

ITEA Topical
roadshow
Large Language
Models session

Generative AI in media: Challenges and learnings

26 March 2024 | Online
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Generative AI in media

challenges and learnings



In this presentation we will show some of the experiments that have been done in the media sector; especially the ones that we have done at VRT, the public media broadcaster in Flanders, Belgium. These experiments can maybe help to get some ideas for new explorations within your projects.

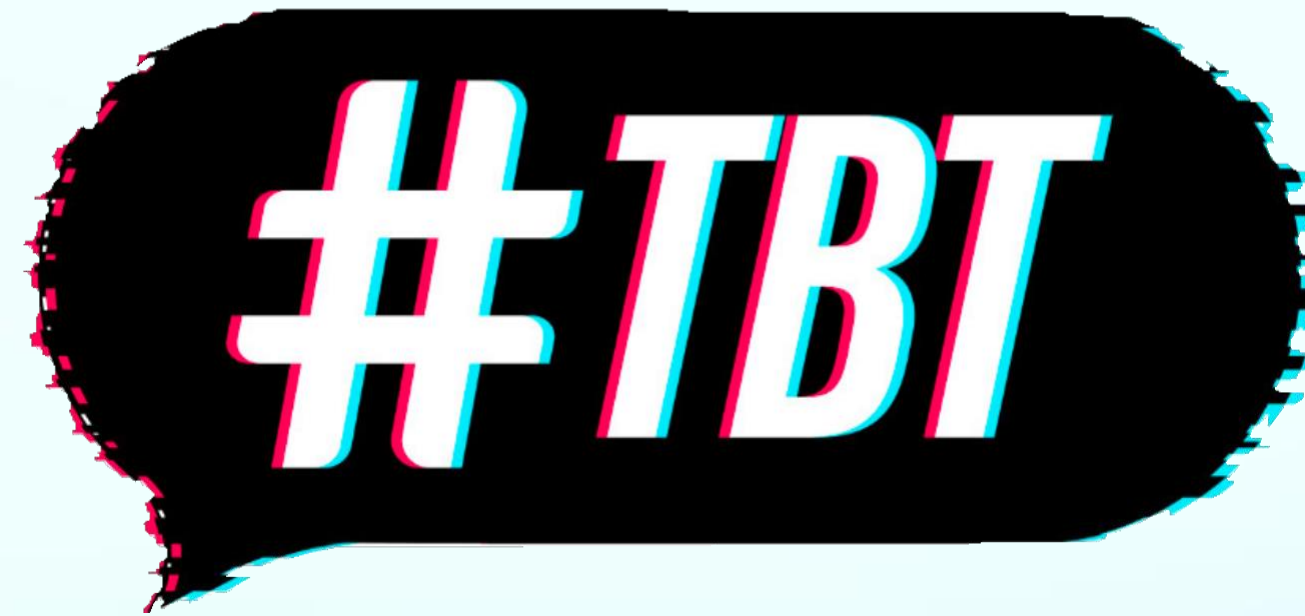


We have a long history of using artificial intelligence and machine learning in media

#TBT

**prediction algorithms
for content publication**

Data analysis



**Personalised
recommendations**

AI supported subtitling

AI enhanced video quality

Switchboard

- Recent messages
- Starred messages
- Blocked users
- Suggestions
- UGC Video stream LIVE
- Moments
- Stories
- Statistics

