

Possible Areas to work in

Customer Relationship Management

1. Customer Analysis
 - Customer Segmentation/ Clustering
 - § K-means Clustering
 - § RFM Analysis (Recency, Frequency and Monetary Value)
 - § Multiple Linear Regression
 - Profitable Segments
 - § Customer Segments that generates highest profits
2. Geospatial Analysis
 - Location Based Purchasing Patterns and Trends

Market Basket Analysis

1. Generate association rules from a collection of transaction items (*Which items are likely to purchase together*)
2. Itemset matching

Data required from Charles & Keith (Min 2 years data, 3 years if possible)		Type of analytical analysis	Tools
Sales Related Data	<ul style="list-style-type: none"> ● Period of Transaction (date/time information) ● Item/Product Transacted (item_id, SKU information) ● Sales value 	Market Basket Analysis <ul style="list-style-type: none"> ● Identify products that are commonly purchased together (A & B -> C) ● Commonly purchased item during certain day/month/period 	SAS
Customer Related Data	<ul style="list-style-type: none"> ● Frequency of purchase ● Demographics (age, gender etc.) ● Purchase value ● Member/Non-member 	K-Means Clustering <ul style="list-style-type: none"> ● Customer profiling (by demographics, RFM, Member/Non-member) Multiple Linear Regression	SAS
Store Related Data	<ul style="list-style-type: none"> ● Area/Province/State ● Retail Store location ● Store Coordinates ● More information on the store if any (i.e. Charles & Keith Signature, store size etc.) 	K-Means Clustering <ul style="list-style-type: none"> ● Geography V.S Store performance (trends/insights) 	Tableau

Time: 2pm to 4pm

Present:

Brandon Ong (Legal & Compliance Manager)

Joan Lim (General Manager)

Kimberly (Marketing Associate)

Charles Wong (CEO)

Data C&K has: Sales, Sell through and inventory data

There are no CRM data available for C&K but they have it for Pedro and China's C&K.

Finding gaps to fill on their current strategy etc.

Software C&K uses: Qlik Sense, Qlik View, Canvas Analytics

Marketing: Retail Marketing and Digital Marketing

Potential Project Areas

1) Digital Marketing related

Social Media (Instagram, Twitter, Facebook) are all native

700k users on Facebook and 200k on Instagram

Facebook: marketing analytics, i.e finding % of 700k are active etc

sentiment analysis based on reviews and complaints

Instagram: Analytics? what kind of post is the best received etc

Stats engagement; hashtag analytics

2) Sales:

Singapore Data - only per transaction and VIP data.

(due to the change in data collection system, C&K loses about 1.5 years of data)

3) *China Data - Location, Transaction, Customers data

- a) Able to do customer profiling, association rule mining based on transactions, demographics. (e.g buying brown shoes on tuesday, for upsell & cross sell)
- b) Robust data set to work with
- c) China as of current works on Franchisee model, sends over sales data monthly to Charles & Keith Singapore. Team as of current make use of the data to determine which product sells better - for sole purpose of inventory ordering and understanding brief financial performance of stores in China. But does not use sales data to perform any further data analysis.
- d) Teams are tied down by their day-to-day job scope, hence does not have any spare capacity to look into in-depth data analysis to better understand business performance in China.