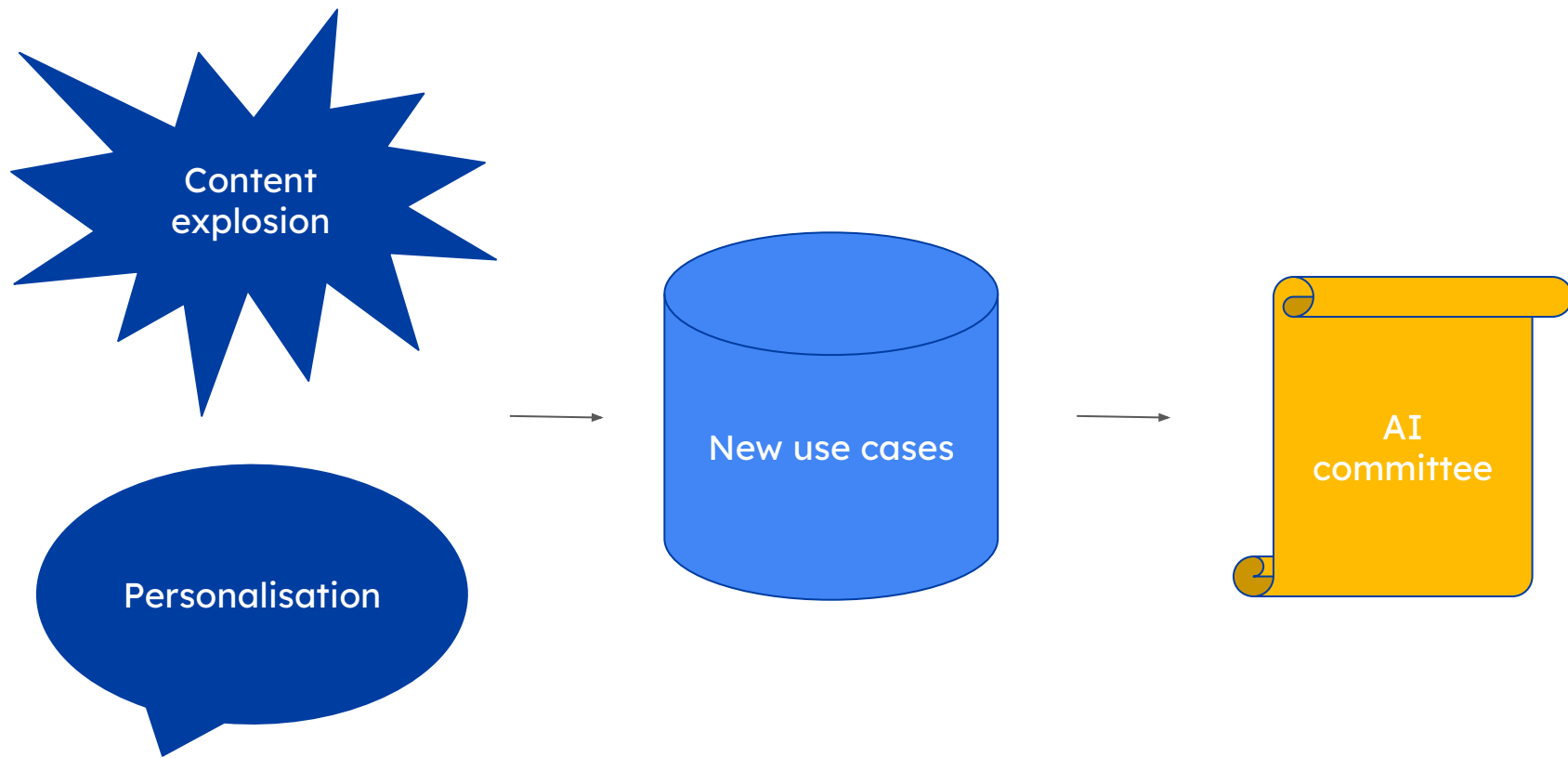# GenAI in Localization
Program Management

