

TrimmedCoffeeSalesAnalysis

March 4, 2025

```
[2]: from IPython.display import display, HTML

first_name = "Joel"
last_name = "Riondato"
personal_header = "<h1>"+first_name+" "+last_name+"</h1>"
display(HTML(personal_header))
```

<IPython.core.display.HTML object>

1 Overall business concern

(for both tasks)

Your business is a boutique coffee roastery, and you sell a range of products to cafes and restaurants in South East Queensland.

Your main concern is growing your business which means looking at opportunities for further development of the business as well as reviewing current areas that may not be effective.

1.1 Task 1 - Structured data analysis

You have decided to analyse your last year of sales data to find an insights that may address the business concern. You would like to know what the sales data tells you about (a) the areas you sell to, (b) the products you are selling, and (c) what you should consider changing to grow your business.

Data: Sales data is provided in the file: `coffee_sales.csv`

```
[5]: # libraries being used
import math
import pandas as pd
import plotly.express as px
import numpy as np
```

1.1.1 1. Question

The business question is: “What are the key factors driving the current sales performance for the business and how can we improve our current business optimised for growth & efficiency.”

The interpretation of the business concern can be broken down into sections: - Gather insights regarding sales relative to geographic characteristics.

- Gather insights regarding sales relative to product characteristics.

From these two main areas of focus (with their sub-sections), a selection of insights will be available to provide recommendations and strategic offerings to the business.

1.1.2 2. Data

This section will be for the data cleaning/prep work prior to the graph visualisations
Reading in the data via csv saved in the same location

```
[11]: df = pd.read_csv("coffee_sales.csv")
```

Creating Colour Map For Products This is an additional step taken so that the products within the different graphs are represented by the same colour. This is not necessary but will aid in the readability of the report. E.g the red column references the same product in another graph with a red column. This will only be applicable to graphs representing individual products and will be explicitly stated when relevant.

The code below chooses a colour map that has a length of colours equivalent to the length of unique products. This is using the Plotly Express features and variable names, therefore creating ‘product_palette’

```
[15]: products = df['Product'].unique()
# Generate a colour scale using Plotly's 'tab10' colour scheme
colors = px.colors.qualitative.Plotly
# Ensure the number of colours matches the number of products
if len(products) > len(colors):
    colors = px.colors.sample_colorscale('Plasma', np.linspace(0, 1, len(products)))
else:
    colors = colors[:len(products)]
# Map each product to a colour
product_palette = {product: color for product, color in zip(products, colors)}
```

Modifying Date Aspects This separates the Day & Month within the Date column so the month value can be accessed individually. This is done so that a mapping function can be applied so each month will have the season its within, this can be used in EDA further within the report.

```
[17]: df[['Day', 'Month']] = df['Date'].str.split('-', expand=True) # this splits the
    date column via '-' into day and month columns respectively.
```

This creates a map for each month to its relative season. After the season column is created, then the Date & Time column is removed

```
[19]: # mapping the Month to the season in the year
season_map = {'Jan':'Summer', 'Feb':'Summer', 'Mar':'Autumn', 'Apr':'Autumn',
↳ 'May':'Autumn', 'Jun':'Winter', 'Jul':'Winter', 'Aug':'Winter', 'Sep':
↳ 'Spring', 'Oct':'Spring', 'Nov':'Spring', 'Dec':'Summer'}
df['Season'] = df['Month'].map(season_map)
```

Modifying Date Aspects Cont. This adds a column with the year, then this is concatenated with the Date column, and then finally is converted into Date_Time format. The reasoning behind this is python can use a datetime data type for easy manipulation and filtering, this is also good practice when working with date data.

```
[21]: df['Year'] = "2023" # the data is from last financial year
df['Date'] = df['Date'].astype(str) + "-" + df['Year'] # concatenating the date_
↳ column with the year column made prior
df['Date'] = pd.to_datetime(df['Date']) # setting the column to date time data_
↳ type, its in string formate otherwise
df = df.drop(['Month','Day','Year'], axis = 1) # removing the month, day and_
↳ year column as its no longer needed (date time is used now)
```

Adding Revenue Column This adds the revenue column with is the product of the Qty & the Price of the product. Although there is no information regarding profitability of each product, having revenue can allow more interpretable results when grouping regions. E.g, a zone has a total of 30% of all sales, accounting \$x. This although only a statement, this can add insight and overall scope to other findings and be used as supplementary data.

