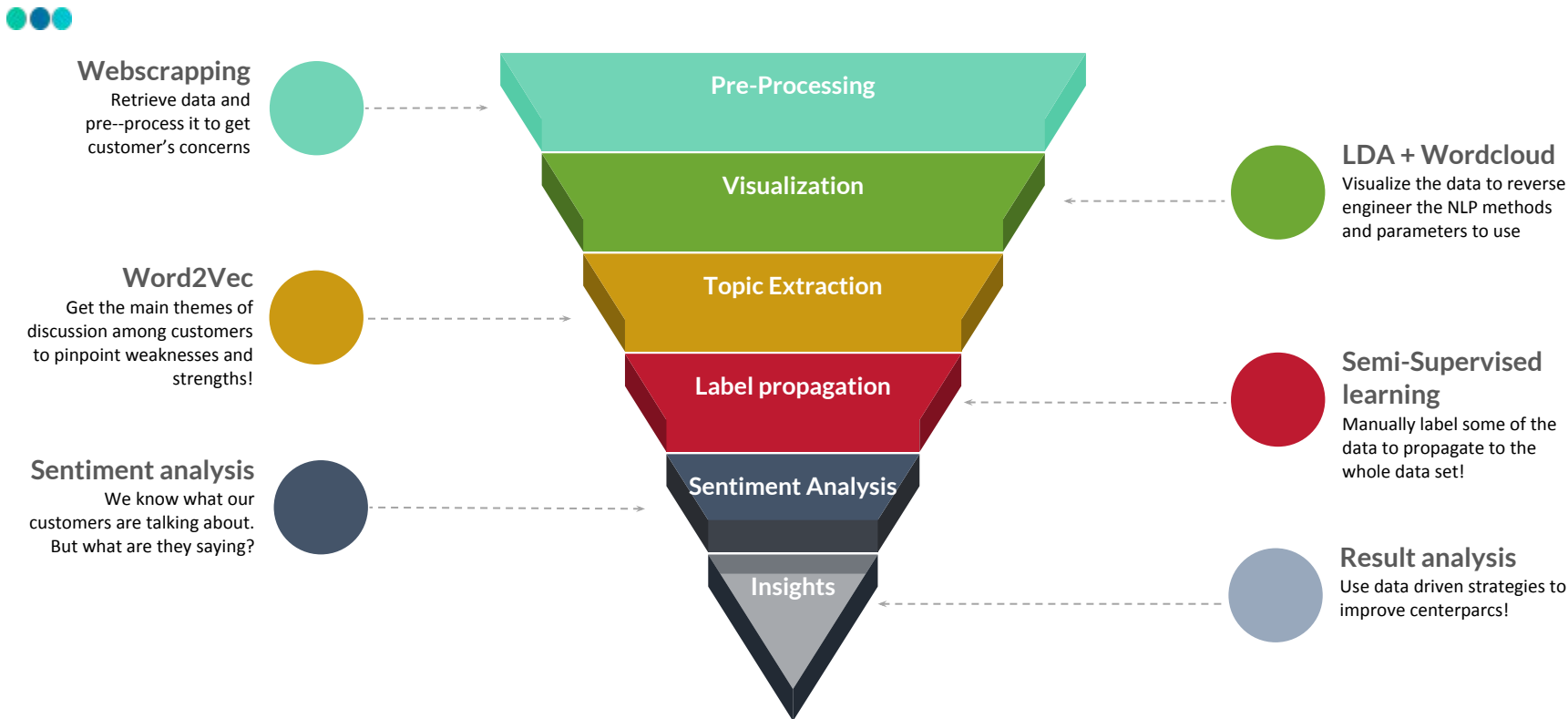
3. From LDA to Word2Vec



All the previous work was to have insights on what was the most recurrent themes found in reviews for Center Parcs
All we've done so far is the equivalent of **observing** our data, we haven't answered anything yet

So, what's next?

