Data Analysis - Retail Store @ Ion Orchard

Agenda

- Why do we analyse this
- Cleaning the data
- Presenting the Dashboards
- Findings and Recommendations

Why do we analyse this

Context:

Havaianas ION Orchard is a now-closed retail branch in Singapore of the popular footwear brand. In order to better understand the parameters of their business, the managerial team of the branch took upon the task of compiling in an analysis-ready tabular format their store's daily revenue, alongside information on cost.

Objective of this analysis:

To analyse the data for information on what can be done to prevent the and recommend some actions to take.

Source:

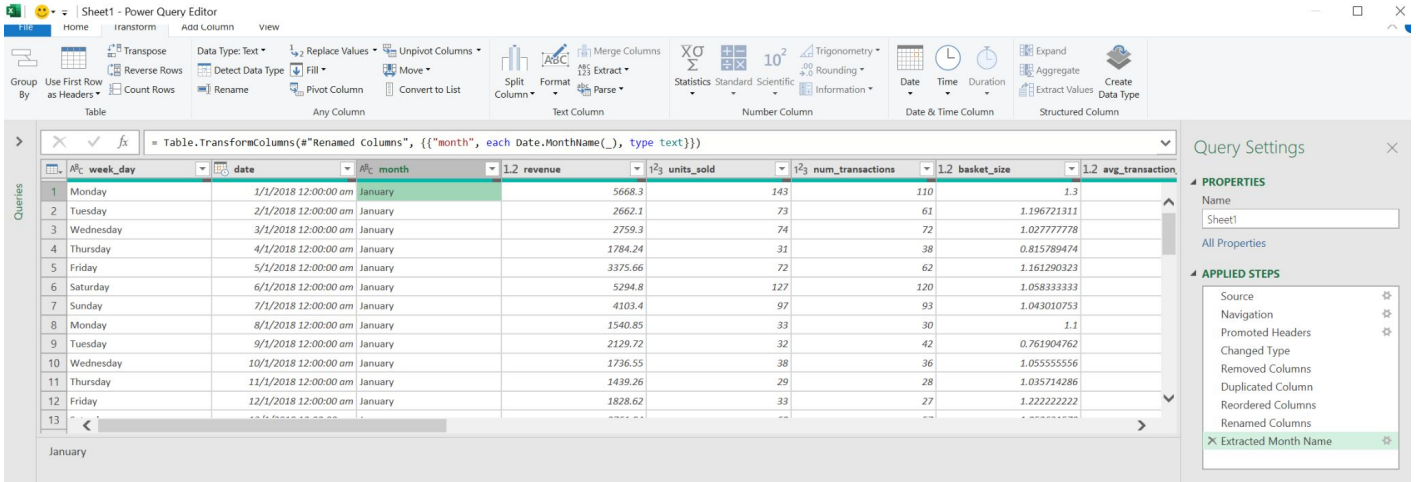
https://www.kaggle.com/datasets/aroodai/havaiianas-ion-orchard-singapore-sales-dashboard

Data cleaning

Clean data is required to identify and fixes errors, duplicates, and irrelevant data from a raw dataset.

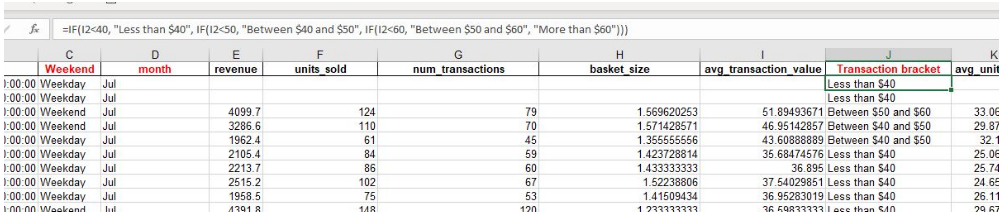
Data Cleaning

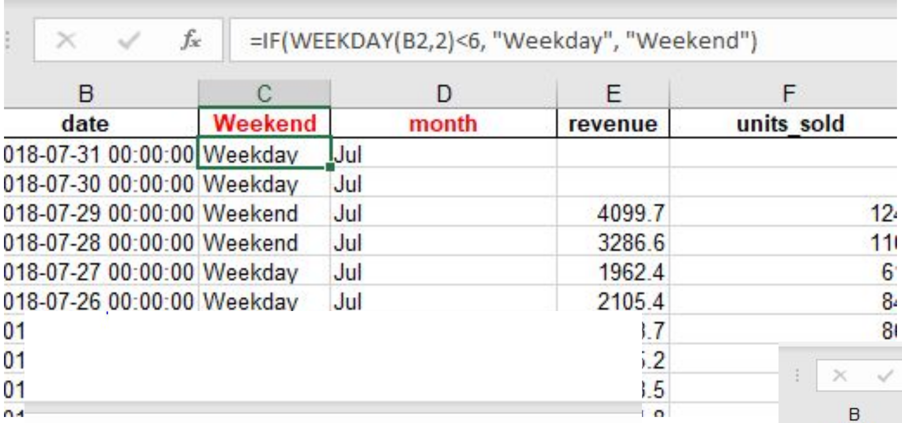
- Add month, weekend, Transaction bracket - for deeper analysis
- Remove data that has header but no details at all - unnecessary information
- Remove data that has limited data - as it would skew overall analysis
- Remove 1x Aug data as there is only 1 data point- not useful

