STREAMING PLATFORM

Online Video Streaming (OVS)

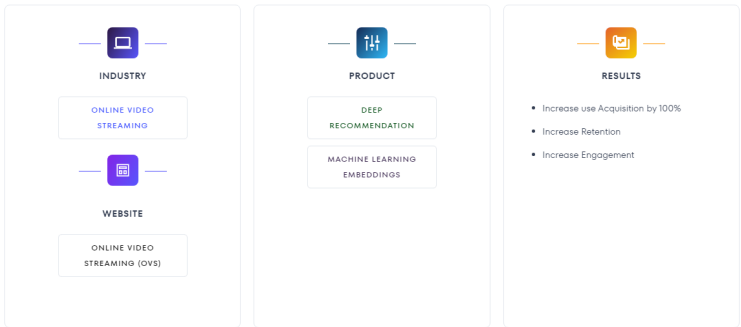| INDUSTRY	PRODUCT	RESULTS
ONLINE VIDEO STREAMING	DEEP RECOMMENDATION	• Increase use Acquisition by 100%
	MACHINE LEARNING EMBEDDINGS	• Increase Retention
WEBSITE		• Increase Engagement
ONLINE VIDEO STREAMING (OVS)		

Today's consumer is drowning in a sea of options when it comes to streaming movies and shows online. Research shows the average user spends 21 minutes searching for something to watch. When Crossing Minds began working with OVS, our goal was to use our proprietary recommendation engines to provide higher quality recommendations to their users with the target of decreasing both the time users spent searching and OVS' churn rate.

Goal

Improve quality of video recommendations in order to increase time and engagement on site, while decreasing churn.

Challenges

Today's consumer is drowning in a sea of options when it comes to streaming movies and shows online. Research shows the average user spends 21 minutes searching for something to watch. When we began working with OVS, our goal was to use Hai's software and proprietary methodology to provide higher quality recommendations to their users with the target of decreasing both the time users spent searching and OVS' churn rate.

For that, we created a simple plugin that would display 2 lines of recommendation, one coming from the usual OVS recommendation engines and one providing recommendations coming from Crossing Minds proprietary algorithms. The data leveraged by our team in order to start providing consisted on the online available history of the users testing the plugin.

The test was narrow in terms of the data set given to our algorithm. By only being able to review the watch history of 12 OVS employees, our goal was to prove that even with such a limited data set, Hai would be able to provide higher quality recommendations than the current algorithm used by OVS. Our algorithm not only included the actual video's chosen by employee's, but also reviewed watch time, drop rate and engagement.

Work Process

All the rules to convert implicit feedback to explicit feedback were done independently (no collaboration with OVS). Several assumptions were made internally to define a scale from 0 to 10 that determines if a user liked a show or not (based only on watch history data – drop rate, time spent watching, etc.).

Plugin Disadvantages as Compared to OVS Recommendations

1. The algorithm deployed within this plugin has only been trained on Hai user data (20k users and 2mm ratings across six different entertainment domains: movies, tv shows, music, books, video games and restaurants). OVS recommendations have been trained on all of the user base of OVS subscribers and fine-tuned with specific business rules.
2. The data used to predict Crossing Minds' recommendations contained only one year of watch history provided by OVS on June 19th. Crossing Minds has not received any data after June 19th.
3. Crossing Minds only received a catalog of 1,500 titles to recommend from. Consequently, TV shows might not be recommended because they were not on the list provided.
4. Crossing Minds doesn't know all the profiles associated with the OVS Subscription ID and therefore, don't know "who watched what". If multiple profiles share the same subscription, the plugin is not able to differentiate between people.

Results

After running the data, the recommendations generated from Hai were displayed alongside the OVS' current algorithms' recommendations. The testers job was to select which line of recommendations they preferred. We were thrilled to see that 100% of the testers chose the recommendations generated by Hai, despite the algorithm not being trained on the OVS's data. This clearly demonstrated the advanced capability of the cross-domain, deep-learning algorithm Hai possesses, and the superior results it provides.

Why Crossing Minds

• Recommendations are more accurate and lead to higher conversion.
• Integrating group-recommendations into OVS's platform with the purpose of differentiating them from their competition while simultaneously increasing their organic growth and revenue.
• All user and item data are fully de-identified and secure.