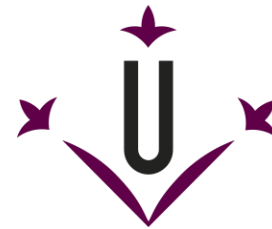


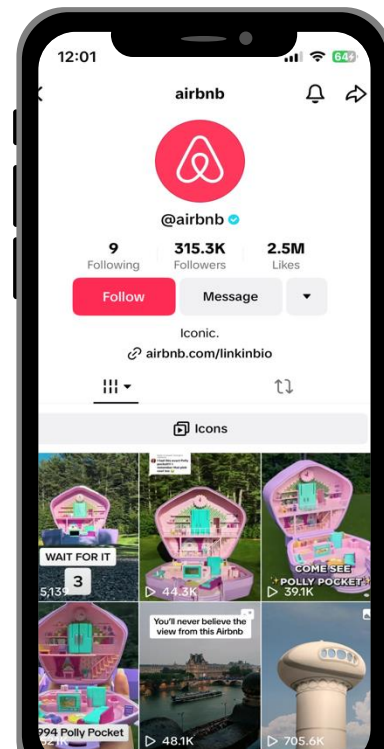
AI-Driven Social Media Listening about Airbnb



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i Turisme

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October 2024



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Introduction

Social media platforms are critical in shaping brand perception and user behavior (Kaplan & Haenlein, 2010).

TikTok's Role

Unique Platform: TikTok, with its short-form videos especially among **Gen-Z** (Kadekova & Holiencinova, 2018; Ortiz et al., 2023).).

Leading in Short-Form Video: TikTok is known for its unique **algorithm** and capacity to engage a vast audience, making it a global counterpart to China's Douyin and one of the world's most rapidly expanding platforms for short-form video content (Kaye et al., 2021).

Influencer Marketing

Engagement Drivers: Identifying key influencers who drive the most engagement is crucial for refining digital marketing **strategies** (Wang & Huang, 2023).

Strategic Insights: Understanding TikTok's influence can help Airbnb adapt its marketing strategies in the evolving digital landscape.

Users growth

55 M. 2018



Tik Tok

1.7 B. 2023

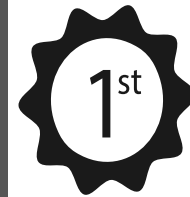
(Statistics, 2024).

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Introduction

Platform	Year of First Publication	Followers	Posts
X	2008	880,600	44,300
YouTube	2010	638,000	531
Facebook	2012	16,155,768	Not available
Instagram	2013	5,400,000	3553
TikTok	2022	256,900	84

Overview of Airbnb's Social Media Profiles (November 13,2023).



*Dealing with
TikTok content
on Airbnb*

AIM: to understand the image of the Airbnb brand on TikTok through the sentiments, emotions, and topics discussed in both Airbnb's official profile and user-generated content and the respective comments in each

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Methodology

Data Collection:

- **Period:** Posts and comments from 2022-2023.
- **Download Date:** November 11, 2023.
- **Language:** English.

