

## Situation

With the increasing demand from consumers for more relevant content—be it through social media, search engines or other websites—any site providing news feeds should develop a strategy for personalization. The algorithms behind the delivery of news content need to be trained to show users more of the content they want, and less of the content they don't want. This requires collecting data from users that represent the profile of the site's actual users—through their individual accounts—and feeding that data into the machine learning training model.

In this case, our client decided to conduct an initial pilot that required a large-scale ramp in which participants would provide very personalized input, with strict data flow requirements and a complex quality system. The company already had a similar project underway with another vendor, but the setup didn't allow for geographic expansion, nor did it provide the demographic diversity that was required to adequately improve the company's algorithm so that it accurately represented its user base.

## Solution

The pilot started with 500 participants contracted for a period of 4 weeks. Appen developed a strong, scalable onboarding module with visual and interactive components, and in a matter of weeks, the client was receiving the data needed to improve its algorithm 24 hours a day, 7 days a week. Participants rated each news item for a variety of elements, including the importance and impact of the content. This process guided users in determining an overall rating score for each item, which allowed the training model to fine-tune the algorithm to provide a more personalized experience for all its users.

While the client initially believed this would be a short-term pilot to fill in gaps, the flexibility, scalability, speed, and high quality of the data Appen



## About Appen

Appen is a global leader in the development of high-quality, human annotated datasets for machine learning and artificial intelligence. With over 20 years of experience, expertise in more than 180 languages, and access to a crowd of over 400,000 worldwide, Appen partners with global companies to enhance their machine learning-based products.

provided, together with a strong partnership formed in those first weeks, allowed this project to go from a short pilot to an ongoing program. Since then, the pilot has expanded to new markets and additional experiments have been implemented successfully.

## Benefits

The geographic and demographic diversity of the rater pool proved immensely valuable to the training model since it mapped closely to the client's existing users, allowing the client to deliver much more personalized content than it had in the past. Additionally, with Appen's on-demand crowd model, the provider continues to receive a steady flow of data, even on holidays and weekends, allowing it to refine its algorithm much more quickly and consistently than it could in the past. Now that the client has a proven program for improving the personalization of its news feed, it can apply a similar process to addressing other areas such as reducing news SPAM for its users.

## Key Success Factors

The client had strict quality thresholds that needed to be implemented and maintained throughout this project. The project also involved a subjective and complex task, and required minimal human QA. As a result, close collaboration was critical to the project's success. The Appen team partnered with the client to develop task guidelines and quality management plans, and quickly ramped the number of participants needed to meet daily and weekly data demands.

Frequent changes to the requirements for this project meant that the Appen project management team needed to quickly update complex processes. The team's agility and effectiveness in responding to these changes were key success factors for this project.

## Appen at a Glance



Expertise in over **180 languages and dialects**



Access to a curated crowd of over **400,000**



**20+ years** of experience providing high quality, human annotated data to support machine learning for speech, search, eCommerce and more