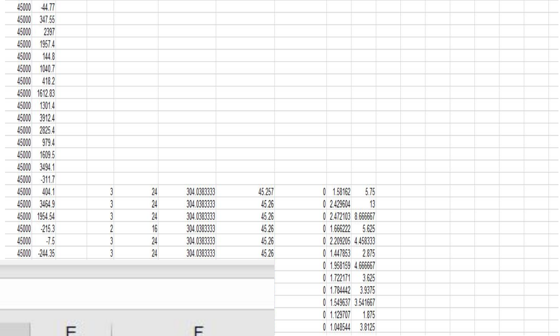


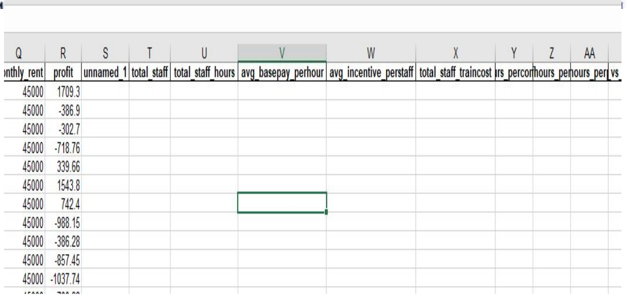
	week_day	date	month	revenue	units_sold	num_transactions	basket_size	avg_transaction
1	Monday	1/1/2018 12:00:00 am	January	5668.3	143	110	1.3	
2	Tuesday	2/1/2018 12:00:00 am	January	2662.1	73	61	1.196721311	
3	Wednesday	3/1/2018 12:00:00 am	January	2759.3	74	72	1.027777778	
4	Thursday	4/1/2018 12:00:00 am	January	1784.24	31	38	0.815789474	
5	Friday	5/1/2018 12:00:00 am	January	3375.66	72	62	1.161290323	
6	Saturday	6/1/2018 12:00:00 am	January	5294.8	127	120	1.058333333	
7	Sunday	7/1/2018 12:00:00 am	January	4103.4	97	93	1.043010753	
8	Monday	8/1/2018 12:00:00 am	January	1540.85	33	30	1.1	
9	Tuesday	9/1/2018 12:00:00 am	January	2129.72	32	42	0.761904762	
10	Wednesday	10/1/2018 12:00:00 am	January	1736.55	38	36	1.055555556	
11	Thursday	11/1/2018 12:00:00 am	January	1439.26	29	28	1.035714286	
12	Friday	12/1/2018 12:00:00 am	January	1828.62	33	27	1.222222222	

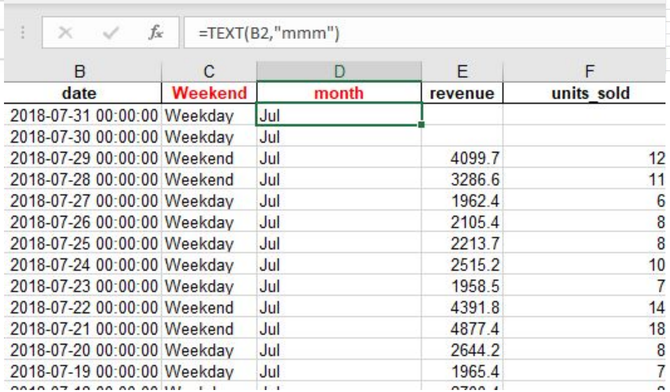
Data Cleaning











Presenting the dashboard

Revenue

- Monthly, Daily
- Profit and Profit %

Customer Spending patterns

- Weekend vs Weekday
- Transaction buckets

Presenting the databoard

Overall

- Revenue
- Profit
- Profit %
- Top Sales day

Monthly Revenue (can filter by Weekday)

- Revenue
- Profit
- Loss

Presenting the databoard

Daily Revenue
- Daily revenue
- Daily Profit

Daily Revenue
(can filter by Month and Weekday)
- Revenue
- Profit
- Loss

Presenting the databoard

Customer Spending

- Weekend vs Weekday
- Transaction Buckets

Transaction Buckets

(can filter by Month and Weekday)

- # Trans < $40
- # Trans > $40 < $50
- # Trans > $50 < $60
- # Trans > $60

Presenting the findings

Revenue and Profit

- 683K, Profit was 2.4%
- Out of 7 months, 3 months were negative profits (Jan, Mar, July)

Presenting the findings

Best Revenue and profit % is May

- Revenue of 146.6K
- Profit of 19.6%
- Top sales for the month is 26 May, $10.4K

Presenting the findings

Only weekends were making profit

- Best Day is Saturday (+25%)
- Worst Day is Monday (-23.3%)

Presenting the findings

Customer Spending behaviour

- Revenue and Traffic for weekends are more than 50% vs weekdays
- Most customers spend between $40 and $50 on weekends
- More customers spend > $60 on weekdays (786) than weekends (159)

Recommendation

Increase Revenue

1) Deep dive into traffic drivers for best month (May) for best practices
2) Increase promotion for weekdays to increase traffic

Reduce cost

1) Fixed cost drivers were high at 441 K over 7 mths (64% of Revenue)
   i) Rent - 45K per month)
   ii) Staff cost - 18K per month

   Suggestion as follows

   Rental - sublet tenancy, reduce footprint on weekday

   Staff cost - Stagger working hours based on Customer footprint on weekdays