STREAMS

- Tom Boonen
- Sagan
- People's experience RvV

Create a new moment Cancel

Please select some media clips

Peter Sagan's crash

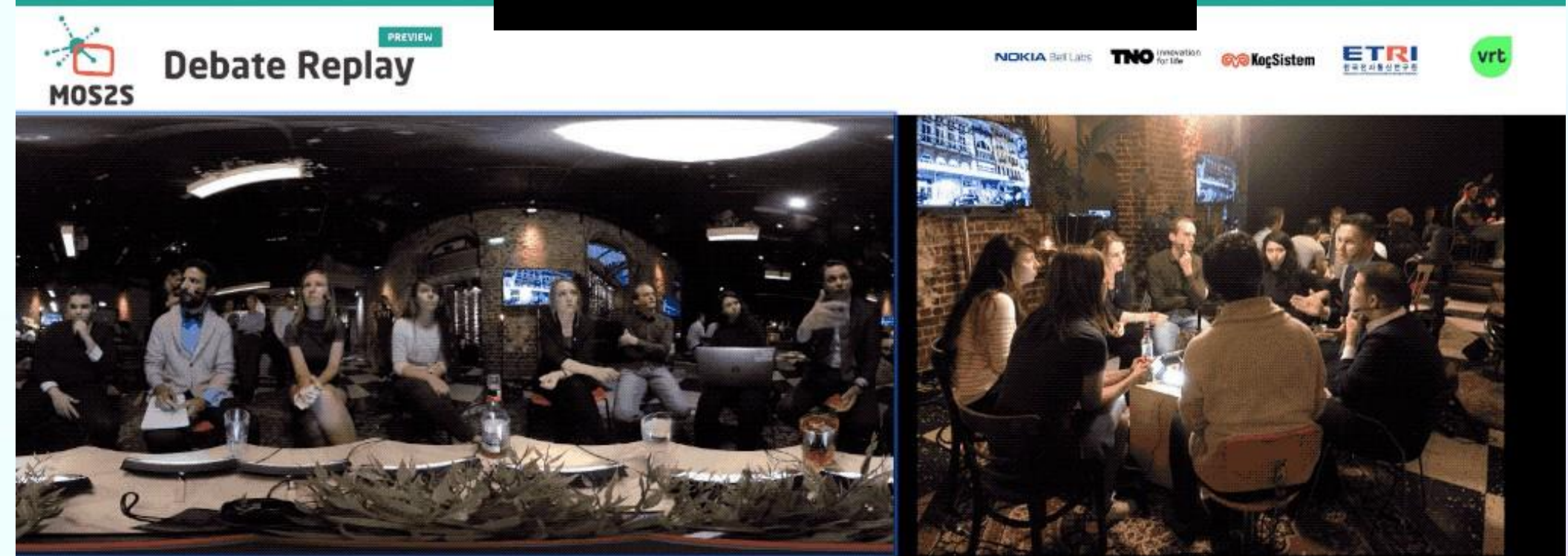
Time: 16:00
Enter the time of the moment. The system will try to find clips and social data around that time frame.

Title: Peter Sagan's crash
Enter a small title for this moment.

Breaking news alert

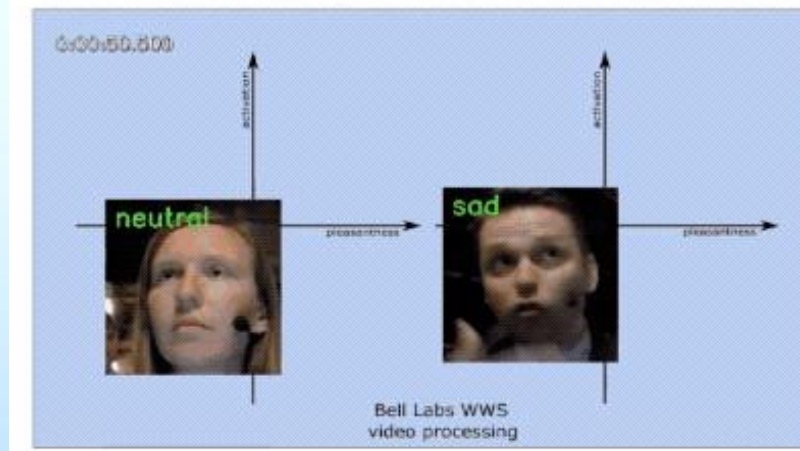
Context analysis

Face detection, sentiment analysis & topic analysis



Valence arousal analysis: Tine Soens & Tom Vandendriessche

Topic analysis: Tom Vandendriessche



Object recognition

Two important things are happening simultaneously

1

Digital Transformation

Media is currently undergoing a huge digital shift; more content is consumed via digital applications. This transforms the way of creating and publishing content. We consume media in a different way than we did with “classic” media, leading to a change in business models.