From NLP to NLU



Label propagation & sentiment analysis

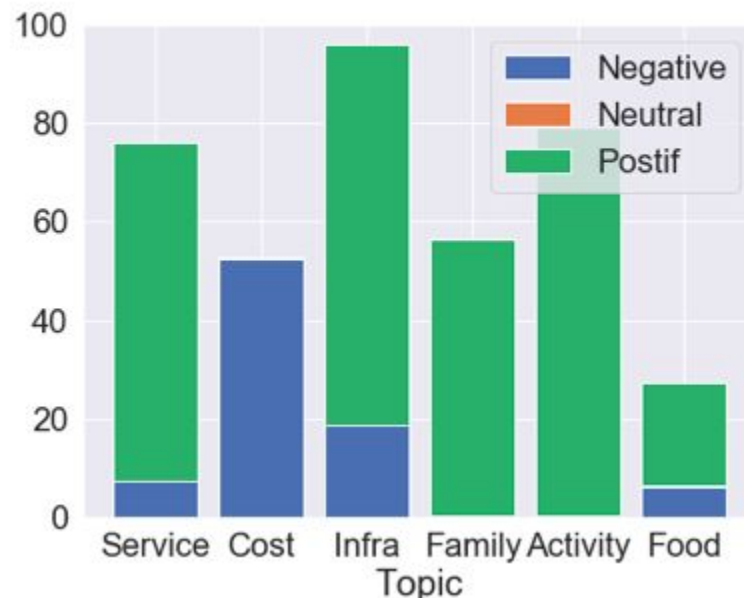
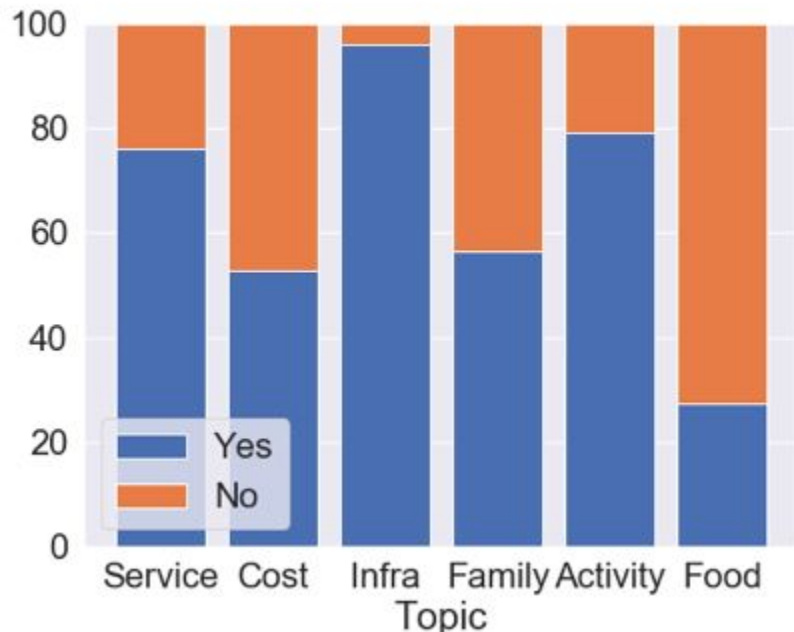
The methodology



1. Split labeled data: train & test
2. Use the training labeled dataset and unlabeled data to train label propagation model. The unlabeled data will help our model better capture the shape of the underlying data distribution and generalize better to new samples
3. Test & analyze the trained model on our test labeled dataset. -> %errors
4. If performances satisfactory, end. Otherwise, we label unlabeled samples and we iterate this strategy from 2 until good enough performances.