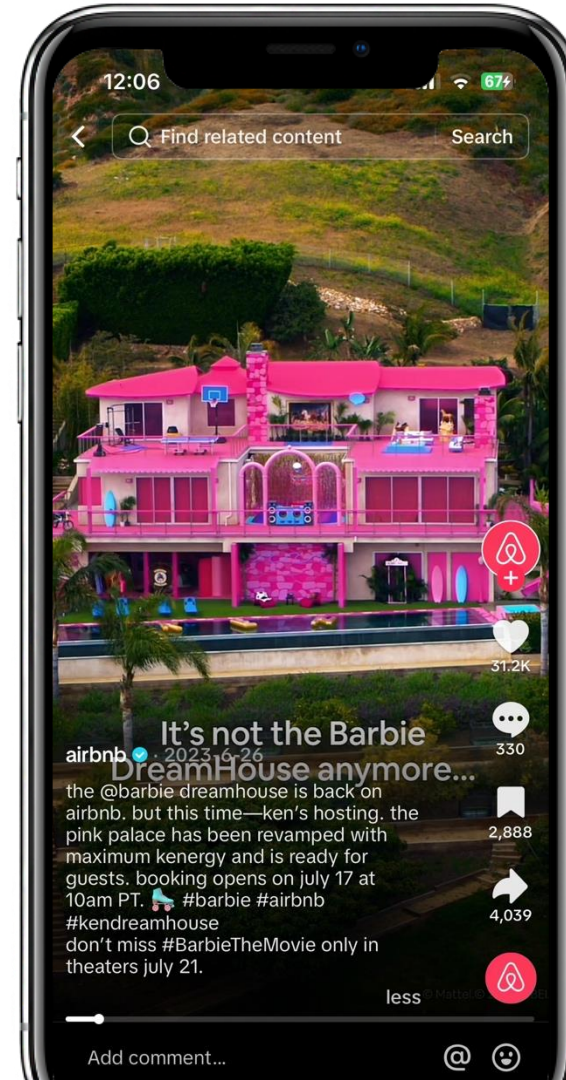


Text of the post and text of the comments