“ If you know that the influx of new subscribers is 80% digital, then I don't need to tell you where we are going in the next ten years

—Christian Van Thillo, Executive Chairman DPG Media



2

Generative AI

The rise and impact of ChatGPT changed the AI landscape

We need to experiment

Learn what can be created

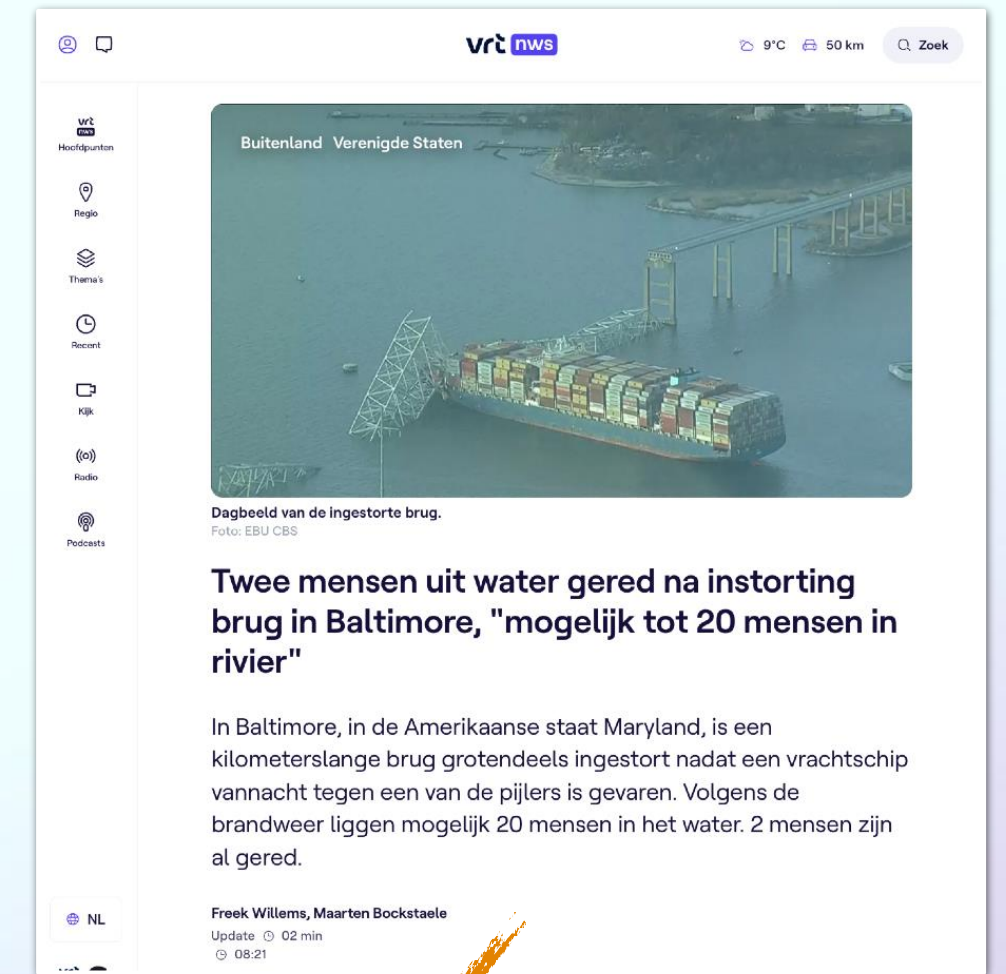
Learn how it can be used in existing story creation and publishing workflows

Learn what doesn't work

Learn how people feel about it

Learn about the obstacles and challenges

News Assistant



Internal experiment:

- top 3 visited news articles
- Summarised
- Adding short URL
- Adding call to action
- Experimenting with tone of voice



Visual Podcasts



How do you make podcasts accessible to Deaf people?

- Hand movements not always clear enough
- Face expressions are not yet OK
- It's not only an audio production anymore, but a video production (thus, requires different expertises in the production process)
- Camera movements are different for use with Deaf people (you need to clearly see the signs and expressions)

Automatic Subtitling



How to provide quality automatic subtitling for short form video and streaming video (not linear broadcasts)?

