

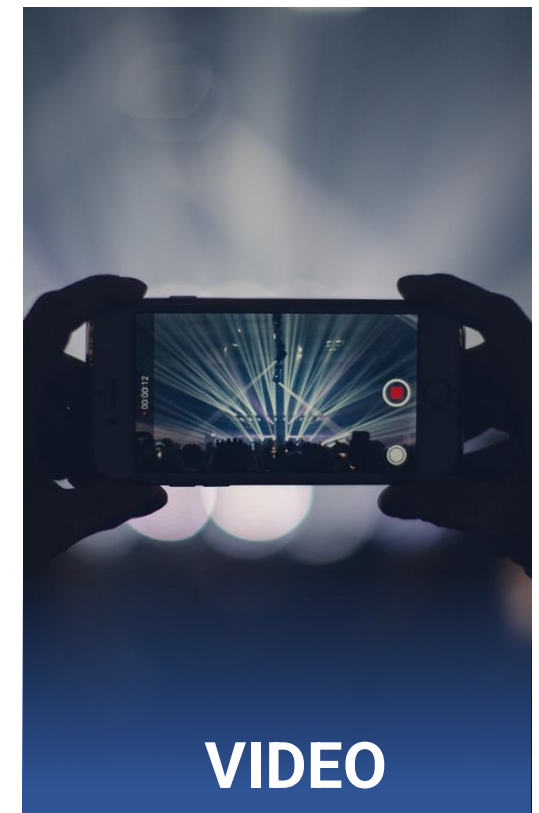
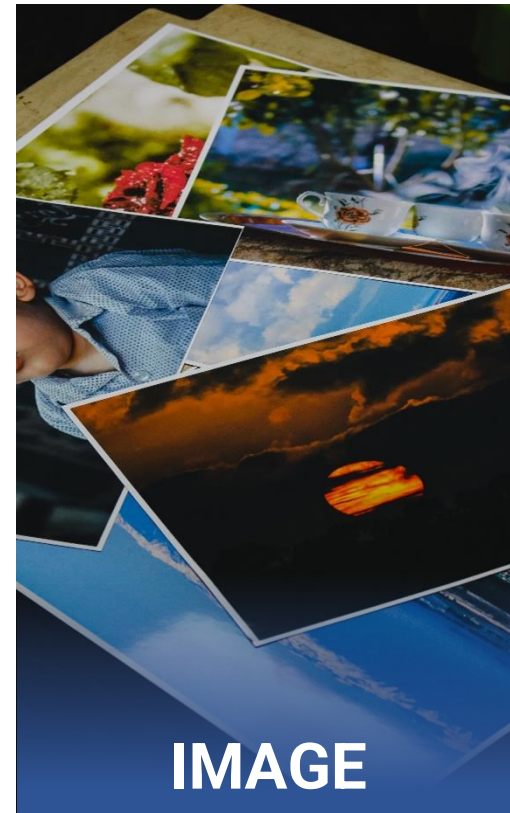
# AI & Tourism Definitions and Realities

**November 8, 2023**

**Presenter: Michalis A. Michael  
GIHE Research Fellow**

# UNSTRUCTURED DATA

Over 90% of all recorded human knowledge is **unstructured data**



# Ways to Classify and use AI for Insights

Weak/Narrow AI (ANI)

General AI (AGI)

Super AI (ASI)

Custom ML Models

Top-up LLMs (GPT-4)/Transformers (Bert)

Zero/few shot LLMs (GPT-4)

Label/Tag/Annotate Big Data

Code Open Ends/Transcript Tagging

Generative

# Sources of Unstructured Data

## INTERNAL DATA



Call Centre  
Audio Transcripts



Customer  
Support  
Emails



Customer  
Chat Messages

## SOLICITED OPINION FROM MR



Survey  
Responses to  
open ends



Qualitative  
Research  
Transcripts

## UNSOLICITED OPINION FROM ONLINE SOURCES



Blogs



Forums



News  
(editorial)