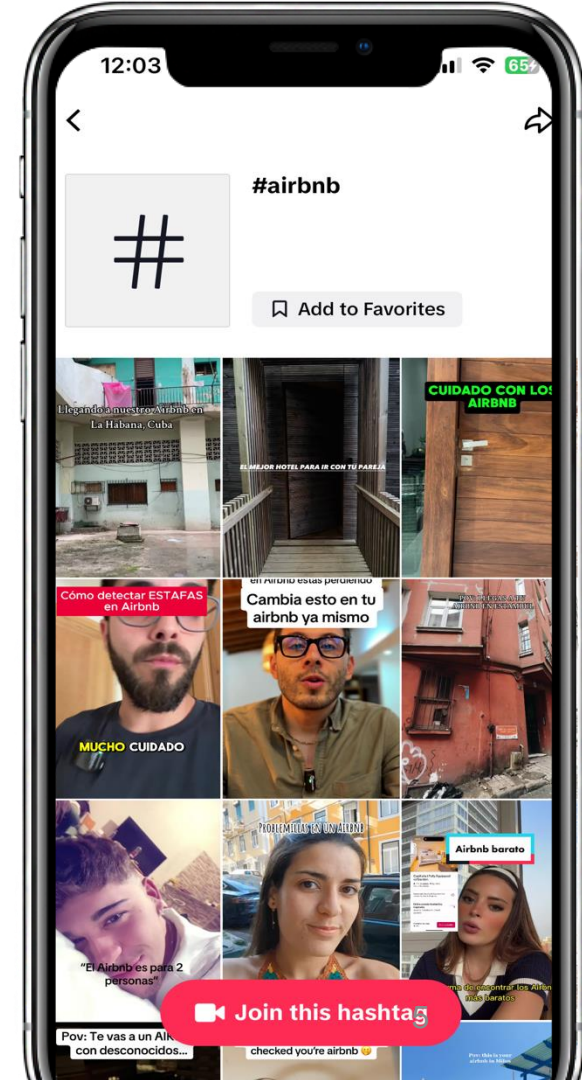


Audio of human voice

Official Profile