It was checked that no discounting had occurred in the data set, (greater quantity implies a discount of a set rate).

```
[23]: df['Revenue'] = df['Qty'] * df['Price'] # creating the new revenue column based_
↳ off the multiple of Qty & Price.
```

```
[24]: df.head()
```

```
[24]:
```

| | Date | Zone | Area | Range | Product \ |
|---|------------|------------|----------------|---------|--------------------------|
| 0 | 2023-01-01 | Gold Coast | Burleigh Heads | Cafe | 2kg Cafe Blend |
| 1 | 2023-01-02 | Gold Coast | Burleigh Heads | Barista | 2kg Smooth Blend |
| 2 | 2023-01-04 | Gold Coast | Southport | Premium | 2kg Single Origin Select |
| 3 | 2023-01-05 | Gold Coast | Burleigh Heads | Cafe | 2kg Cafe Blend |
| 4 | 2023-01-07 | Brisbane | Southbank | Barista | 2kg Light Roast |

| | Qty | Price | Season | Revenue |
|---|-----|-------|--------|---------|
| 0 | 33 | 17.7 | Summer | 584.1 |
| 1 | 32 | 21.8 | Summer | 697.6 |
| 2 | 87 | 34.9 | Summer | 3036.3 |
| 3 | 63 | 17.7 | Summer | 1115.1 |
| 4 | 58 | 18.7 | Summer | 1084.6 |

1.1.3 3/4. Analysis/Visualisation

Ensure that you use markdown cells to justify why you make your analysis decisions and why you use specific code perform key analysis. Relate your justification to addressing the business concern

1.1.4 Data Manipulation Over, Now Data Exploration Can Begin!

The first question asks to identify trends relative to location, starting by looking into total sales by zones in the data. Having an understanding of trends relative to location can demonstrate underlying insights in which the business can use.

The code below creates a temporary subset of the original data (df) and groups it by zone & finds the sum of products (Qty) via that zone. This is then plotted in a plotly express bar graph. The figures are also shown in a table format below the graph and paired with descriptive summary statistics for sales % applicable to zone. Majority of the graphs used will be in a bar chart as it provides clear and interpretable results for the viewer. Additional elements such as statistics embedded in sentences will also be used to supplement and enhance the graph visualisations.

1.1.5 Zone vs Qty Sum

```
[29]: zone_qty_sums = df.groupby('Zone')['Qty'].sum().  
      ↪reset_index()#sort_values(ascending = False)  
  
fig = px.bar(zone_qty_sums, x='Zone',y='Qty', color = 'Zone')  
fig.show()  
  
zone_qty_sums  
zone_qty_sums = zone_qty_sums.set_index('Zone')['Qty']
```



```
[30]: brisbane_qty_sum = zone_qty_sums['Brisbane']  
      goldcoast_qty_sum = zone_qty_sums['Gold Coast']  
      sunshinecoast_qty_sum = zone_qty_sums['Sunshine Coast']
```

```
[31]: print(f"Brisbane has sold {brisbane_qty_sum / df['Qty'].sum() * 100 :.2f}% of  
      ↪all products, \n"  
      f"whilst Gold Coast has sold {goldcoast_qty_sum / df['Qty'].sum() * 100 :.  
      ↪2f}%, \n"  
      f"and the Sunshine Coast has sold {sunshinecoast_qty_sum / df['Qty'].  
      ↪sum() * 100 :.2f}%")
```

