

How Allente Built a Recommendation Engine to Deliver Personalized Streaming Content



Viewers are increasingly moving away from traditional TV to specialized media providers streaming the exact content they want. Allente offers streaming services, IPTV solutions, and fiber broadband to more than one million customers in Sweden, Norway, Denmark, and Finland.

While streaming media providers make huge amounts of content choices available to their customers, searching through the library for content they might like to watch can lead to decision fatigue and hamper the viewer experience. In the age of multiple streaming services, this can mean losing a customer to a competitor. To combat that and provide its viewers a better experience, Allente needed a way to deliver customized recommendations to help its viewers reduce the time to find the videos they would be interested in watching.

Identifying Users' Viewing Preferences with KNIME

Allente knew that to achieve this as fast as possible, they would need a data science platform that offered simplicity of setup and use while delivering the analytic depth to explore data, build models, and deploy them within the same platform.

Company

Allente

Allente is a Nordic TV distributor that offers TV solutions via satellite TV and IPTV, to over one million customers in Denmark, Finland, Norway and Sweden.

Marketing Analytics

Streaming Analytics

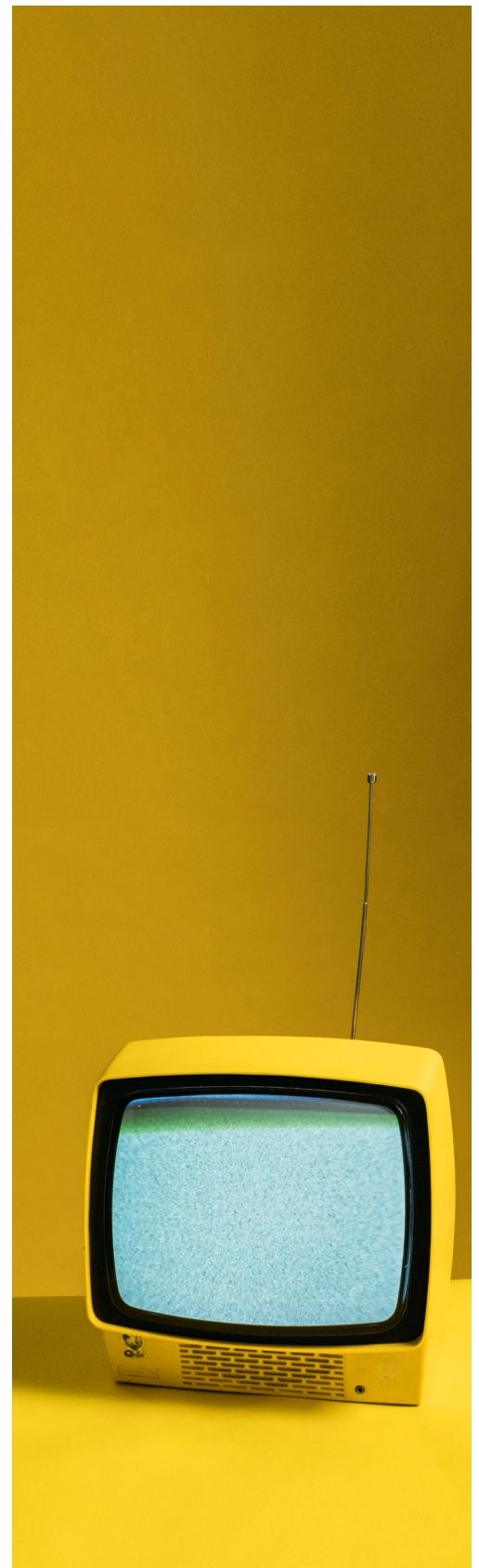
Recommendation Engine

As an end-to-end data science platform, KNIME perfectly met these requirements. It was an easy decision for **Allente** to embrace KNIME as its central data science platform to deliver highly relevant, machine learning-powered recommendations to its viewers.

Together with **Redfield, a KNIME partner**, Allente set out to build a recommendation engine using KNIME. The first step in building the recommendation engine was to connect to Allente's main data sources in the cloud and on-premises and make sense of the troves of data they held such as event data, video-on-demand catalog, and sample tables from its legacy Oracle database. With KNIME, they built an automated data pipeline that let them connect to these varied data sources, get the data into the right shape, and categorize it into key customer segments easily in one intuitive, visual workflow environment.

Once the key customer segments were defined, Redfield and Allente built and deployed the content recommendation model in the same visual environment offered by KNIME. This involved having the flexibility to code customer segments using **Python**, optimizing and refining them to improve the accuracy of recommendations, and finally, testing and production, all without switching tools.

The model can predict content that viewers might find engaging, even for new users who do not have a viewing history. Allente is now able to deliver extremely relevant recommendations with the added upshot of improving content distribution efficiency. With KNIME, the team at Allente can easily tune and adapt the model when new consumption data surfaces, ensuring that recommendations remain relevant in the future as well. What's more, Allente can anticipate customer behavior and predict demand such as which shows might be popular with which customer segments a couple of years from now.



Predictive Modeling in KNIME to Reduce Churn and Improve Customer Lifetime Value

KNIME's low-code capabilities have also made machine learning accessible to non-technical teams at Allente. For instance, the customer service team at Allente uses KNIME to predict the likelihood of customers churning and lowers it with targeted retention measures using behavioral insights. They also carry out customer lifetime value analysis to understand return on investment and calculate expected revenue. Additionally, they are able to improve the conversion rate of their upselling activities with personalized offers.

KNIME has accelerated the adoption of a data-driven culture and data-driven decisions at Allente. One of the biggest advantages of using KNIME has been the speed and flexibility of both ETL and spinning up models. In the words of an executive at Allente, "For us it has been key to have one tool that could do a little bit of everything. Easy to use - yet advanced and powerful. Having one hub where we can do both data-crunching, machine learning models and automated pipelines in a simple manner has transformed our life."