Reviews



YouTube



X



Facebook



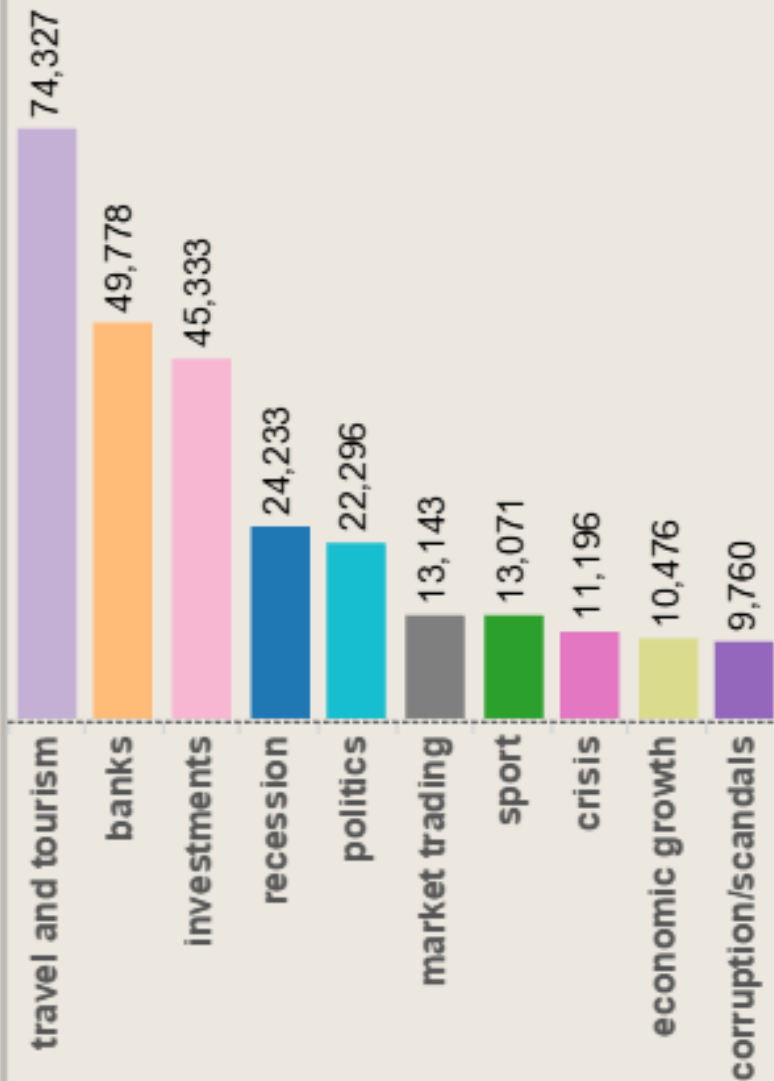
Instagram



Other online  
sources (on  
request)