Paula Manzur & Emma Vila
Booking.com

AI for everyone, every day
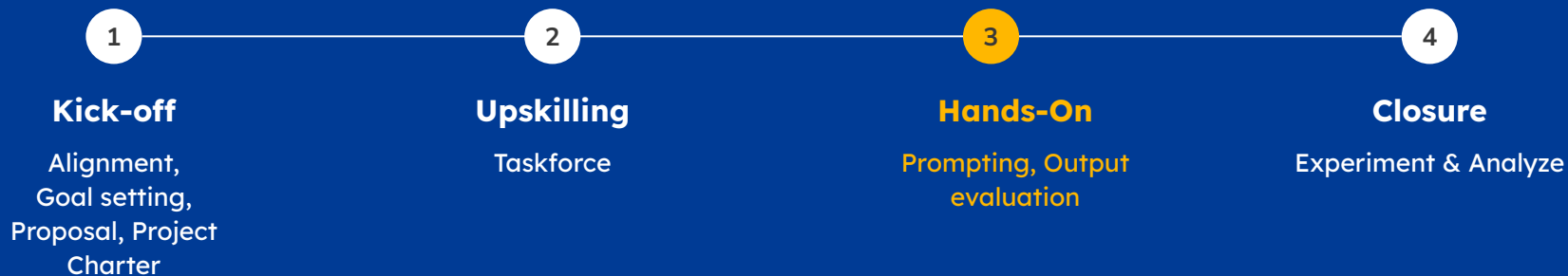
Learn, Explore, Play, Adapt, Experiment and Succeed .

