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Sample App Business Analysis

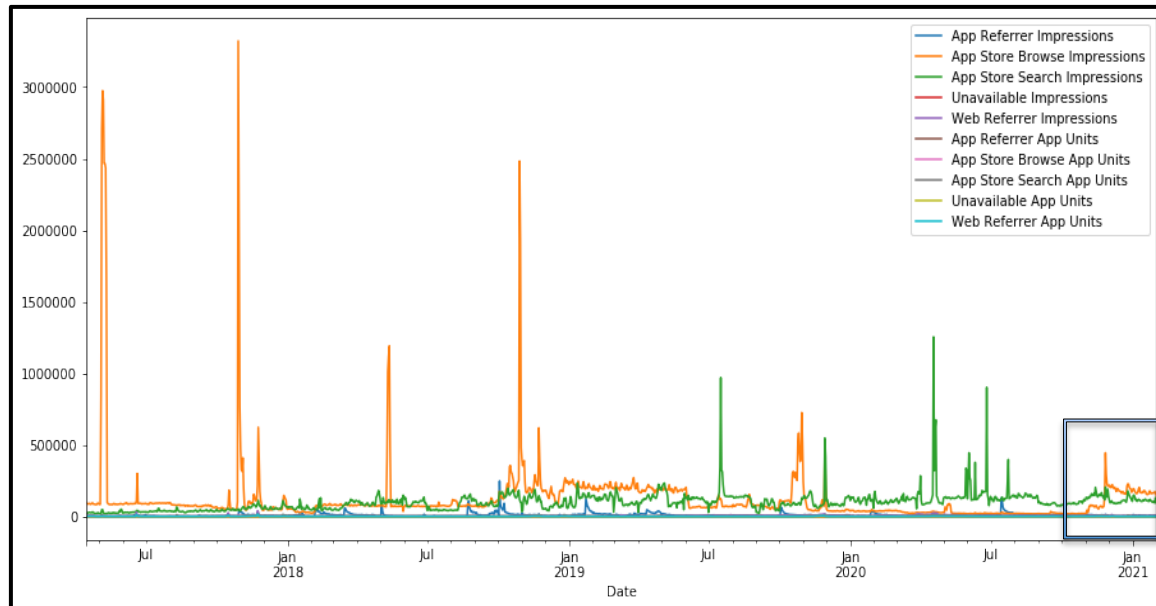
Sample App can be found on the iOS App Store. Sample App made a change to a marketing campaign that impacted their App Store Search channel on 10/28/20. The developer of Sample App would like to know the following: What is the impact of the 10/28/20 store change?

Please reference this [project](#) for more in depth analysis.

I needed to better understand the data, and used the OSEMN process. App Store Connect keeps complete records so the data was clean and basically ready for analysis.