- Train a specific language model, for a small language (Flemish; which is a regional version of Dutch)
- Optimised for media services
- Training data: how to cope with IP & copyrights on source data?
- Continuous training: challenges in normalising source data across different providers



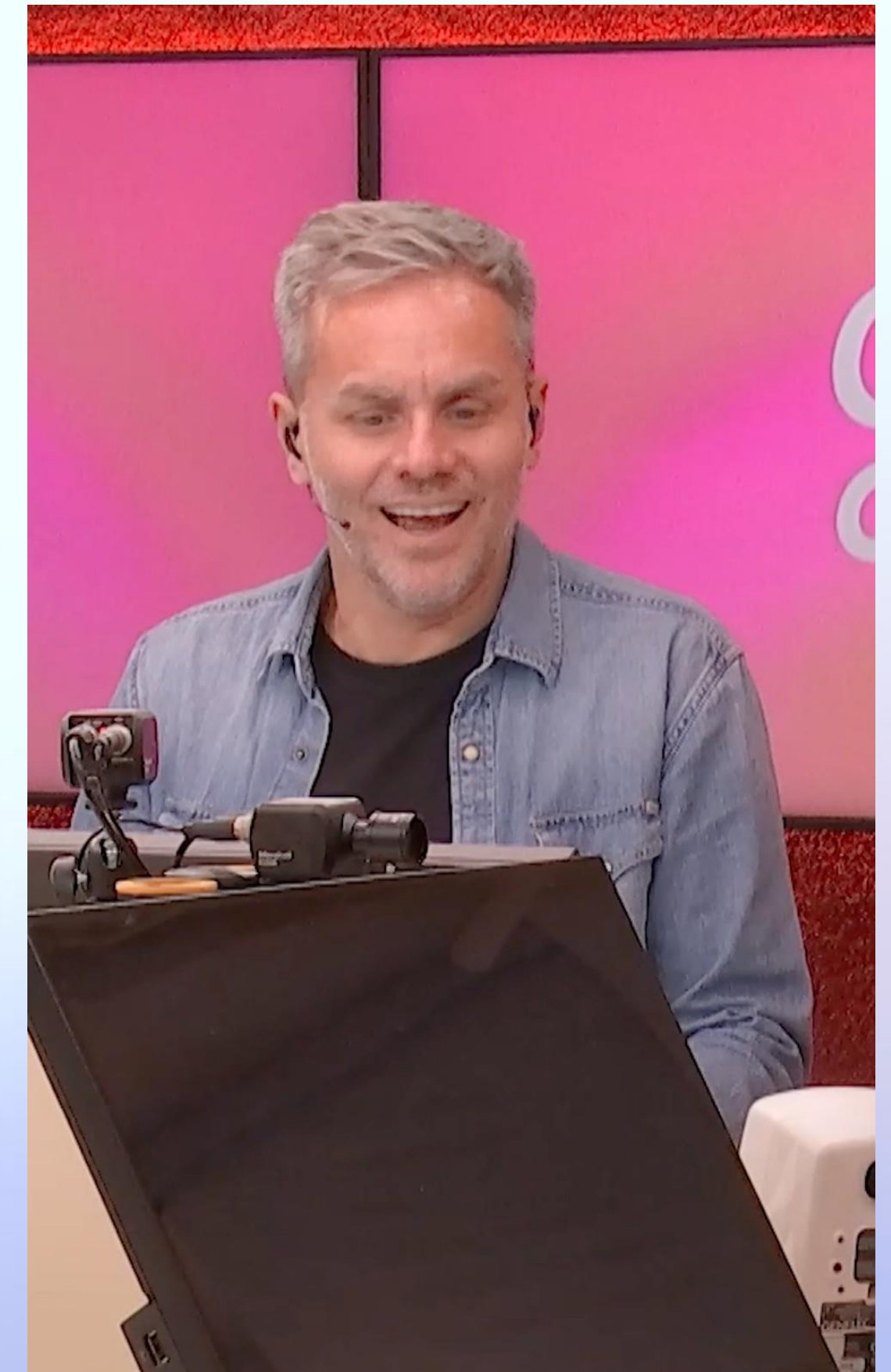
Virtual host



<https://radiowereld.nl/medianieuws/2023/12/vlaanderen-mnm-experimenteert-met-ai-deejay-in-de-avond-audio/>

How to make a personalised experience for on-demand media content, just like On-Air radio broadcasts?

- How to make a consistent tone of voice, and natural sounding host, when creating automatically generated scripts (with ex. ChatGPT)?
- Privacy & IP with voice cloning
- How to create a synthetic voice (new voice, not based on 1 person)



<https://www.vrt.be/vrtnews/nl/2023/11/09/ai-goeiemorgen-morgen/>

Challenges

Technical

Existing workflows
Hallucinations
Energy sustainability
System scalability

Regulatory

Copyright
IP
Privacy
Company governance

Societal

Change
Trust
Bias
Fake news