Content
explosion

Personalisation
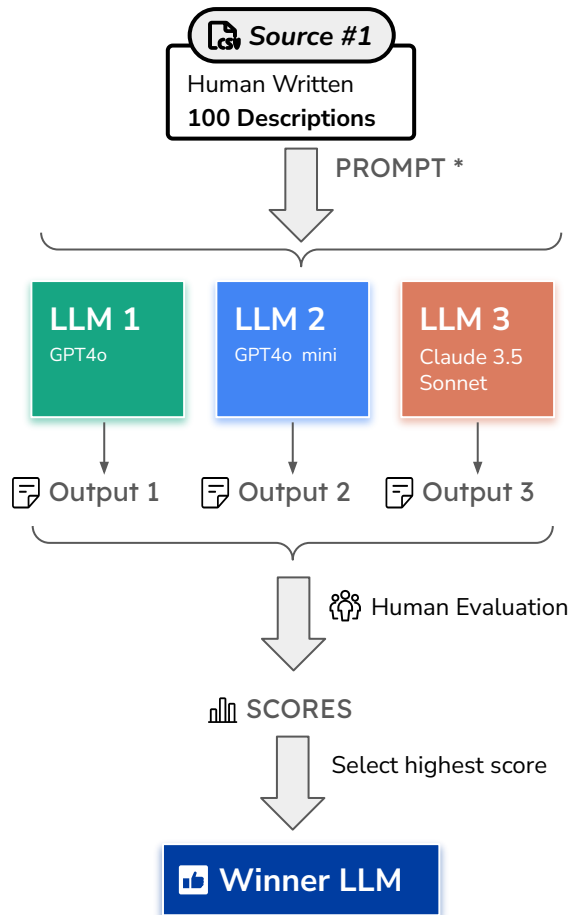
New use cases

AI
committee

Use case: Property Descriptions

Explore and validate the translation of Human/AI written English Property Descriptions with GenAI models in all supported Booking.com languages.
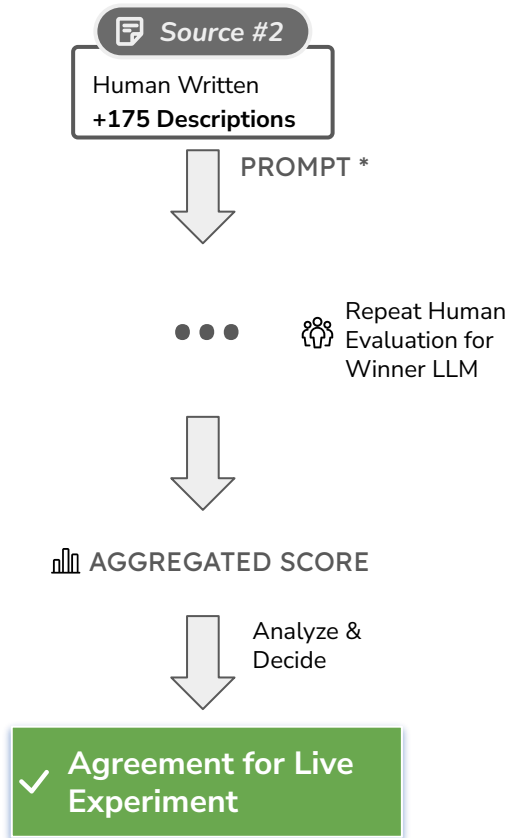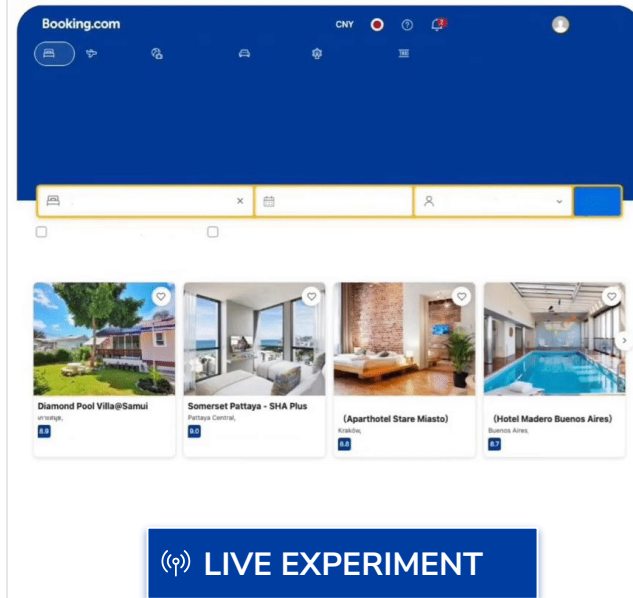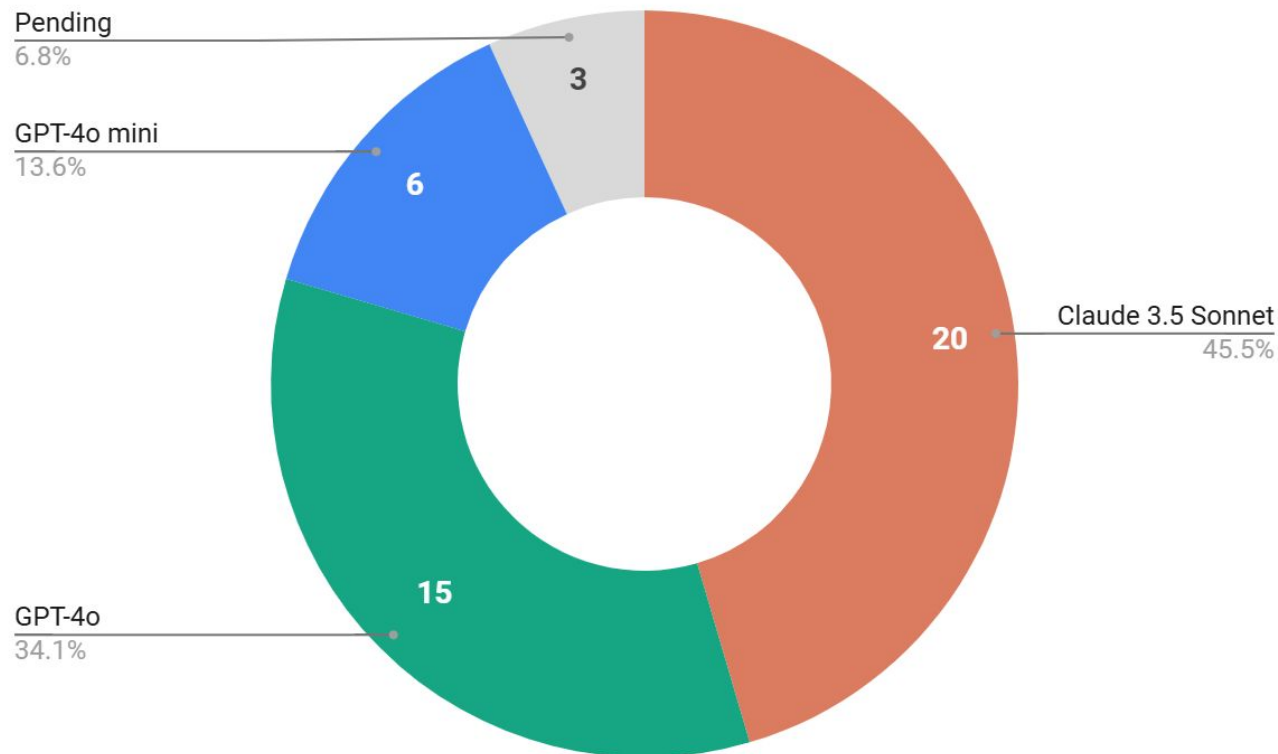
High-Level Summary