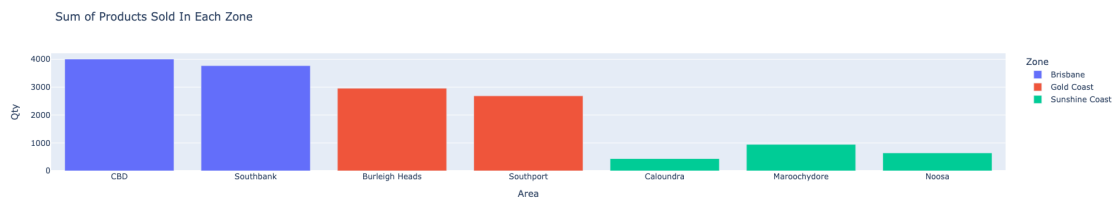
Brisbane has sold 50.35% of all products,
whilst Gold Coast has sold 36.59%,
and the Sunshine Coast has sold 13.06%

This shows that the Brisbane zone has sold the most products with a portion just over 50%. Behind Brisbane is the Gold Coast with a share just under 37% & the Sunshine Coast last with around 13%. Geographically Brisbane & the Gold Coast are relatively close, whilst the Sunshine Coast is further away, this can imply that we have a weaker customer base in the Sunshine Coast and could be an area of expansion. A more reasonable and intuitive interpretation is that the population is greater in Brisbane and Gold Coast regions therefore more demand for coffee.

This information however doesn't provide in-depth insight and data exploration should continue.

To gain further insight, it can be looked into the sum of products sold by the area within the zones. This is another level deeper than the previous graph. The code below does the same process as before however with an additional groupby condition which is now 'Area'. The results are still presented in a bar graph.

```
[33]: area_qty_sums = df.groupby(['Zone', 'Area'])['Qty'].sum().reset_index()
area_qty_sums
fig = px.bar(area_qty_sums, x='Area', y='Qty', color='Zone', title='Sum of
↳Products Sold In Each Zone')
fig.show()
```



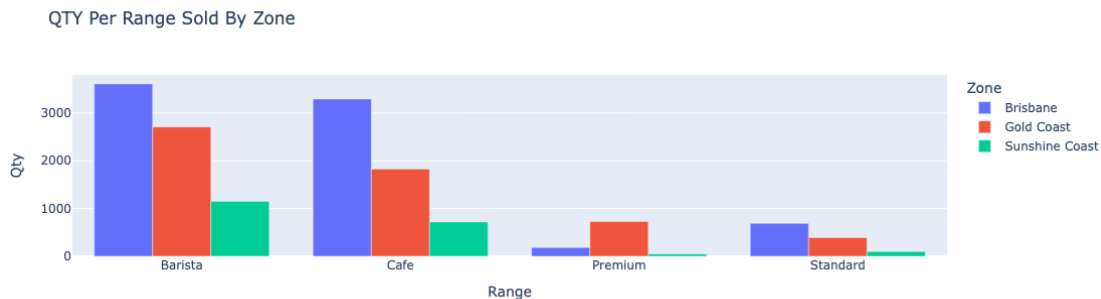
The results indicate that there is a fairly even distribution amongst the areas within each zone, therefore no significant trends which may be influencing the data. An insight from this graph is that more efforts for advertising could be made in the Sunshine regions to increase sales, as current figures are considerably low.

Although the zones & now area total products sold is identified, the product ranges that make up each zone would provide insight as it may reveal trends relative to areas which the business can take into account.

1.1.6 Range Qty Sum vs Zone

Below shows figures of ranges sold separated by the zones. The code starts with creating a temporary subset of the data, 'zone_area_range_qty_sums', which groups by zone and range and thus the sum of Qty. It then plots this in a similar bar graph used prior.

```
[36]: zone_area_range_qty_sums = df.groupby(['Zone', 'Range'])['Qty'].sum().
      ↪reset_index()
zone_area_range_qty_sums
fig = px.bar(zone_area_range_qty_sums, x= 'Range', y='Qty', color='Zone',
      ↪title='QTY Per Range Sold By Zone', barmode = 'group')
fig.show()
```



