

## PROBLEM STATEMENT

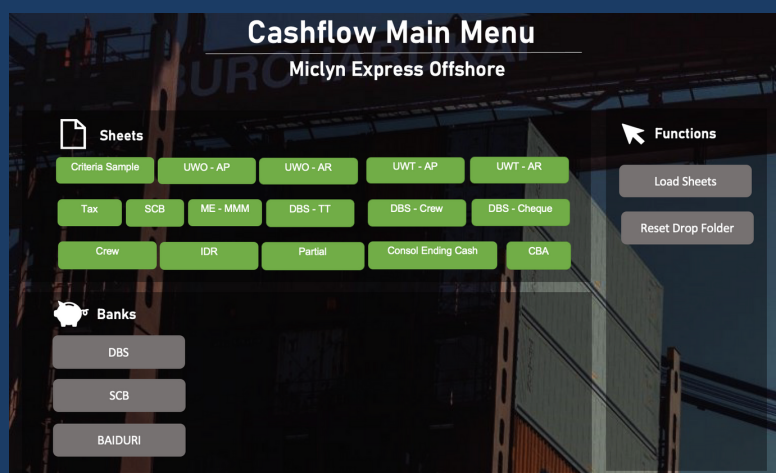
- Develop a semi-automation solution to the forecasting processes to reduce the amount of manual and repetitive work required such as compiling information from various sources and calculation of values
- Create an interactive dashboard which allows for Cash Flow performance analysis as well as for comparison of actual and forecasted figures



## USER INTERFACE

(PYTHON & VBA)

- Buttons created to allow user to navigate to the different worksheets and perform various functions
- Useful buttons for user to conveniently extract bank statements via Internet Explorer
- Efficiently compile multiple excel files from various stakeholders



## AUTOMATION



- Easily populate key figures upon a click of a button utilising VBA scripts
- Utilise Xlwings to call out Python scripts on Excel allowing user to execute python scripts with the user interface.
- Use of Python to automate the manual process of having to collate different Excel files into one Excel file by loading and resetting the designated drop folder

## INTERACTIVE CASHFLOW DASHBOARD

- Useful functionalities such as filter slicers, a drop-down list and a "Refresh" macro button to improve the efficiency and make the dashboard dynamic and interactive.
- Key cashflow figures highlighted at the top of the dashboard
- Various graphs and visualisations for simple analysis on actual-forecasts comparisons over time and help gain insights on the company's cash flow performance for the period.

(POWER BI)



## LIMITATIONS

- Unable to explore further possible automation strategies due to insufficient information or data
- If there are any changes or additional data, the client will need to adjust the codes accordingly
- Excel functions such as VLOOKUP are looking for an exact match, so if there's any typo or different spelling, there will be an error in the model

## KEY INSIGHTS

The team gained new expertise by expanding the basic skills in softwares like Python and VBA. Additionally, communication with the members and clients are also important to ensure the project is right on track. Ultimately, the key problems have been addressed and we would like to thank both our client and professors for their guidance.