
IXIS Digital Data Science Assessment

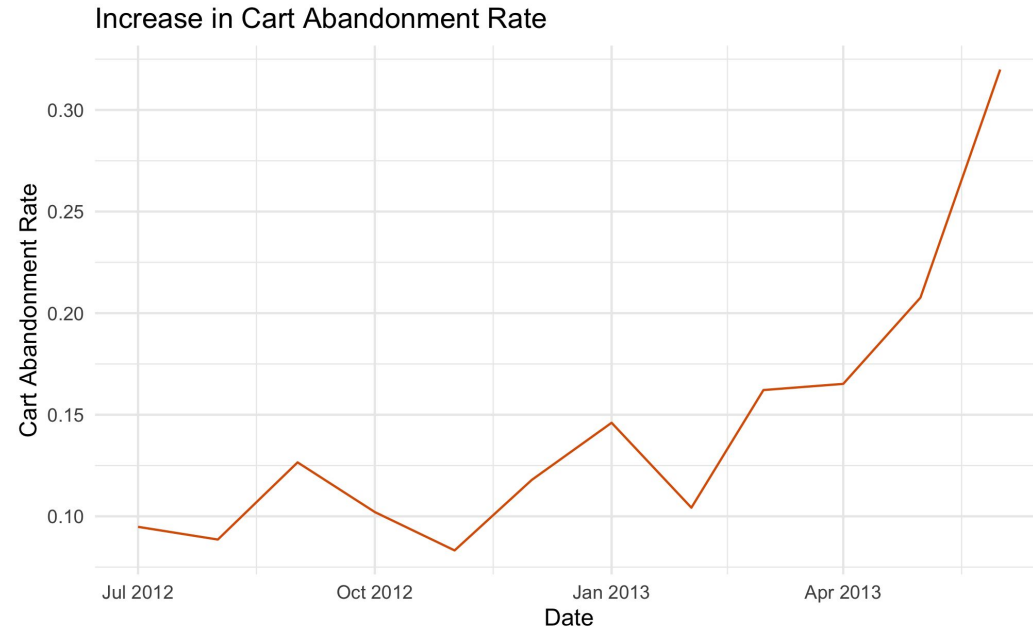
— Connor Putnam —

Goals

- The overall goal of the project is to measure various KPIs in order to help an online retailer measure and analyze their website's performance.
- The slide deck will be split into two stages:
 - Identify points in the customer journey which result in an unfinished purchase.
 - Potential explanations for the customers commitment changes.

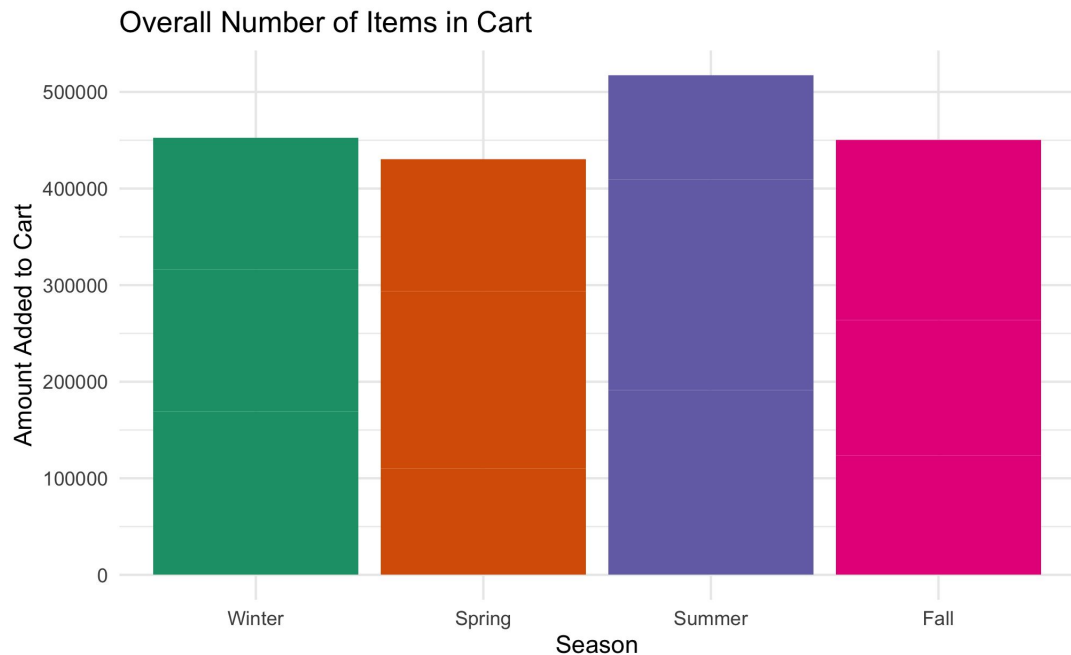
A Potential Cause for Concern

- In addition to the metrics indicated by the assessment, the cart abandonment rate was calculated on a monthly basis.
- From this it can be seen that in there was a sharp uptick in cart abandonment rate starting in April 2013.



Potential Variable: A Seasonality Component

- Results indicate that there is a potential seasonality component to the data:
 - Less items are added to a customer's cart overall in the Springtime.
 - More items are added to the a customer's cart during the summer months.



Using standard meteorological seasonal cutoffs.

Potential Explanation - Device Type

- Desktop user sessions and transactions per month are fairly proportional to one-another.
- This pattern is **not repeated for mobile users**; their amount of transactions is lower than the number of sessions they engage in.

There are two potential explanations for the uptick in cart abandonment rates in April 2013:

1. As engagement and transactions largely increase in April, so do cart abandonment rates.
2. There is an **issue at the point of sale for mobile users** resulting in much higher rates of cart abandonment, despite a higher number of sessions.