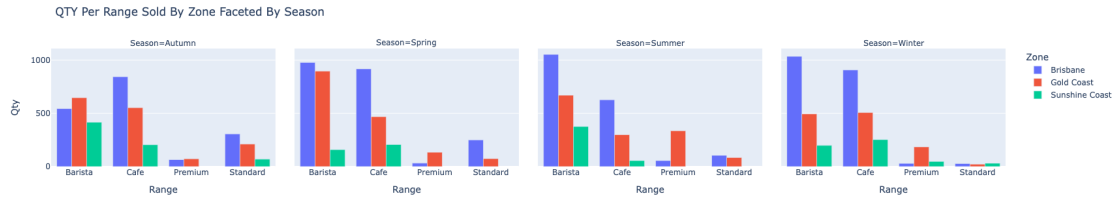
This graph shows many different trends relevant to the business question: 1) The Barista, Cafe & Standard ranges are leading in Brisbane, Gold Coast & Sunshine Coast in that order respectively. However the proportion sold is far greater for the Barista & Cafe ranges. 2) There is a contrary trend with the Gold Coast primarily using the Premium ranges of the business with very little in Brisbane & almost none in the Sunshine Coast. This could indicate a niche customer base in Gold Coast.

Paired with the information in the previous graph, the business can get a better scope of what ranges are important to major zones buyers, in this case its the Barista & Cafe ranges for both Brisbane & the Gold Coast.

1.1.7 Range Qty Sum Vs Zone Facet Season

Another potential influence of the products range relative to zone could be the season. Trends may show that the business could potentially take advantage of, below represents another bar chart but used the season column made prior as a condition in the groupby statement.

```
[39]: zone_area_range_qty_sums = df.groupby(['Zone', 'Range', 'Season'])['Qty'].sum().
      ↪reset_index()
zone_area_range_qty_sums
fig = px.bar(zone_area_range_qty_sums, x= 'Range', y='Qty', color='Zone',
      ↪title='QTY Per Range Sold By Zone Faceted By Season', barmode = 'group',
      ↪facet_col = 'Season')
fig.show()
```



The insights from this graph demonstrate expected trends with Brisbane or Gold Coast leading in sales for each range compared to Sunshine coast. Interesting trends show that the Premium range in the Gold Coast spikes only in the Summer. Another insight is that Barista ranges become less popular in Autumn however this is not critical as it's top performing in all other seasons. The main insights from this graph show that the barista ranges and cafe ranges consistently sell through all seasons, with Brisbane being a high transaction state.

To gain further insight, it can be looked into the product ranges relative to area opposed to just zone. This may demonstrate more specific data trends in which the business could take advantage of.

1.1.8 Area vs Sum Product

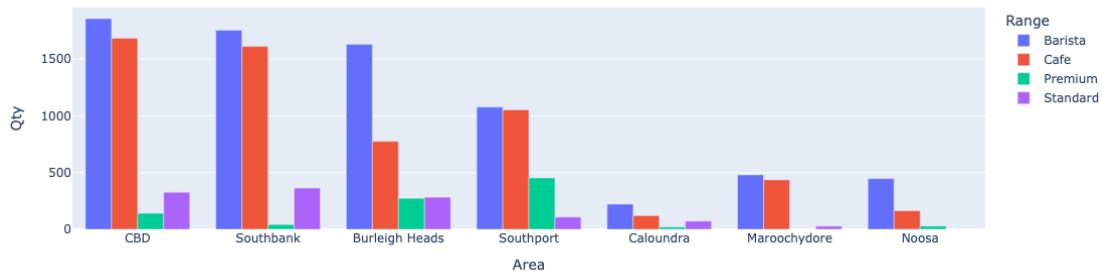
Below uses the same code process as prior however using the area and zone columns in the groupby condition, with the Qty sum again as the y-axis. This colours based off the range, the results are below:

```
[42]: Table = df.groupby(['Zone', 'Area'])['Qty'].sum().reset_index()
Table
```

```
[42]:
```

| | Zone | Area | Qty |
|---|----------------|----------------|------|
| 0 | Brisbane | CBD | 4006 |
| 1 | Brisbane | Southbank | 3769 |
| 2 | Gold Coast | Burleigh Heads | 2960 |
| 3 | Gold Coast | Southport | 2690 |
| 4 | Sunshine Coast | Caloundra | 435 |
| 5 | Sunshine Coast | Maroochydore | 944 |
| 6 | Sunshine Coast | Noosa | 638 |

```
[43]: area_product_qty_sums = df.groupby(['Zone', 'Area', 'Range'])['Qty'].sum().
      ↪reset_index()
area_product_qty_sums
fig = px.bar(area_product_qty_sums, x= 'Area', y='Qty', color='Range',
      ↪title='', barmode = 'group')
fig.show()
```



