Electrolux

CASE STUDY

Propensity Modeling
Electrolux N.A.

Business Need

Marketing managers are often interested in and challenged with measuring the effectiveness of their website on current and prospective customers. Does the current version of their website provide a platform necessary for customers to browse all the products offered, compare information about the different products to then ultimately lead a customer to make a purchase? From this, can we capture the behaviors that customers are doing on the website that indicate a likelihood or propensity to make a purchase. In other words, can we predict whether or not a customer will make a purchase based on their web browsing history?

Customer Challenges

- Retrieving the Google Analytics data from the Google API
- Making sense of and preparing the data in a meaningful way to build propensity models
- Building a robust, sound machine learning model that is both accurate and explainable

Solution Provided

- Automated routines to extract data from the Google Analytics API
- Store data in SQL Server using Azure
- Prepared data and created new variables (lags, transformations, combinations) based on the data to better capture customer behavior and intent
- Built sophisticated machine learning models to show the impact web browsing has on product purchases
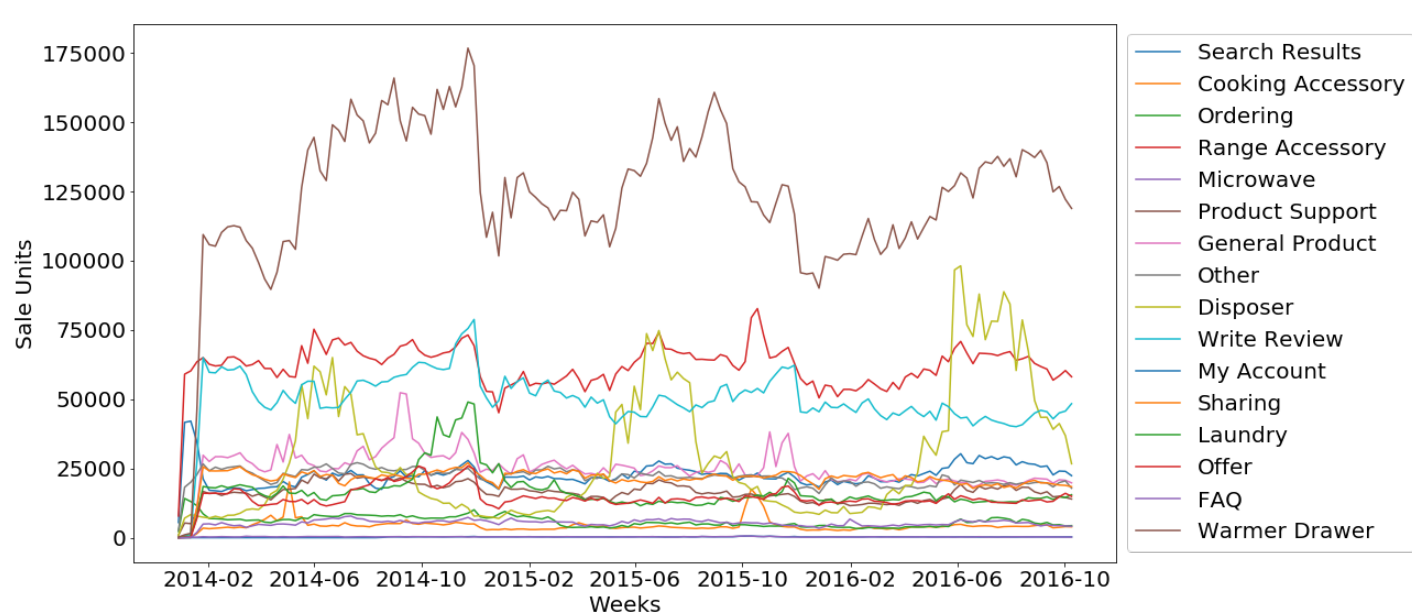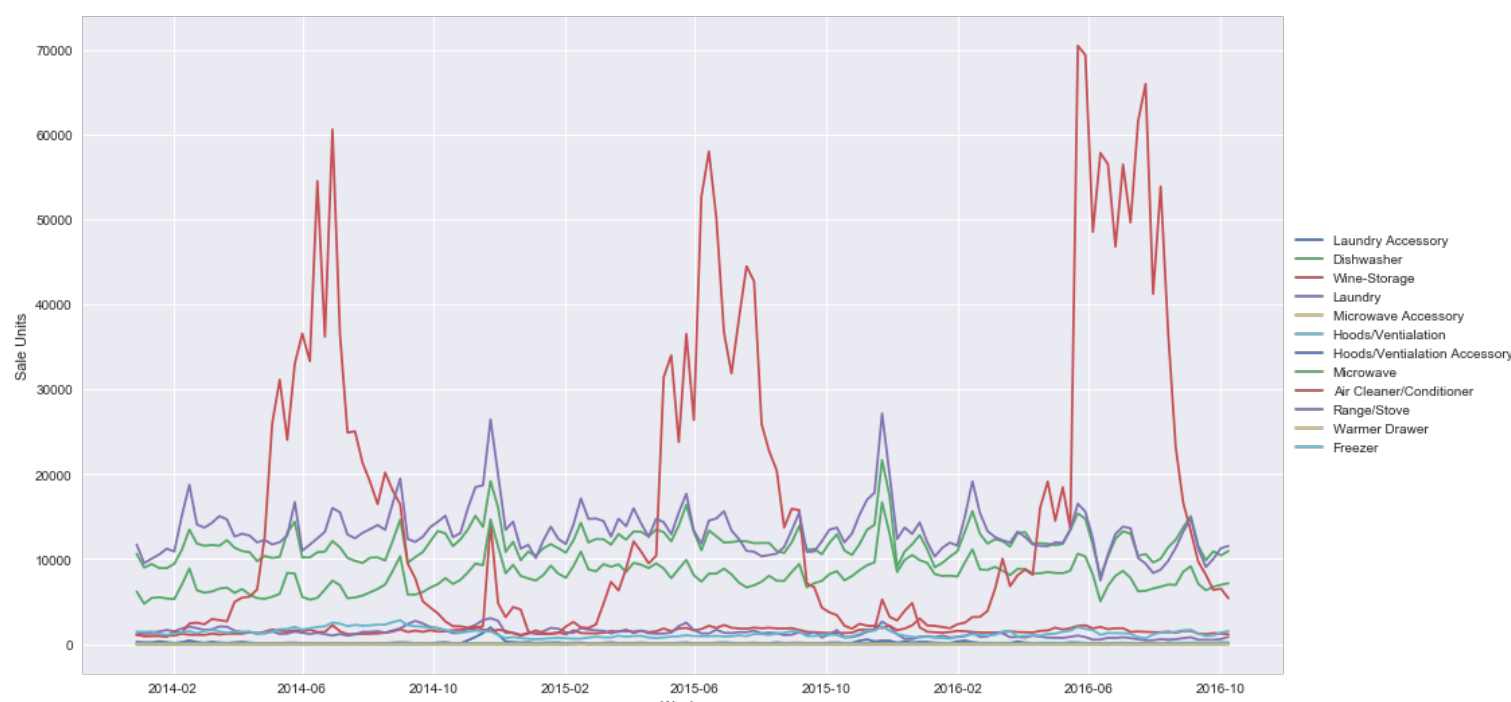

"Extraction and preparation of Site Visits from Google Analytics"

Impact of Solution

- The models based on the customers website browsing content and history was able to predict customers intent for making purchases with good accuracy
- The models showed indicators of when certain products would spike or dip in sales based on website activity

"Extraction and preparation of POS Sales"

Technology Used

Microsoft Azure · python · mixpanel · R