Results overview

A summary of our results



Results Insights

A summary of our results



1.) **FOOD**

Food was often found to be subpar in general in our Center Parcs

2.) **CLEANLINESS**

Many guests found their cottages dirty

3.) **COST**

A general concern was that Center Parcs was very overpriced

Results overview

A summary of our results



	ELVED EN	LONGLE AT	SHERWO OD	WHINFE LL	WOBUR N
Activities	77.8 _{4.26}	79 _{4.24}	76.2 _{4.28}	79.9 _{4.18}	84.9 _{4.14}
Cost	53.5 _{3.82}	53.2 _{3.78}	53.9 _{3.84}	53.3 _{3.97}	49.2 _{3.76}
Family	56.2 _{4.23}	54.9 _{4.27}	57.5 _{4.31}	59.6 _{4.40}	52.6 _{4.16}
Food +	21.4 _{4.34}	19.1 _{4.36}	20.6 _{4.42}	20.9 _{4.45}	21.9 _{4.31}
Food -	6.9 _{3.15}	6.03 _{3.17}	6.5 _{3.19}	5.9 _{3.34}	6.02 _{3.04}
Service +	66.3 _{4.15}	67.3 _{4.14}	68.4 _{4.19}	68 _{4.28}	73.8 _{4.12}
Service -	9 _{2.37}	7.9 _{2.26}	7 _{2.28}	6.9 _{2.36}	5.6 _{2.25}
Infra +	74.2 _{4.37}	76.9 _{4.36}	75.5 _{4.39}	79.5 _{4.46}	81.4 _{4.25}
Infra -	20.3 _{2.78}	19.8 _{2.79}	18.9 _{2.79}	16.6 _{2.87}	16.7 _{2.84}
Avg_Ratin g	4.04	4.05	4.09	4.20	4.01

Food

An underwhelming culinary experience



A generally underwhelming culinary experience:

- Many people recommend to bring their own groceries.

'The food was substandard'

Parc Restaurants systematically get associated with negative sentiments.

25% of food reviews have negative sentiment.

Substandard, subpar, poor service, overpriced recurrent themes

'Systematically cold'

Cleanliness

Mixed feelings



Mixed reviews on the salubrity of Center Parcs

While only 35% of reviews mentioning cleanliness were negative, we found that to be a disturbing trend.

Upon closer inspection, we noticed 'positive' reviews were mostly neutral, or said in passing

Most of the cleanliness issues stemmed from the rooms themselves, not the common amenities.

While this is not directly quantifiable, we noticed the tone of those that complained about cleanliness was more negative.

'bed was not thoroughly
cleaned'

'dirty room'

Review Example

A customer dissatisfied with cleanliness has a negative experience at Center Parcs



‘This is the third time we are coming here with our family, 3 generations, and it will be the last. We were incredibly disappointed with the management. Our place was dirty, bed sheets included. We complained and received no compensation ...’

COST

A supermajority dissatisfied with the price



An overwhelming majority of cost related comments are negative.

People complain about an overpriced parc.

Some people carry on to say that they will not come back as it is not worth the money.

Most widely cited trait, and most negatively associated one.

*'An expensive vacation
for a big family'*

*'An expensive option
but well worth it'*

*'restaurants inside the parc are
very expensive'*

A Benchmark to track Success

A potential idea to put recommendations into place and analyse results as we did here

