24th February 2016
Sample Report below
More similiar: *https://wiki.smu.edu.sg/ANLY482/Time-series_Analysis_on_Singapore_Public_Transportation_Train_Network_Project_Documentation*
Others :
https://wiki.smu.edu.sg/ANLY482/Arisaig_Home

Data Preparation
- Changes for data cleaning - it is better to keep the original data format, allows for future reference.
  - Document the data cleaning process in interim report, provide step by step on cleaning process + screenshot. (Functions used)
    - For same functions used, just show once is good enough
- For Market Basket Analysis
  - Can we concatenate "transaction id" + "store name"?
    - Yes.
  - Important point to note for market basket analysis
    - From sales channel perspective, identify which outlet or which stores is good at cross-selling (e.g. 1 transaction tends to contain many different items)
- Transaction ID
  - Change to character (include in interim report)
- For the Analytics Data Cube Submission
  - Write down changes in Character and Modelling Type (Nominal to Character)
  - Write done all the headings
- Exploratory Data Analysis
  - Find out inconsistency, flag it out
    - Net Price=0, 1 , don not exclude it out, clarify it with sponsor

Exploratory Data Analysis
PART 1: Regions (*Look at them as a whole*)
Start off with the sum (Net Revenue) first! *[Overall, Something that they are familiar with first]*
- First Chart: Start with 2015, latest reporting year (then look at the last 3 years)
  - Look at 80-20 rule, pareto chart in JMP
    - Y- Dual Axis (Net Price Contribution and Cumulative %)

- Second Chart: Geographical region (2015)
  - see which one is dominant

- Third Chart: Overall Sales Trend in the last 3 years (Include Time Factor)
  - Line Graph for Trend analysis (Show the slope)

PART 2: Stores
[Temporal Charts]

- Fourth Chart: Box Plot
  - Based on store size?: look at their differences
  - Add in store numbers
  - Add in time dimension
  - 25% of the box plot (upper quartile)= does it remain the same throughout the 3 years

- Fifth Chart: Each specific stores' net price (Is it store type)
  - Segment them, what is the strategy
  - Is it due to store size, store type… ?
  - Just filter out

PART 3: Category (Aud)
- Sixth Chart: Show Sales Volume per month for each category
  - Bags and Shoes Market differences
  - Cross Check with Sales Revenue
- Group category & Class (Focused)

PART 4: Article, Colours
- Filter both bags and shoes
- See if there is a change of trend/ consumers using temporary
- Differences in different regions (No diff)
- Pull out the unique patterns and show those
  - E.g Flats Open Toe has an increase trend

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*** Tableau- use storyboard for sponsor's meeting [STORY-TELLING]
*** Do not offer reasons, just show them the data
*** Look into examples, Tableau Storytelling example (Design their story)
*** Analyse the trends, what actions you should do (validate)
*** Don't show them one shot

Dashboard- integrate different tables
Storyboard- for presentation
- Add in filter

Additional Data: Add in Stats for the regions in China [Store Types]
- Shoes' Competitors