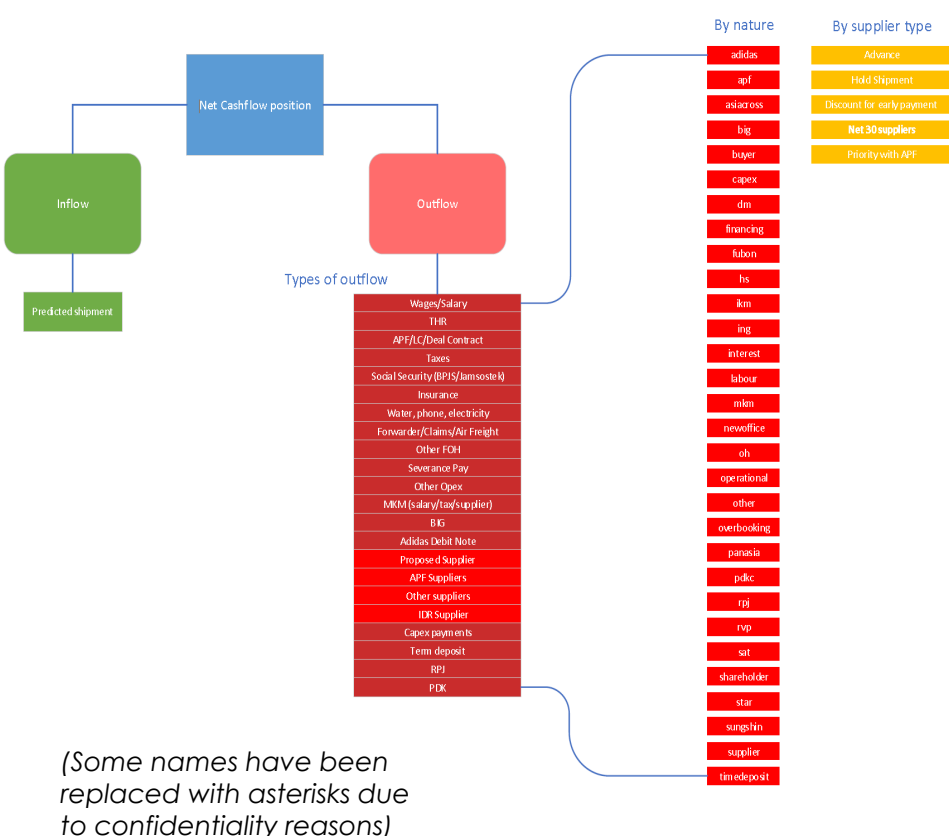**SMU** SINGAPORE MANAGEMENT UNIVERSITY
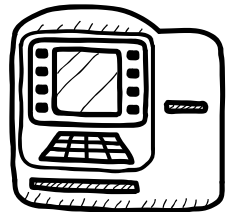
SMU-X

PROJECT VISION

"To digitise, automate and create a prescriptive cash flow model that helps determine whether a particular invoice should be paid on a specific date"

1. Digitise

Digitising by classifying variables for proper data input and combining all data into a single spreadsheet. Similarly, we also correct Database Management.

(Some names have been replaced with asterisks due to confidentiality reasons)

2. Automate

Using VBA, restrict valid inputs by employees. As such, VBA will transfer it into the different sheets and linking Excel to R using VBA

3. Create

Model 1

Binary model on whether an invoice should be paid by its due date

Model 2

Using all numerical and categorical variables, group the invoices into different clusters using K-means & K-mode.

Model 3

Using Model 1's binary output and Model's 2 clustering, predict when to pay the invoice using a mixture of both supervised and unsupervised learning

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