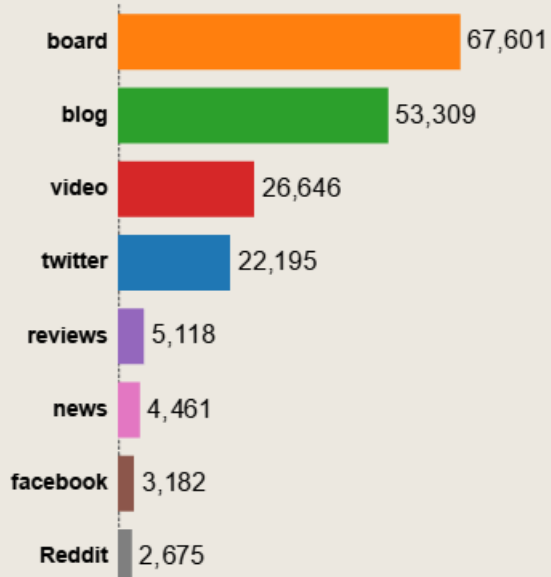
# Top Topics

Click a Topic to Drill-Down to the Next Level



## Source

Click a Source to see posts from this source



14.83%



52.30%



## Time Period

1 July - 31 August 2023

listening 247

# Unstructured Big Data on Switzerland

Source Type	Content
reviews	Insanely terrible and I have made all the people aware about my experience and lots have had the same. Flight cancelled in between my destination no help offered I had to take a taxi then a train reach Switzerland to book and sleep in a hotel rebooked a flight wit..
reviews	We travel a lot and we choose to stay at this hotel for 2 nights but checked out after only one night. during our 3 weeks trip to Europe Lucerne was my third stop in Switzerland and third hotel. So I know what to expect from Swiss hotel. Pros: Good location good bre..
board	If you google image Switzerland infinity pool the main result is Hotel Villa Honegg which is not in the BO but above Lake Lucerne. This is the most Instagramed pool in Switzerland so may be what your friend is thinking of. The pool at the spa at Rigi (Rigi Kaltbad)..
reviews	We are bicycle touring unsupported for 7 weeks through Germany and Switzerland staying in hotels large and small. This hotel was very disappointing for the money we spent. We stayed here 4 years ago and there has been a downturn in our experience. The posit..
reviews	Very disappointed with this hotel I expected 5 star service and at check in I was greeted by snooty reception staff quite unfriendly. After travelling through Switzerland for the previous 2 weeks 5 star all the way with staff who were so professional and friendly and w..
board	Not true. Off season and shoulder season prices for hotels can be a little less almost anywhere in Switzerland. But thats true in all of Europe. Switzerland is one of the most if not the most expensive countries in Europe. Period. It doesnt matter if you are in a city to..
reviews	A clean and comfortable hotel but dated. The village is small near to the Gotthard Tunnel. 90% of communication was German. The hotel's restaurant though popular was rather plain and expensive. Switzerland is however expensive now.

# Transformed into Structured Data

(fictitious data)

## Net Sentiment Score - NSS™

Rank	Brand Name	Score	Up/Down
1	Ritz Carlton	65%	↓
2	Mandarin	35%	↑
3	Shangri La	30%	↑
4	Four Seasons	15%	↓
5	Hyatt	8%	↑
6	Intercontinental	-12%	↓
7	Marriott	-33%	↓

## No. of Online Posts - Buzz

Rank	Brand Name	Score	Up/Down
1	Marriott	22,000	↑
2	Hyatt	18,000	↑
3	Four Seasons	13,000	↓
4	Intercontinental	10,000	↑
5	Mandarin	9,500	↓
6	Shangri La	8,000	↑
7	Ritz Carlton	6,500	↓

## Hotel A : Negative Sentiment

Rank	Source Type	Link	Content	Likes	Shares
1	reviews	<a href="#">Link</a>	Not as per my expectation for 17000 I think waste of money		
2	reviews	<a href="#">Link</a>	Terrible experience. They refused to tell me if the could ha...		
3	instagram	<a href="#">Link</a>	I have tried this but it's unfortunately, not working! :(	2	0
4	board	<a href="#">Link</a>	Finally, after sitting on hold and talking to someone from c...		
5	board	<a href="#">Link</a>	On top of everything you are waiting 20 minutes past your...		

Best Performing Post

Worst Performing Post

## AI ChatBot

Ask a question about the dataset...

ASK

*DataVinci answers questions about your dataset.*

Ranking based on confidence and then ranked based on engagement

# AI Implementation Options for any Organisation

AI Partner	Project Support	Hire Data Scientist	Hire Software Engineer	Cost
LLM e.g. Zero/few Shot GPT-4	✗	✓	✓	US\$0.18/5 tweets
DSaaS	✓	✗	✗	US\$0.01/5 tweets
In-house	✗	✓	✓	?

