



# **Publisher Background**

Consumer behaviour is constantly changing. As technology continues to evolve, understanding what consumers want has become more critical than ever. New Zealanders depend on local media companies for perspective on what is going on in the world and what's coming next. And for New Zealand Media and Entertainment (NZME), it is all about keeping Kiwis in the know about what matters most to them.

Combining print, digital, radio and video platforms, NZME caters to an audience of 3.4 million. Its network of over 50 media brands includes well-known news outlets such as The New Zealand Herald and Newstalk ZB.

# Partnership Overview

The shift in news from a one-size-fits-all model to a personalised model is happening fast. NZME wanted to give their readers a more customized experience and achieve greater control over the content that was being recommended to their users on the NZ Herald website. The website earlier depended on an automated content recommendation engine (CRE) for audience engagement and recirculation. But NZME had limited control over the CRE and were keen to increase the relevance of their content recommendations to better target their audience.

As part of the Google News Initiative (GNI) APAC Data Lab Program, <u>Datalicious</u> developed a bespoke CRE algorithm that recommends 'the next best article' based on content similarity and a user's historical behaviour. It gave NZME more visibility and control over content recommendations and created a better user experience for readers.

#### **AUTHORS:**

- Chris Yong Lead Analytics Consultant, Datalicious
- Sheena Bhalla Strategy & Program Lead, Google News Initiative, APAC
- Mathew Pretel
   Partner Technical Lead, gPS

# NZME boosts engagement with a bespoke content recommendation engine

NZME wanted a bespoke solution to give them visibility and control over content recommendations. They knew that suggesting personalised and pertinent content would create a better user experience for their readers, while spending more time on-site and nurturing readership loyalty in addition to increasing revenue.

# The Project

With the Google News Initiative APAC Data Labs team, Datalicious created a CRE and API system for NZME that was built on the Google Cloud Platform. It uses machine learning, artificial intelligence and Natural Language Processing (NLP) to recirculate and recommend relevant articles to NZME users. Users read more content and spend more time on the website, nurturing readership loyalty.

The algorithms are programmed to recommend articles based on previously consumed content, as well as topics relevant to the reader's location. They are also classified into respective categories like sports, entertainment or politics.



Sport recommendations shown on the NZ Herald website, powered by the Datalicious CRE.

When an article is specific to a given region, the CRE can classify it according to the part of New Zealand it refers to. Now, NZME readers get content recommendations that are relevant to the area they live in, no matter what NZ Herald article they are reading at the time.

Google Analytics (GA) was used to develop an understanding of the topics that engage individual NZME readers. Datalicious then extracted this behavioural data from GA and scored articles based on reading signals and behaviour.

A custom News Recommendation Engine using two modelling systems for content-based and user-based recommendations:

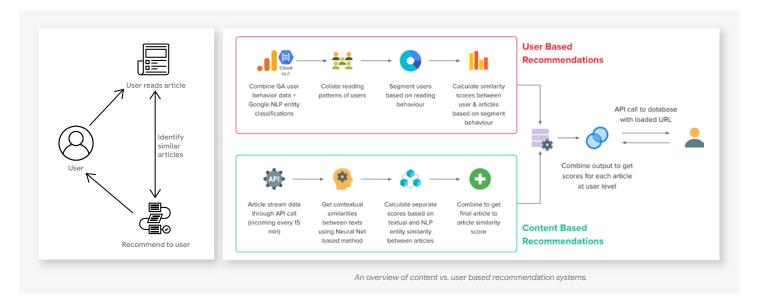
Content recommendation system
Based on article and topic similarity

2

User-based recommendation system Based on user behaviour and reading history

G.CO/NEWSINITIATIVE November 2020

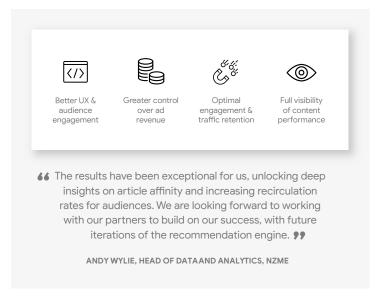
#### Continued | 2



### The Results

The project has seen significant results and has had a positive impact on NZME's performance. It has created a better user experience and audience engagement as readers receive relevant and more personalised content recommendations. For NZME, it has meant greater control over ad revenue from paid placements and optimal engagement and traffic retention on NZME branded websites.

The new CRE solution also allows full visibility of content performance across NZME platforms, with easy access to real-time and historical analysis.



#### HOW THE NEW CRE MADE A DIFFERENCE

23%

The new CRE built on the Google Cloud Platform contributed to an impressive 23% increase in website visitors for a targeted audience

3x

Improvement in recommending content relevant to the reader's location

# 500 ms

Time taken by the new CRE to deliver a recommendation to the reader

The NZ Herald is focused on keeping Kiwis in the know. Delivering the "next best" article recommendations with our purpose-built engine has resulted in a more relevant and engaging experience for our audiences than the previous off-the-shelf product. It was a huge collective effort between the Google News Initiative team, Datalicious and NZME to create the engine which sits at the frontier of technology, by utilising AI, machine learning and natural language processing tools.

ANDY WYLIE, HEAD OF DATA AND ANALYTICS, NZME

G.CO/NEWSINITIATIVE November 2020