1

Kick-off

Alignment,
Goal setting,
Proposal, Project
Charter

2

Upskilling

Taskforce

3

Hands-On

Prompting, Output
evaluation

4

Closure

Experiment & Analyze

Phase 1

Source #1
Human Written
100 Descriptions

PROMPT *

LLM 1
GPT4o

LLM 2
GPT4o mini

LLM 3
Claude 3.5 Sonnet

Output 1   Output 2   Output 3

Human Evaluation

SCORES

Select highest score

Winner LLM

* Same baseline for all langs

Phase 2

Source #2
Human Written
+175 Descriptions

PROMPT *

● ● ●   Repeat Human Evaluation for Winner LLM

AGGREGATED SCORE

Analyze & Decide

✓ Agreement for Live Experiment

Phase 3

Booking.com   CNY   ●   ?   ♡³

Diamond Pool Villa@Samui
ບ້ານຜ້ຶງ,
8.8

Somerset Pattaya - SHA Plus
Pattaya Central,
8.0

(Aparthotel Stare Miasto)
Kraków,
8.8

(Hotel Madero Buenos Aires)
Buenos Aires,
8.7

(( )) LIVE EXPERIMENT

LLM winning models distribution

Claude 3.5 Sonnet
ar, ca, cs, el, ja, ko, lt, nl, no, pl, pt, ro, ru, sk, th, uk, vi, es-ar, pt-br, zh-tw