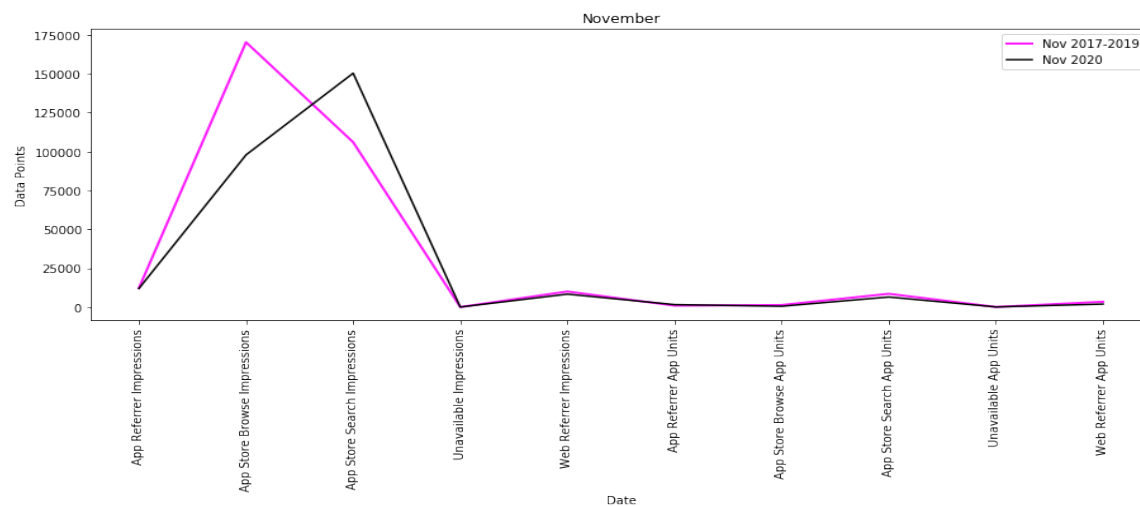
The changes made to the app should impact search results. “**Impressions** [rather than app units] **are a better measure of discoverability for Search**, since most users will download directly from Search without tapping to view your Product Page.” [Source](#). An impression is the number of times your app was viewed in the App Store for more than one second. An app unit is each first-time installer on a device with iOS 8 or tvOS 9, or later. Each impression comes from a different source such as another app, browsing the App Store, Searching the App Store, unknown sources, and web referrals.

The data ranges from 4/17/2017 – 2/1/2021 and the change on the app store took place on 10/28/2020. There are only three months of data that are available to use after the change, therefore, there is not enough data to show a real quantifiable change. There are some trends for the App Store Search Impressions that show a steady rise in impressions for the prior four years, but a stagnant App Store Search App Unit rate and a massive drop in App Store Browse Impressions.



*Entire data set graphed. The box encompasses the months after the change was made. No real fluctuation in data.

The three months that were affected by the new marketing campaign are November 2020, December 2020, and January 2021. A comparison of these months with each other for seasonality from before and after the change should allow us to see if there is a difference that the yearly graph could not pick up because it is more precise. By using the median I can account for outliers more easily, and get a clearer picture by graphing the results.



*The pink line shows November 2017-2019 concatenated and averaged. The Black line is for 2020, also averaged. There is a clear shift from App Store Browse Impressions towards App Store Search Impressions.

The data for comparing the three months from before and after the change is shown below.

(Nov 2020 mean) – (Nov 2017/2018/2019 combined mean)

App Referrer Impressions:	-312.94
App Store Browse Impressions:	-72,457.06
App Store Search Impressions:	44,362.01
Unavailable Impressions:	1.23
Web Referrer Impressions:	-1,689.71
App Referrer App Units:	642.12
App Store Browse App Units:	-802.43
App Store Search App Units:	-2,085.44
Unavailable App Units:	13.74
Web Referrer App Units:	-1,482.86

(Dec 2020 Mean) – (Dec 2017/2018/2019 combined mean)

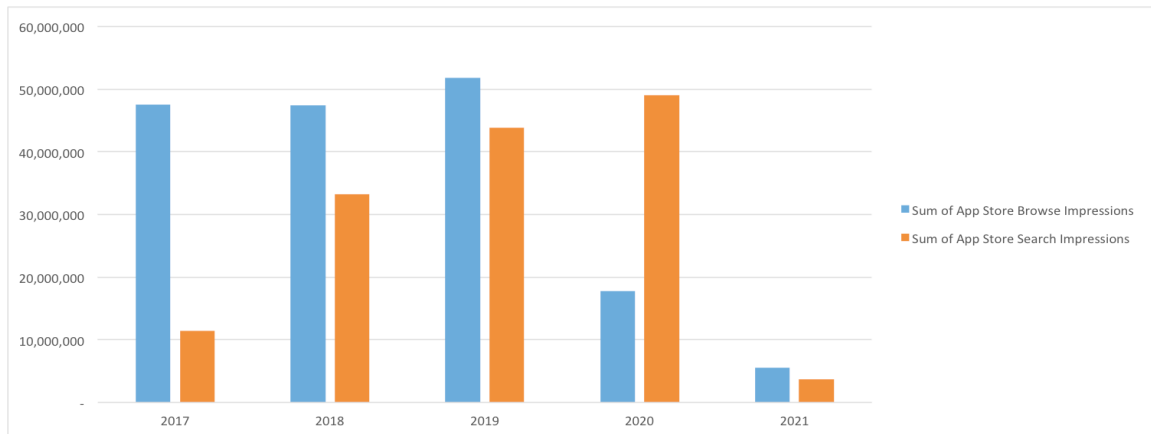
App Referrer Impressions	-1,922.94
App Store Browse Impressions	98,615.37
App Store Search Impressions	33,462.32
Unavailable Impressions	0.58
Web Referrer Impressions	-622.41
App Referrer App Units	-66.48
App Store Browse App Units	-302.18
App Store Search App Units	-1,211.30
Unavailable App Units	24.94
Web Referrer App Units	-620.37

