



# Implementing AI To Improve Business Continuity And Economic Resilience In Singapore During Covid-19

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Due to covid19 demand for shipping has  
**exponentially** increased!



# Proposed Solution (Predictive Analysis)

## AI's usage:

- Monitors export of cargos from one country.
- Suggest best prediction for the next shipment amount. Which could be used to arrange available resources for shipments.
- Maps Geopolitical naval routes and trends of transportations.

## Possible Add-on's:

- Notification System – Provide notification when the trend of cost goes low (consumer or business owner)/ if more transportation occurs (to shipment owners).

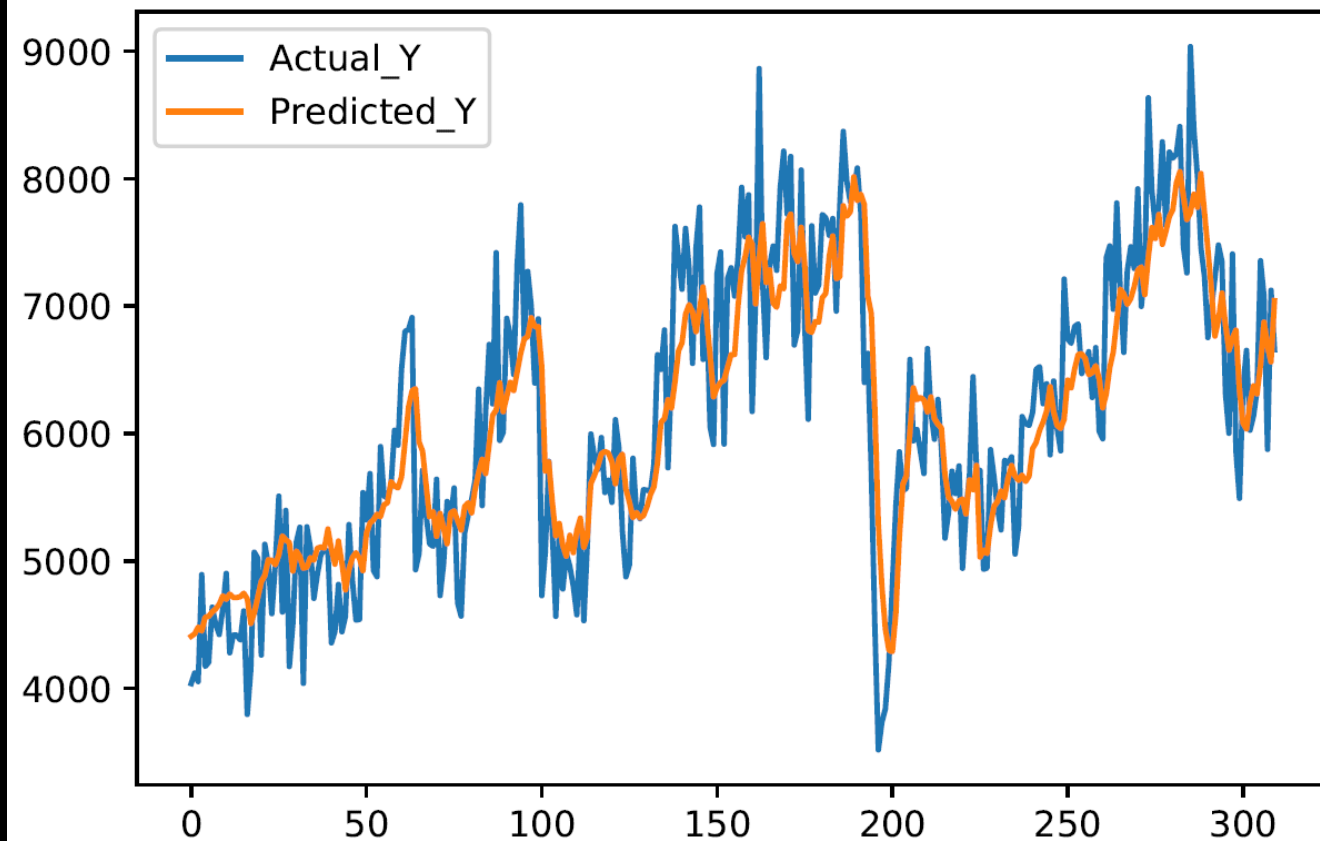
# What has been done?

## Training :

- The Model comprises of:
  - LSTM layer with a ReLu activation
  - Loss: Mean Squared Error
  - Optimization: Adam
- The Train to test Ratio= 7:3
- **Training data:** Export (in Tonnes) in from one country to the other (E.g., Singapore to Japan).
- Test set is made sure that the window doesn't overlap, hence it could be used for evaluation

## Evaluation:

- The evaluation is done using non-overlapping test dataset to avoid any bias.



## Evaluation results!

RMSE of model: 502

RMSE of logistic regression: 619

**1.23X** Better!



*Questions?*