Gpt-4o
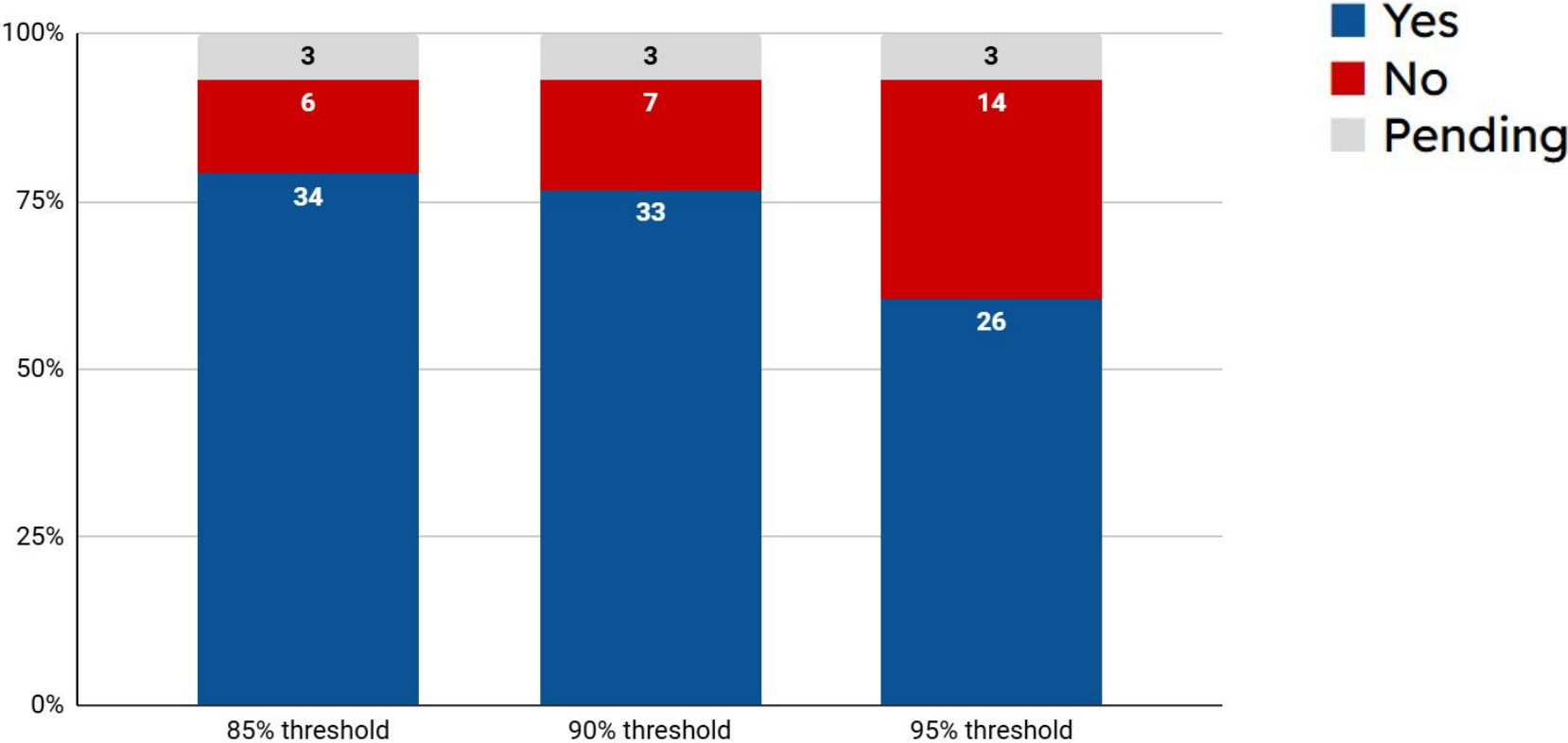es, et, fi, fr, he, hr, hu, id, it, ms, sl, sv, tr, es-mx, en-us

Gpt-4o-mini
bg, da, de, hi, tl, zh-cn

Pending - 3 languages
is, lv, sr

Pie chart labels:
- Pending 6.8% — 3
- GPT-4o mini 13.6% — 6
- Claude 3.5 Sonnet 45.5% — 20
- GPT-4o 34.1% — 15

Quality threshold distribution

System prompt

You are a linguist translating accommodation descriptions for Booking.com. Your goal is to create accurate and easy-to-read accommodation descriptions.
You ensure the translations feel natural in the target language, use a personalized and professional tone, and avoid being too colloquial.
BASIC GUIDELINES
You use {formality} tone of voice
{general_instructions}

User prompt

Task
Localize the listed 'Accommodation Descriptions' into {target_language} ensuring that it is natural and engaging for the target audience.
Follow the grammatical and syntactic rules of the {target_language} language.
{language_instruction}

Instructions
#1 Ensure that the content in the 'Accommodation Name' is {property_names}.
#2 Proper names of geo entities (places, landmarks or other) and names of bars, restaurants and similar establishments should be {proper_names}.
#3 Make sure that the units of measurement used are {unit_of_measure}.
#4 Strictly adhere to the terms provided in {glossary}.

