

Data Science – Skills Assessment

Prediction of Liquidity

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Prediction

- The data is rolled up by receiving country, currency and time. The average of transaction amount is taken.
- There are 225 combinations – 3 receiving countries x 3 currencies x 25 hours (including 0 and 24)
- For a given country and currency the average amount calculated over 3 days is shown as predicted

Data

- The data is divided into 4 parts of 6 hours
- 10 hours to 15 hours, 16 hours to 21 hours, 22 hours to 3 hours and 4 hours to 9 hours
- This is done to correct the cumulative predicted amount

Correction

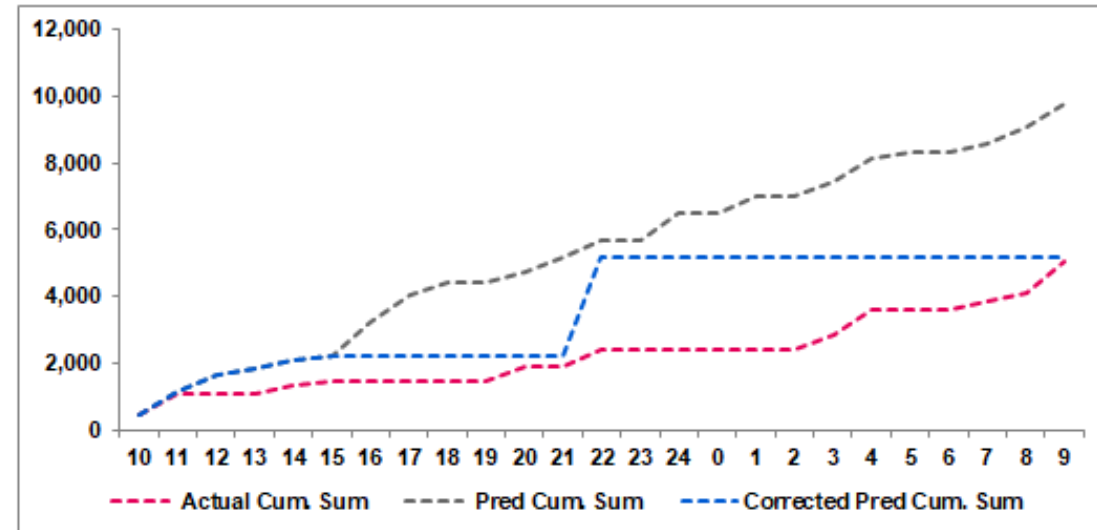
- For 10 hours to 15 hours the corrected cumulative predicted amount is equal to cumulative predicted amount (**eg – UK-X-3**)
- For 16 hours to 21 hours if cumulative actual amount is less than the average of cumulative predicted amount for 10 hours to 15 hours then the cumulative predicted amount for 15th hour is used, else cumulative predicted amount is used (**eg – UK-X-3**)
- For 22 hours to 3 hours if cumulative actual amount is less than the average of cumulative predicted amount for 10 hours to 15 hours then the cumulative predicted amount for 15th hour is used, if cumulative actual amount is less than the average of cumulative predicted amount for 16 hours to 22 hours then the cumulative predicted amount for 22nd hour is used, else cumulative predicted amount is used (**eg – UK-Z-5**)
- For 4 hours to 9 hours if cumulative actual amount is less than the average of cumulative predicted amount for 10 hours to 15 hours then the cumulative predicted amount for 15th hour is used, if cumulative actual amount is less than the average of cumulative predicted amount for 16 hours to 22 hours then the cumulative predicted amount for 22nd hour is used, if cumulative actual amount is less than the average of cumulative predicted amount for 22 hours to 3 hours then the cumulative predicted amount for 3rd hour is used, else cumulative predicted amount is used (**eg – UK-Z-5**)

User Interface

- The user interface has been created to compare the actual amount of transactions vs the predicted amount of transactions
- The cumulative sum of amount is shown. The day starts at 10 hours and ends at 9 hours
- Red line** – cumulative actual amount
- Blue line** – cumulative predicted amount (corrected)

Select Receiving Country	UK
Select Currency	Y
Select Date	4

drop down



- Select Receiving Country
 - Canada
 - USA
 - UK
- Select Currency
 - X
 - Y
 - Z
- Select Date
 - 3
 - 4
 - 5