# Thank You



[mmichael@digital-mr.com](mailto:mmichael@digital-mr.com)



+44 (0)203 795 4715



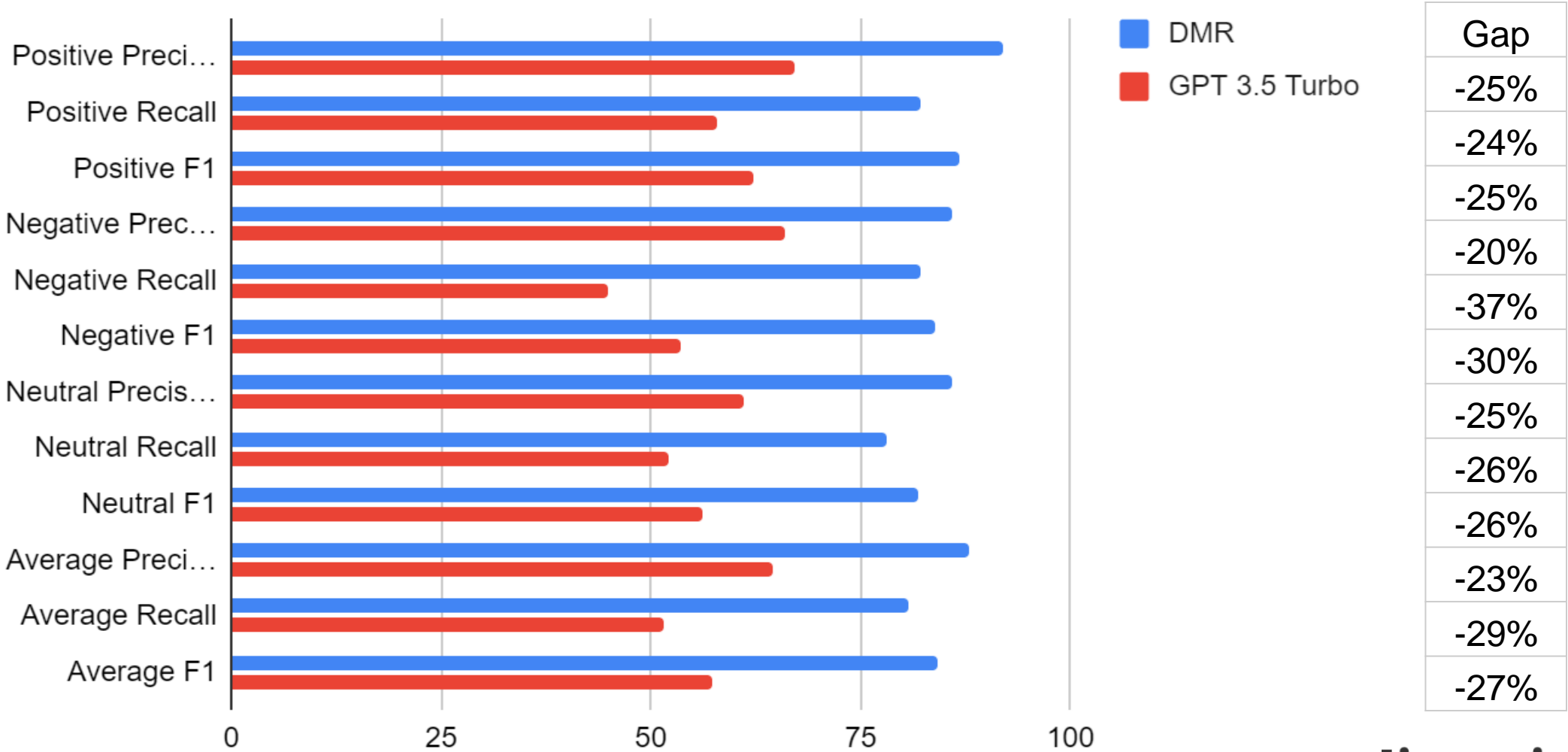
GIHE  
Route de Glion 111, 1823  
Glion-sur-Montreux,  
Switzerland





# Gap Analysis GPT-3.5 Zero Shot Vs DMR ML Models

DMR and GPT 3.5 Turbo



# Gap Analysis GPT-4 Zero Shot Vs DMR ML Models

DMR and GPT-4