Examples
Example 1
{example_1}
Example 2
{example_2}
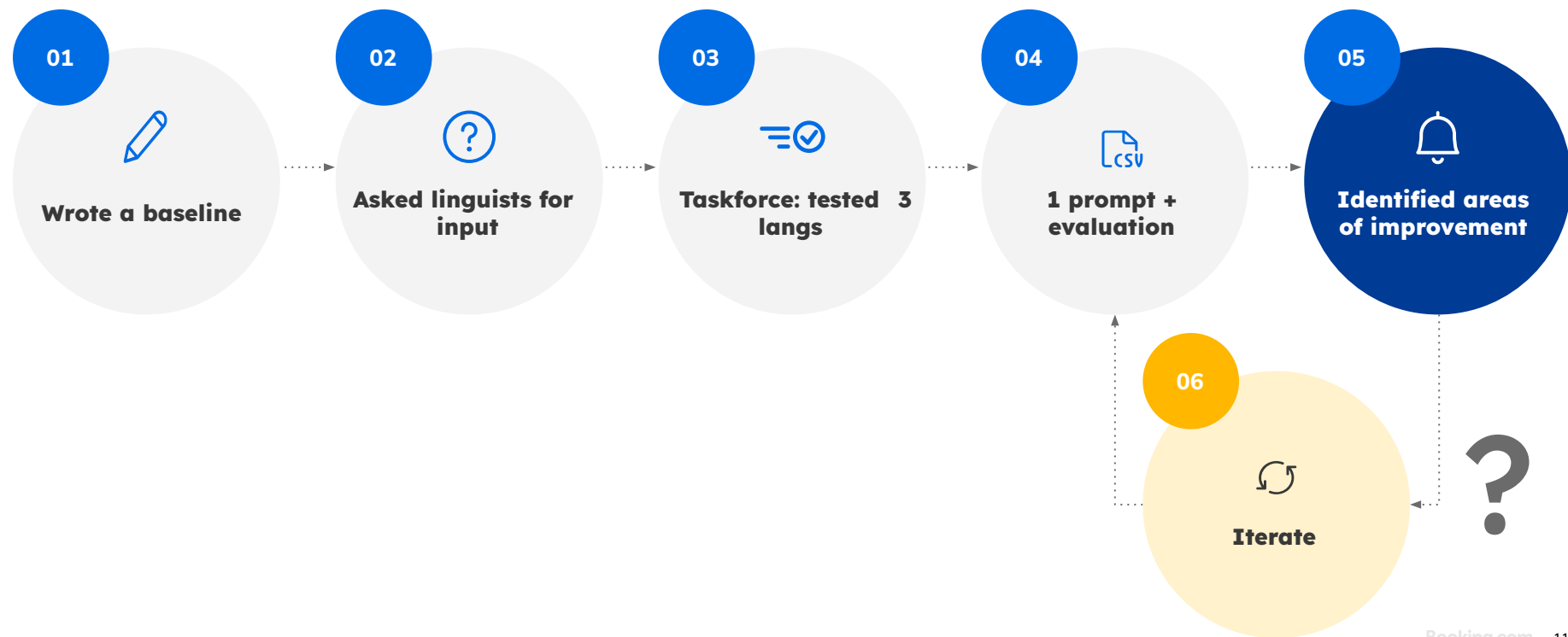
Now it's your turn:
Accommodation Descriptions: {accommodation_description}
Accommodation Name: {accommodation_name}
Do not include <translated_accomm_description> in the output.

Prompt engineering is an iterative process. You'll need to prompt, test, evaluate, ~~refine~~, and then ~~repeat~~.

1 prompt for 43 langs, no iteration (yet)

01 Wrote a baseline

02 Asked linguists for input

03 Taskforce: tested 3 langs

04 1 prompt + evaluation

05 Identified areas of improvement

06 Iterate

?

The 3 pillars of Program Management of GenAI uses cases in Localisation

Be part of the decision

Operationalisation of GenAI use cases: be part of the strategic decision

Always a challenge

Depends on use case and positioning of each Localisation department

Leverage the opportunity

Invest in Upskilling

Use these projects as Learnings

Think what else can you make of them

Example: how can we scale in terms of evaluation? Are automated solutions an option?

Experiment and Educate

Educate stakeholders about GenAI applied to Localisation

One-size-fits-all approach may not always be the case

NMT may still be better depending on the use case

Thank you!

Paula Manzur & Emma Vila

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emma.vila@booking.com