The insights from this graph show that there are no abnormal trends which are considered significant. One interesting findings is that Burleigh Heads sells significantly less Cafe products than Barista with the rest of them being almost equal in other Brisbane Gold Coast areas. Maroochydore also shares alike trends with CDB & Southbank with Cafe & Barista ranges, potentially showing alike customer flavour profiles. This again shows the potential of expanding sales in the Sunshine Coast as their purchasing trends share similar traits in top performing regions.

1.1.9 Sums of Products

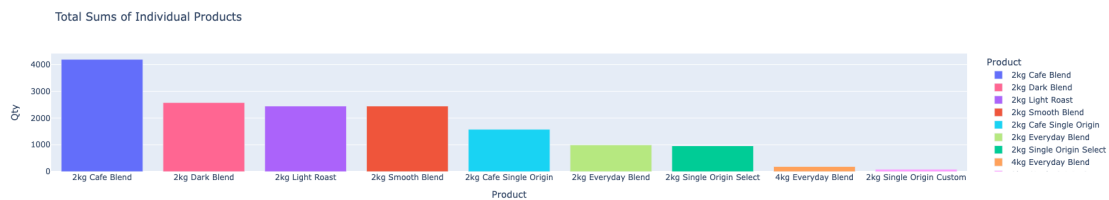
Now that there is a foundational understanding of which zones have the most products and their makeup of range popularity, understanding the individual product popularity will gain additional insight. Keep in mind, a colour map is created for the products so different graphs with using the same colour for products can be safely assumed.

Below shows a subset of the data being made, 'product_counts', which finds the total counts of each product within the data. This is displayed via the graph.

```
[47]: product_counts = df.groupby(['Product'])['Qty'].sum().sort_values(ascending =
      ↪False).reset_index()

product_counts
fig = px.bar(product_counts, x='Product',y='Qty',color='Product',
      ↪color_discrete_map = product_palette, title = 'Total Sums of Individual
      ↪Products ')

fig.show()
```




```
[48]: product_counts = df.groupby(['Product', 'Range'])['Qty'].sum().
      ↪sort_values(ascending = False).reset_index()
product_counts.head(10)
```

```
[48]:
```

| | Product | Range | Qty |
|---|--------------------------|----------|------|
| 0 | 2kg Cafe Blend | Cafe | 4187 |
| 1 | 2kg Dark Blend | Barista | 2574 |
| 2 | 2kg Light Roast | Barista | 2445 |
| 3 | 2kg Smooth Blend | Barista | 2445 |
| 4 | 2kg Cafe Single Origin | Cafe | 1575 |
| 5 | 2kg Everyday Blend | Standard | 994 |
| 6 | 2kg Single Origin Select | Premium | 957 |
| 7 | 4kg Everyday Blend | Standard | 186 |
| 8 | 2kg Single Origin Custom | Cafe | 79 |

The graph shows valuable insights into the business product popularity, they key findings are:

- 1) The 2kg Cafe Blend product was the most sold product last year, with the Dark Blend, Light Roast & Smooth Blend all relatively similar. The Cafe blend is apart of the Cafe Range, however the next 3 most popular items all with near equal transactions last year are in the Barista range. This shows an interesting insight and that there is only a single favourite in the cafe range whilst the barista range has a more balanced popularity. This could be a risk to the business as if there is a problem in sourcing for the 2kg Cafe Blend, a significant portion of sales will be affected, as the other cafe range offering is the least purchased out of all.
- 2) The graph also shows that the 4kg Everyday Blend (standard range) & 2kg Single Origin Custom (cafe range) are the least sold products from last year.