(Jan 2021 mean) – (Jan 2018/2019/2020 combined mean)

App Referrer Impressions	-7,193.84
App Store Browse Impressions	53,649.57
App Store Search Impressions	1,302.85
Unavailable Impressions	-0.11
Web Referrer Impressions	594.87
App Referrer App Units	-205.11
App Store Browse App Units	-65.21
App Store Search App Units	-1,206.76
Unavailable App Units	-89.49
Web Referrer App Units	-554.62

Comparing these averages is useful to see gains and losses. There is an **increase** in App Store Search Impressions for each month, which is a good sign that the marketing campaign is working.

There is a clear trend with regards to App Store Search Impressions.

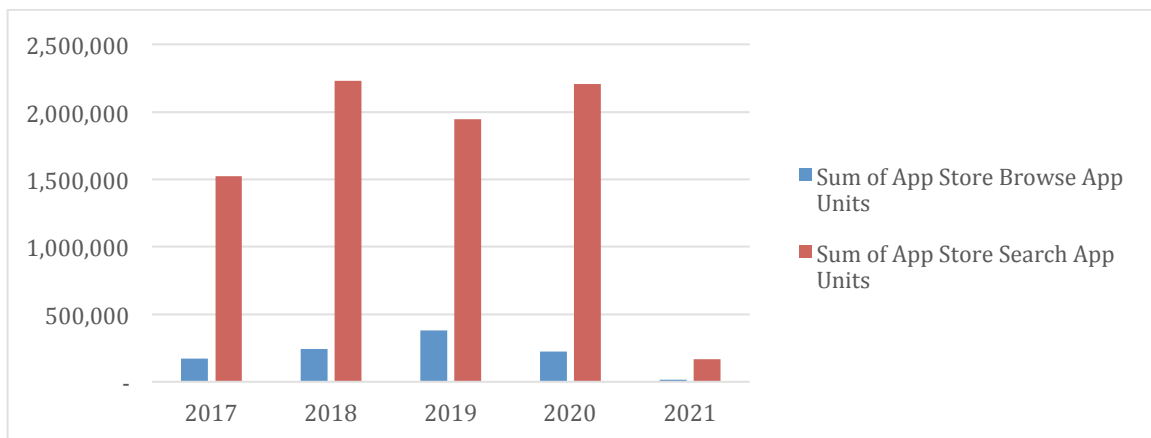


*Blue = Sum of App Store Browse Impressions

Orange = Sum of App Store Search Impressions

**2017 and 2021 are partial years due to limitations in the data set

Search impressions are consistently trending upwards, while Browse Impressions, which seemed stable, took a dive in 2020. As seen in the graph below, there is no correlation between rising Impressions and App Unit rates.



App Store Search Impressions are trending up consistently, which suggests to me that the developers were right to strengthen their marketing campaign for where the bulk of their downloads are coming from. It seems that whatever the change was on the App Store is working but because App Store Impressions have been trending up consistently there is no evidence in the data presented that shows that the change made on 10/28/2020 to the App Store is the cause.