





# **Nowcasting Macroeconomic** Indicators using Google Trends



#### Presented By:

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## BACKGROUND:

- \* Main aim is to nowcast macroeconomic factors (GDP, Retail Trade Sales and E-Commerce) using Google Trends Data
- \* Using Pytrends package of python for fetching Google trends data
- \* Need to present dashboard, report and presentation at the end.

## OVERALL PROGRESS

\* Data Cleaning and Wrangling done



\* Time series for all the three factors made stationary



\* Econometric Model fitting (DFM, ARMA Model)



\* Machine Learning Model fitting (LASSO, Random Forest, Boosting)



\* Model Finalized for all the three indicators



· Created Dashboard



### PREVIOUS WEEK PROGRESS

\* Scheduled Task for Last week: Bootstrap and Dashboard creation.

#### \* Work Progress:

- > Created script files for whole code
- > Finalized the rough sketch for dashboard
- > Created dashboard and deployed it on heroku

#### RESULTS

\* Dashboard created and deployed on heroku

Link for dashboard:

https://nowcasting-indicators-canada.herokuapp.com/

### ROADBLOCKS:

- \* Calling Google Trends API multiple times blocks
- \* Solution as discussed with Partners: To use only single sample rather than working with multiple

#### NEXT WEEK PLAN

- \* Dashboard demo to the partners
- \* Create final report and presentation
- \* Prepare for presentation
- \* Enjoy completion of MDS degree \(\text{\text{\text{\text{\text{e}}}}\)

# ARE WE ON TRACK? MEETING WITH THE PARTNERS:

- \* On Track as mentioned in the proposal document
- \* Scheduled weekly meetings on Thursday
- \* Partners are satisfied with what we have done so far
- \* Clear all the doubts as soon as we ask them over MS teams/ mails

### INDIVIDUAL AND TEAM EFFORTS

\* Work assigned equally

\* Divided segment of the dashboard.

Timings for work: Monday to Friday, 9:30 AM - 5:30 PM

#### DASHBOARD DEMO

\* The demo for our dashboard over deployed application

