

SOURCE Trends 2019-2020

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**Monthly Orders**

Plotting Monthly Order sums makes it easier to see the trends changing over time:

* Dips in September 2019 and May 2020 for Direct, YouTube, Facebook, and Snapchat.
* Chart

  Description automatically generatedDips in Feb 2019 and Feb 2020 are pronounced for Organic, Direct and Google Sources.

**Monthly Sessions**

* A screenshot of a computer

  Description automatically generated with medium confidenceWhile the daily graph looked consistently straight, we can see clear dips in session activity for February 2019 and February 2020 that were not discernable.

**What about Performance?**

Now that we have seen the counts over time, the next question is:

**What percentage of Sessions per Source resulted in an Order?**

**Monthly Conversion Rate**

Plotting the Monthly Conversion Rates we see more interesting findings:

* From January 2019 to April 2020, even though Snapchat had the lowest counts, they were performing pretty well in terms of percentage conversion.
* From April 2020 to December 2020 Snapchat is still converting to orders at a higher rate than YouTube, though it looks like YouTube may overtake Snapchat if the trend continues.
* YouTube, Facebook and Direct have been consistenly falling in their conversion rates with inflection points at September 2019 and May 2020.
* Each has been similarly affected by what seems like a larger event. With additional data and resources, causal inference algorithms could be used to help determine what the event was, and predictive models could be used to calculate the future impact of such events.
* Both Google and Organic sources have maintained consistent conversion rates, with no seasonality and no impact from the events that impacted the other sources.

Chart, line chart

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**Final Notes**

**Immediate Next Steps:**

* Webpage Negative Session Counts
  + Engage Dev + Engineering Team ASAP
* February Seasonality
  + Investigate Past & Anticipate Future
* September 2019 & May 2020
  + Determine Inference & Impact

**Which Sources to prioritize:**

**Google & Organic**

* Most Orders
  + Google & Organic
* Most Sessions
  + Google & Organic
* Most Consistent
  + Google & Organic
* Higest Conversion
  + Google & Direct

**Which Sources to de-prioritize:**

**Snapchat & Youtube**

* Least Orders
  + Snapchat & Youtube
* Least Sessions
  + Snapchat
* Least Consistent
  + Snapchat
* Lowest Conversion
  + YouTube

**Future Analysis Potential:**

* Sources each compared by page for deeper drilldown
* Aggregation Calculations designed into functions for accuracy
* Engaging Finance Team to incorporate financial ROI metrics
* Colloborate with Product Managers to better understand customer insights
* Brainstorm with Dev & Engineering for better data structure & integrity

\* For full data review, here is an app detailing the Import, Exploration, Cleaning & Visualization:

<https://app.hex.tech/d6d449a9-e1f9-4ea9-9999-3fc5c85486b5/app/5a4e0dc7-3d2a-4a80-a3fc-c4624949b28c/latest>

**Preview:**

Table

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