Based of these insights, possible solutions can be formed regarding suggestions to optimise the business for growth and efficiency. 1) Due to the extreme popularity of the 2kg Cafe Blend (cafe range), this shows evidence of the potential introduction of a 4kg option. However it must be considered as this is a cannabilistic method and its predicted that the 2kg Cafe Blend sales will reduce in the following year when the 4kg is introduced. The effect of this decision is dependent on profit margins and the proposed price of the 4kg option, aspects which wont be covered in this report. This proposal could be attractive to existing customers on zones that already heavily purchase this product, and with an incentive to purchahse larger amounts at reduced rates this could increase the sales growth of the business.

- 2) The data provides evidence that the removal of the 4kg Everyday Blend and 2kg Single Origin Custom products would optimise the business as they can focus well performing products. The effect of these product removals wouldn't be severe due to their low popularity, however, if removed there would only be 1 standard range offering and only 2 cafe range offerings.
- 3) Although not as severe as the bottom 2 products, its also feasilbe proposal to have the Single Origin Select & Everyday Blend offerings reduced to 1kg products rather than 2kg. This would reduce the business costs and overall effectiveness as they product is meeting the demands from the customers, with an emphasis on produc optimisation.

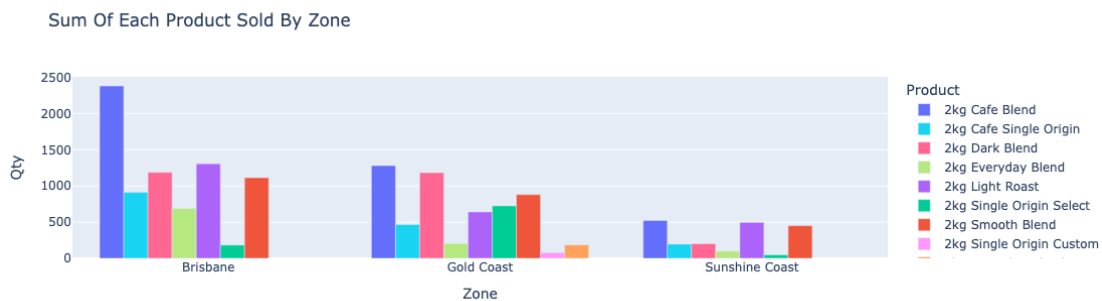
1.1.10 Product Sum vs Zone

Although the data prior demonstrated detailed insights for individual product performances, pairing this with zones could show additional trend and insights.

Viewing the products performance separated by Zones is represented below. The code follows the format as previous sections, by creating a subset of the data and using the groupby clause, in this case using zone and product, then finding the Qty sum.

```
[52]: zone_product_counts = df.groupby(['Zone', 'Product'])['Qty'].sum().reset_index()
zone_product_count_total = zone_product_counts.groupby('Zone')['Qty'].sum()
brisbane_zone_product_count_total = zone_product_count_total['Brisbane']
goldcoast_zone_product_count_total = zone_product_count_total['Gold Coast']
sunshinecoast_zone_product_count_total = zone_product_count_total['Sunshine Coast']
```

```
[53]: fig = px.bar(zone_product_counts, x="Zone", y="Qty",
    color="Product", color_discrete_map=product_palette, title = 'Sum Of Each
    Product Sold By Zone', barmode = 'group')
fig.show()
```



```
[54]: print(
    f'''Within Brisbane zone, the 2kg Cafe Blend Coffee accounted for {
    (zone_product_counts.query('Zone == "Brisbane" & Product == "2kg Cafe
    Blend")['Qty'].values[0] / zone_product_count_total['Brisbane']) * 100 :.
    2f}% of sales within that zone.'''
)

print(
    f'''Within Gold Coast zone, the 2kg Cafe Blend Coffee accounted for {
    (zone_product_counts.query('Zone == "Gold Coast" & Product == "2kg Cafe
    Blend")['Qty'].values[0] / zone_product_count_total['Gold Coast']) * 100 :.
    2f}% of sales within that zone.'''
)
```

Within Brisbane zone, the 2kg Cafe Blend Coffee accounted for 30.64% of sales within that zone.

Within Gold Coast zone, the 2kg Cafe Blend Coffee accounted for 22.67% of sales within that zone.

