



Global News Explorer

Why live in a bubble constrained by language?

Technology allows us to explore the world, gain insight and understanding from new perspectives...

Russian politics news in Hindi
Spanish Culture news in German
German National news in English
Japanese Business news in Portuguese

No Problem!

Welcome to a world where the boundaries of language no longer stand in the way of deeper connections, wherever humanity makes its mark.



Why?

We live in a complicated and interconnected world, the flow of information is global, multi-lingual and diverse.

Our technology seeks to assist those engaged in gaining a deeper understanding of the context of geopolitical news and agendas.

It leverages the latest in machine learning, or 'AI' as it's popularly known, to take in sources in a wide range of languages, summarise and standardise the text, then read aloud a translation in a wide and growing number of languages.



How?

In the alpha demonstration you have seen, we offer the user the opportunity to select an announcement style, use one, two or three speakers, choose a language in which to read aloud, and a language from which to source news.

The user then selects a topic of their choice and submits their request.

The system delivers a live stream of audio mixed into a radio style presentation, to be consumed on the move, at work or at play.

A future update will allow the user can choose to have the original text and translated text read in tandem to aid learning with content that is fresh and relevant, studies show that learners of foreign languages respond better to content that appeals.



Potential

While the present alpha demonstration is designed to provide live content to be streamed on a platform such as Twitch or YouTube we also see the potential to exploit the technology to create product across multiple platforms:

Subscription model, subscribers receive a daily or weekly audio file delivered by email or web.

Freemium model, subscribers can listen to X minutes of their stream for free, beyond that a fee is due.

Pay as you go, users pay a download fee to receive the audio file on a per file basis.

Advertising supported, by inserting advertisements into the stream.

App model, an app is produced that can stream the audio from a central distribution point, users pay in app.



Barriers

As a team our language skills are limited, we require professional assistance in evaluating;

The quality of the RSS source.

The quality of the translation.

The quality of the machine voice, pronunciation, etc.

RSS feeds can go offline or stale, at present we are using a manually curated list, in future versions we would extend the application to use a central repository of qualifying feeds that can be monitored both by human, machine, and user rankings on quality and accuracy.

Finally, voice rendering can at first seem expensive...



Costs

The system demonstrated runs on £300 of commodity hardware. The primary cost is voice rendering.

Exact calculations are challenging due to the varying length of articles, our back of the envelope calculations give us;

12000 characters per hour @ 0.18 / 1000 = \$2 / hour

If we math correctly then a live, 24/7 stream would cost \$1488 a month, while for an individual this would be a barrier to adoption to most, as the cost of a 24/7 radio stream it's very small and well within the scope of advertising supported content production costs.

Many of the monetization opportunities discussed previously would make multiple sales of the same rendered stream, reducing costs and increasing margins significantly.



The Stack

WSL

Python

Elevenlabs

Flask

Feedparser

GPT4All

Argos Translate



Conclusion

While in many respects the concept and execution are simple, it leverages incredibly powerful tools to deliver an accurate and novel product.

Our initial focus has been news, we limited the scope of the project to meet the time constraints of the hackathon. In the future we can see extending this across more popularist domains, cars, entertainment, music, health, technology and many other fields are worth exploring to find markets previously untapped.

We believe that with the right resources, support and investment this platform could develop into a valuable product for users from a number of markets. Thank you for your time.