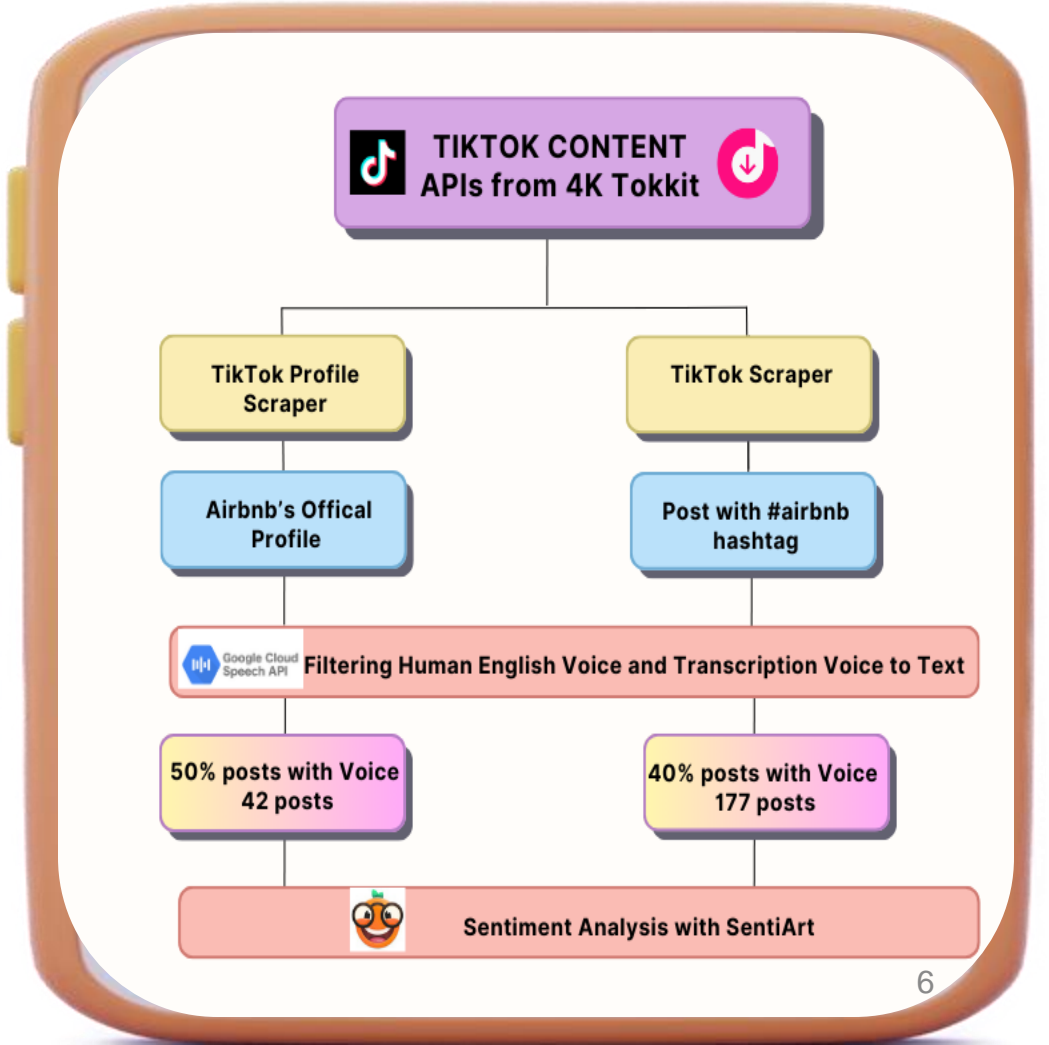
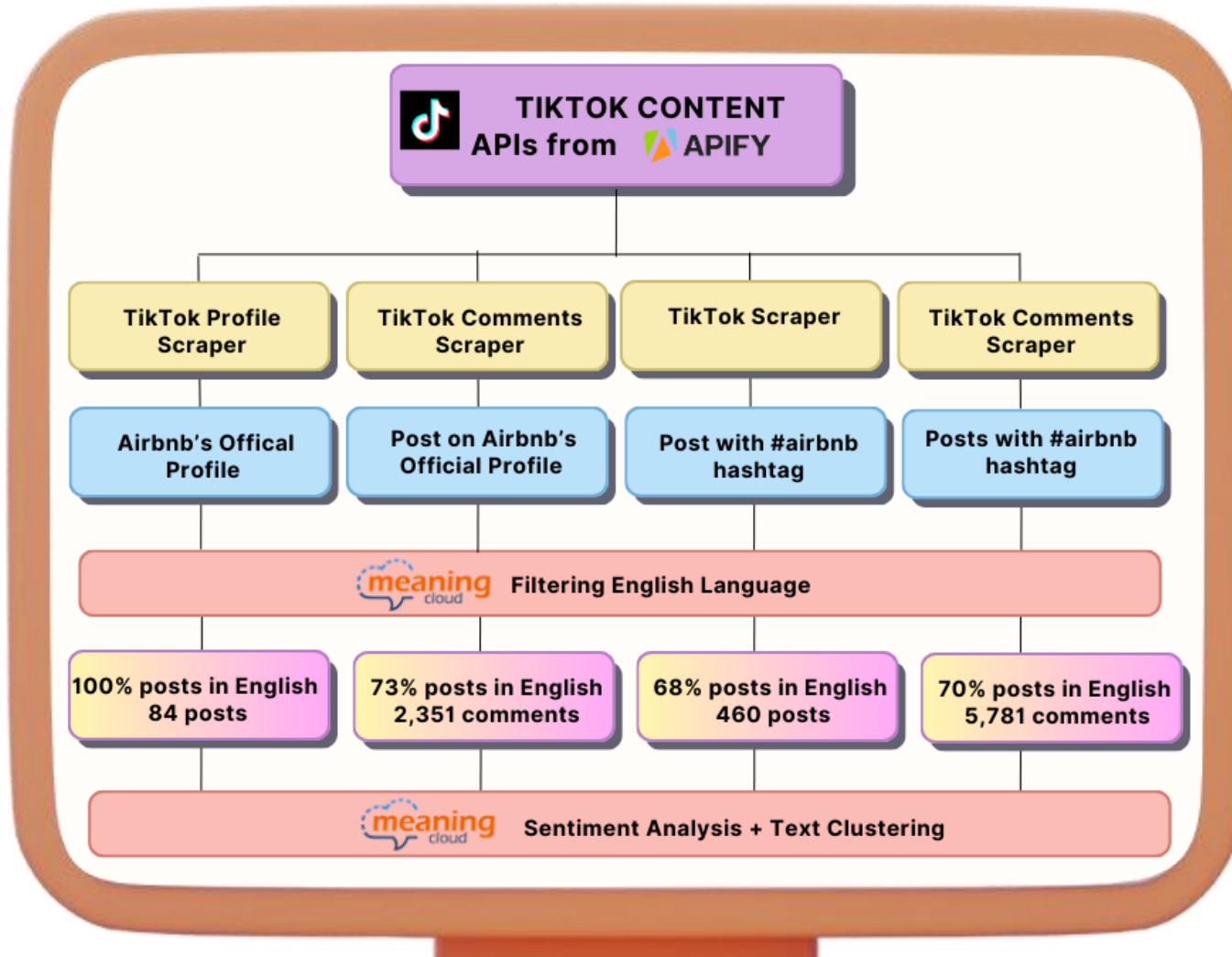


