

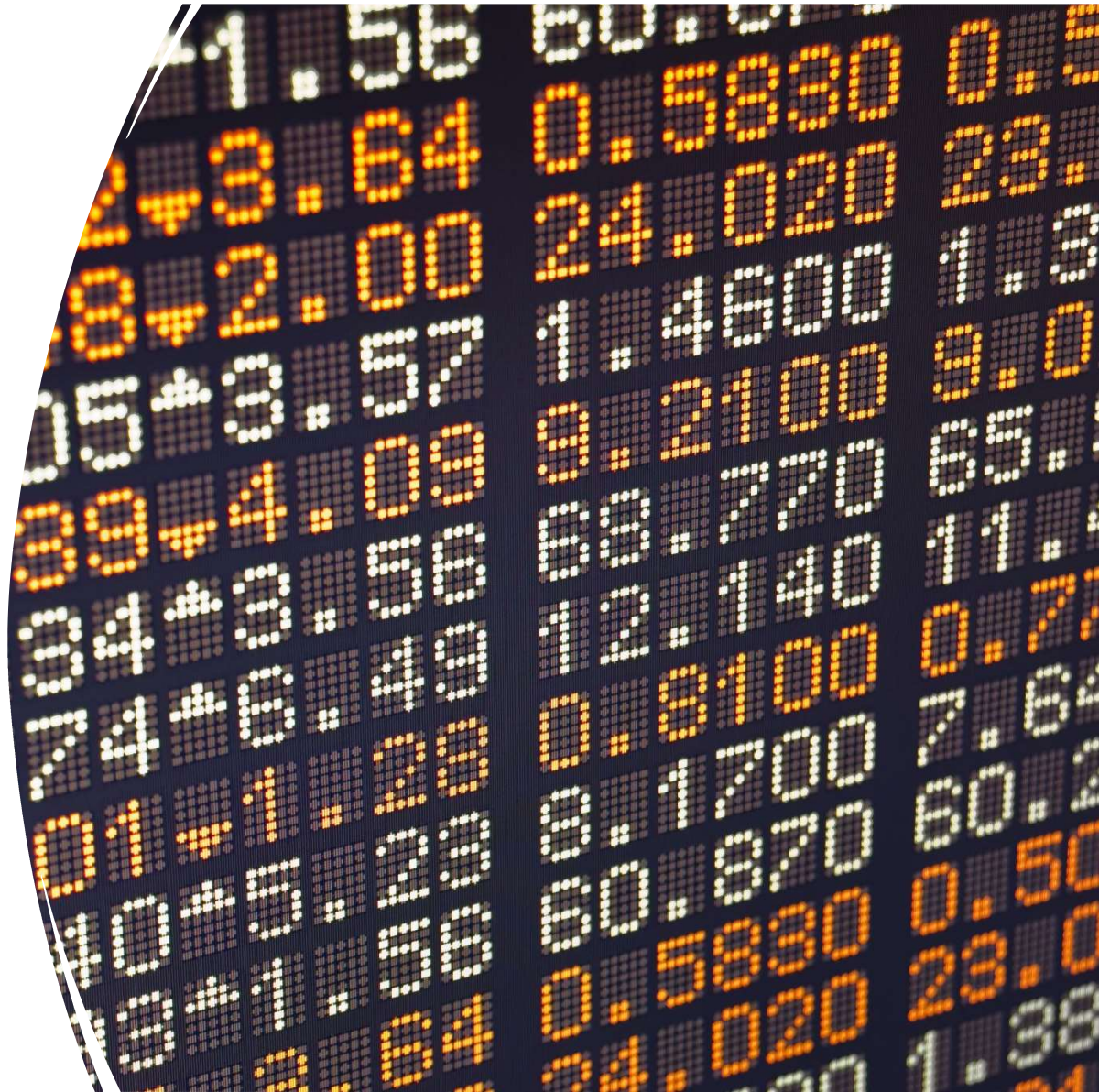


Analysis of Conversion Rates From Search Data

Lily.AI Technical Assessment

Summary of Findings

- Search to Product-View
Conversion Rate: ~51%
- Product-View to Order View
Conversion Rate: ~4%
- Product-Views from Search have a higher chance of converting to Order-Complete events than Product-Views not from Search, although the effect is small.



Methodology

- Setup a Jupyter Notebook in a GitHub repository to perform research. Located here:
<https://github.com/CYINT/lily-test>
- Divided the problem into four steps:
 1. Load the data into pandas and conduct data exploration.
 2. Calculate the Search to Product-View conversion rate.
 3. Calculate the Product-View to Order-Complete conversion rate.
 4. Form hypotheses about patterns in the data and test those hypotheses using appropriate data science techniques.

More details located in the Jupyter notebook found here:
<https://github.com/CYINT/lily-test/analysis.ipynb>

Recommended Follow Up Research

1

Collect and Analyze data from search bounces to determine why some searches do not convert into product views.

2

Improve data collection to ensure that better funnel tracking is implemented, search data is tracked.

3

Research search types to determine if certain searches result in better conversion rates.