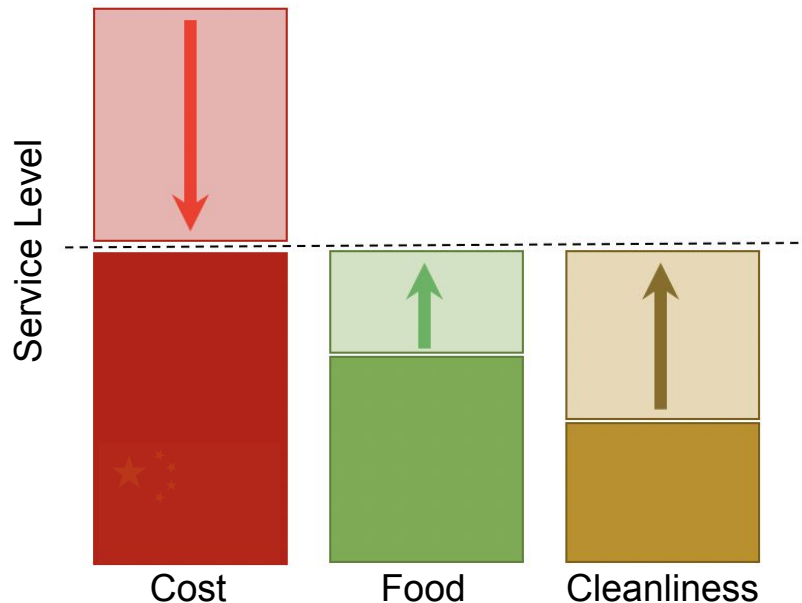


Proposed Actions - Big picture

The identified problems are intertwined and call for a strategic action plan



- Overall costs are too high for the proposed service levels in terms of food and cleanliness.
- Service level for food and cleanliness is inconsistent with the quality of activities and with the high-end positioning of Center Parcs.
- Food and cleanliness are not core services but their poor quality is detrimental to Center Parcs' image.
- Maintain brand image and activity service levels, reduce costs and match food and cleanliness levels to cost levels.



Solution Deep Dive (1/3) - Cost reduction

Re-evaluate profit equation and propose all-inclusive pricing



- **High food price** should not be a source of profit as it is not central to Centre Parcs' value proposition.

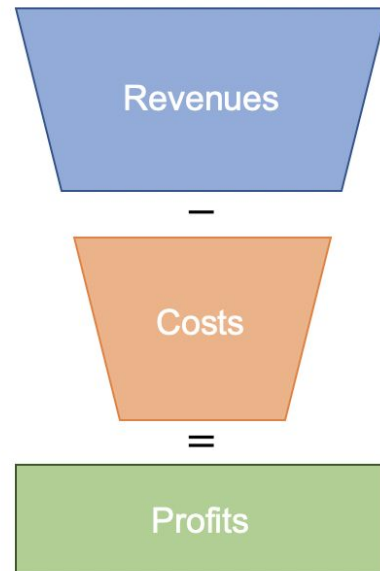
⇒ **Negotiate prices** with retailers and propose the same range of options at normal retail prices.

- Customers are taken by surprise by the **additional costs** (activities, restaurants, etc.).

⇒ Propose **all-inclusive pricing** to increase customer satisfaction and retention.

Overall, perform **general cost analysis** to identify any **redundancies** to reduce costs and maintain profits while improving customer experience.

The profit equation



Solution Deep Dive (2/3) - Better food

Keep high-end options but diversify mid-range ones and propose affordable prices



- Customers are **disappointed** by the food served at restaurants.

⇒ Partner up with known food chains appreciated by families (ex: hippopotamus, courtepaille, etc.) or spend more on catering services.

- **Groceries** are so **expensive** that customers bring their own food (missed sales and disappointed customers).

⇒ Propose **affordable groceries** (win-win for Centre Parcs and retailers as customers will make their purchases there instead of bringing their own food)

⇒ Grow local organic food to promote ecological values that Centre Parcs conveys, could also be an activity (2 in 1)



Solution Deep Dive (3/3) - Cleaner & Newer rooms

Refurbish older rooms and spend more resources and attention on housekeeping



- For the price they pay, mid-range customers are disappointed by the **lack of cleanliness and old age** of their rooms.

⇒ **Refurbish** older rooms and pay extra attention to **housekeeping** and cleanliness

- The **service level** proposed for the mid-range rooms is **lagging behind** the service levels of the core value propositions of Centre Parcs.

⇒ To maintain brand image, **do the extra mile** with personalized services (chocolates, flowers, welcoming letters, etc.)

⇒ Invest part of the effort spent on high-end rooms for the mid-ranged ones



Next steps and Questions?

Further potential leads



- Pool resources from other groups to establish benchmark solutions that can be applied across Center Parcs
- ⇒ Establish consistency in brand quality across parks
- What budget can be allocated for the action plan to tailor the solution to the resources?