UGC #airbnb



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Methodology



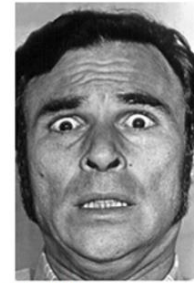
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Methodology

What is Emotional Analysis?

With this model, you can classify emotions in English text data. The model was trained on 6 diverse datasets and predicts Ekman's 6 basic emotions, plus a neutral class:

- 1-anger 🤔
- 2-disgust 🤢
- 3-fear 😨
- 4-joy 😄
- 5-neutral 😐
- 6-sadness 😭
- 7-surprise 😲



Fearful



Angry



Sad



Happy



Disgusted



Surprised

Paul Ekman's Theory of Emotion

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Results

Category	Text from Airbnb Official Posts (84)	Text from #Airbnb posts(460)
Art & Entertainment	4	21
Business	-	12
Real Estate	-	16
Sports	5	8
Travel	47	349

Top 5 Text Clustering of TikTok Content using MeaningCloud

TEXT CLASSIFICATION OF TIKTOK CONTENT

Text from Airbnb Official Post (Travel + Art & Entertainment + Sports)

Text from #Airbnb posts (Travel + Art & Entertainment + **Business + Real State**)



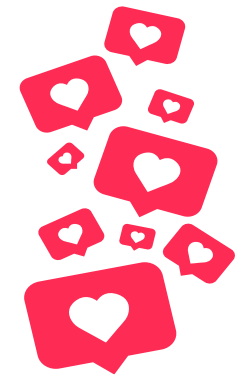
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Results

Dependent Variable	Influencer Type	N	Mean	Stand.Desv.	F-Value	p-Value
Engagement	Nano influencer (1–10k)	60	160.68	134.05	77.72	<0.001
	Micro influencer (10k-100k)	141	36.45	25.49		
	Macro influencer (100k-1M)	109	25.54	16.12		
	Mega influencer (+1M)	37	39.37	28.59		

Analysis of Variance - Engagement Through Type of Influencer

Nano influencers achieve much higher average engagement compared to the other types of influencers. In the quantitative analysis of influencers, we have assessed success in terms of the interaction of the posts with the users.

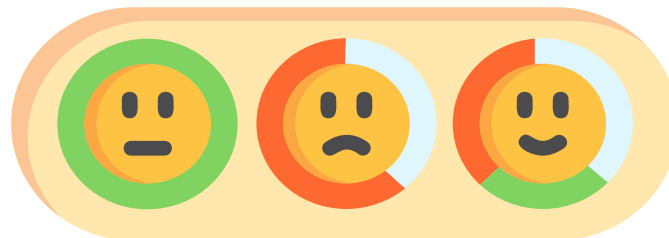


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Results

	Text from Airbnb Official Post		Comments in Airbnb Official Post		Text from #Airbnb post		Comments in #Airbnb post	
Polarity	2022	2023	2022	2023	2022	2023	2022	2023
N & N+ (%)	6 (12%)	2 (6%)	236 (17%)	323 (32%)	30 (15%)	30 (11%)	237 (16%)	555 (13%)
NEU & NONE (%)	26 (53%)	14 (40%)	449 (33%)	389 (39%)	77 (39%)	92 (35%)	737 (49%)	2295 (54%)
P & P+ (%)	17 (35%)	19 (54%)	439 (32%)	279 (28%)	89 (45%)	142 (54%)	535 (35%)	1422 (33%)
Total	49	35	1360	991	196	264	1509	4272

Polarity in Text Publications and Comments From 2022 to 2023, Analyzed Using MeaningCloud



Some comments –@TAGGING

e-WOM

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Results

Classifier	Method	TikTok Voice from Airbnb Official Post			TikTok Voice from #Airbnb Post		
		Mean (SD)	Min	Max	Mean (SD)	Min	Max
SentiArt (emotion)	Sentiment	0.61 (0.45)	0.02	1.77	0.31 (1.01)	-0.72	1.19
	Anger	-0.13 (-1.22)	-0.45	0.26	-0.18 (-1.29)	-0.92	0.82
	Fear	0.39 (0.86)	-0.37	1.20	0.46 (0.88)	-0.68	1.92
	Disgust	-0.05 (-3.51)	-0.38	0.38	0.06 (-3.67)	-0.80	0.78
	Happiness	0.58 (0.43)	0.07	1.28	0.47 (0.59)	-0.41	1.17
	Sadness	0.31 (0.71)	-0.77	1.06	0.14 (1.74)	-0.47	1.17
	Surprise	0.45 (0.54)	-0.002	1.01	0.48 (0.65)	-0.68	1.50

Sentiment Analysis Results With SentiArt Using Orange Data Mining

The tool uses vector space models together with theory-guided, empirically validated label lists to compute the valence of each word in a text by locating its position in a 2D emotion potential space spanned by the words of the vector space model (Jacobs, 2019).

90% agreement

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Conclusions

Brand vs. User Perception:

The study demonstrated that the different topics depend on the profile, real state and business in the UGC #airbnb

User-Generated Content

(UGC): UGC on TikTok generates more engagement especially from **nano-influencers** due to their perceived authenticity.

Implications:

- Strategic Importance of UGC
- TikTok as a Key Platform
- Innovative Methodology



Positive Sentiment: Airbnb's content on TikTok is largely viewed positively, with "happiness" being the predominant emotion across both user and brand content.

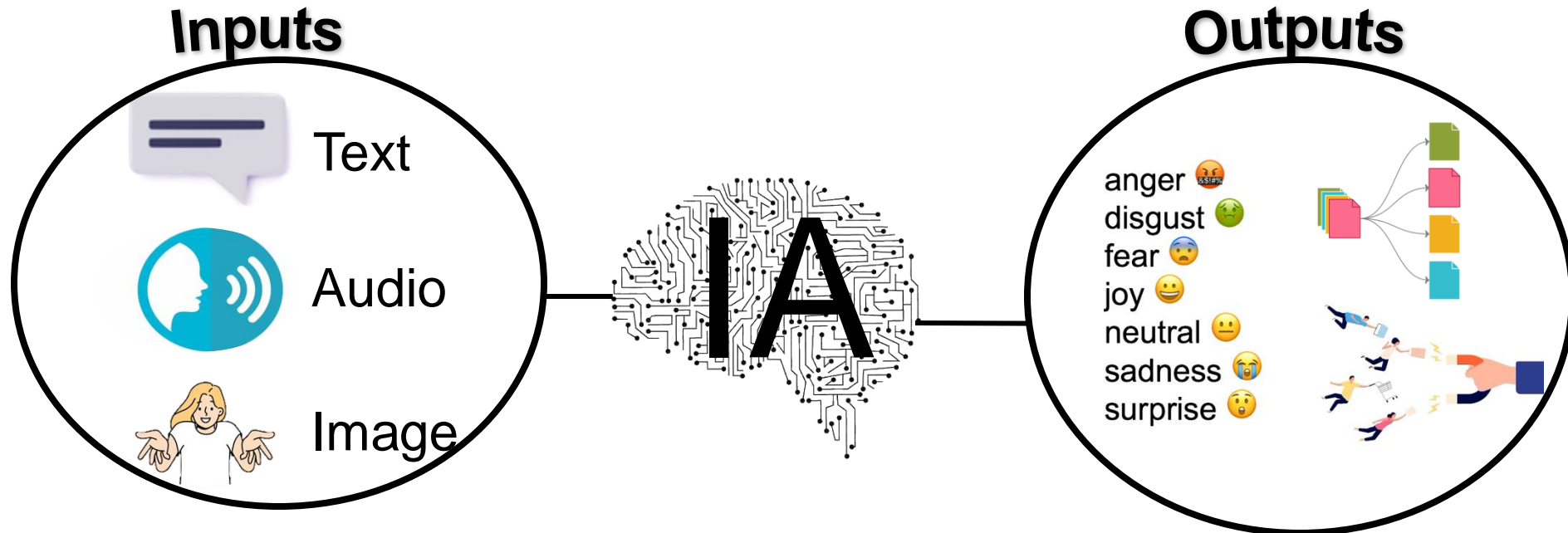
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Limitations

Future work

- Data base: Focus on a single company
- Emphasis on the holiday segment
- Language
- Geographical Scope
- Exploratory Study
- Generation Z Bias

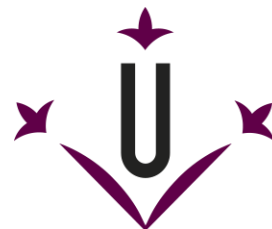
- Expansion to other brands: civitatis, klook
- Inclusion of other types of accommodation
- Multilingual analysis: Chinese
- Development of real-time tools for detecting a crises on social media(AI) to analyses different content: video, audio, image (negative reviews)



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