The trends from this graph show interesting and meaningful results, they include: - The most distinctive insight is that the 2kg cafe blend product is the most dominant within Brisbane by a considerable margin, with it being calculated as accounting just under 31% of Brisbane's product sales. This finding is an outlier to other products in all other zones, with all having similar top performing products, but yet the 2kg cafe blend is the highest performing product in all zones. This finding supports the recommendation of a 4kg option of the product as the demand is there primary in Brisbane & the product is a top performer in all zones. - A subtle insight is that the lowest performing products found previously (4kg everyday blend & 2kg single origin custom) are only sold within the Gold Coast zone. This indicates a niche market or only a selective outlets picking this product. As no other zones purchase these products, this can support the option of removing the product line as there is no demand in 2/3 of the supplied zones.

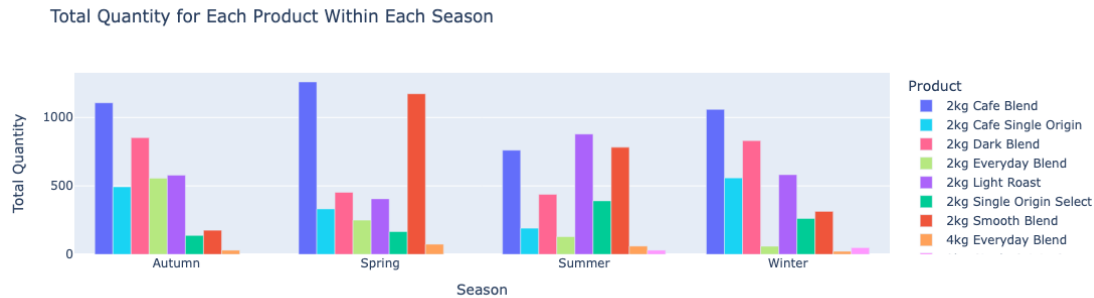
Sum of Each Product Sold By Season Another possible area of interest is the relationship between season and individual products sold last year. The code below demonstrates this relationship using the same methods used previously. A dataframe is used which is grouped by season and product, then finding the Qty sum to use as the y-axis.

```
[57]: # Group by 'Season' and 'Product' and sum the 'Qty'
Season_Product_Counts = df.groupby(['Season', 'Product'])['Qty'].sum().
    ↪reset_index()

fig = px.bar(
    Season_Product_Counts,
    x='Season',
    y='Qty',
    color='Product', color_discrete_map = product_palette,
    title='Total Quantity for Each Product Within Each Season',
    labels={'Qty': 'Total Quantity', 'Season': 'Season'},
    barmode='group', # Groups the bars for better comparison
)

fig.update_layout(
    xaxis=dict(title='Season'),
    yaxis=dict(title='Total Quantity'),
    legend_title_text='Product'
)

fig.show()
```



Recall the order of seasons is Summer, Autumn, Winter, Spring. This graph shows various trends which the business can take advantage of: - Across all zones, the top performing product (2kg Cafe Blend in Dark Blue) has a stable total transactions. - The 2kg Dark Blend in dark pink, spikes in autumn and winter, therefore during the middle of the year. - The 2kg Light Roast in purple has a more stable fluctuating trends - The 2kg Smooth Blend in red has major spikes in spring and summer, which are the end and starts of the year.

These noticeable trends could be accounted for and prepared in advance by the business by anticipating these spikes. If there are major spikes in a product within a season, having the capacity to fulfill all orders will enable greater revenue and not be limited by low stock supplies.

- The 2kg Single Origin Customer in light pink also only sells during the summer and winter, therefore only half of the year. The costs to hold product in warehousing or storage when only selling minute quantities in half of the year supports the decision to remove this offering.
- The 4kg Everyday Blend in orange although has extremely low total quantities sold, there is demand through all seasons unlike the 2kg single origin mentioned prior. This could be evidence for rather than removing the product to reduce it to a 1 kg or 2 kg offering as there is minimal but ongoing demand throughout the year.

1.1.11 5. Insight

The business question is: “What are the key factors driving the current sales performance for the business and how can we improve our current business optimised for growth & efficiency”. From the EDA analysis conducted, various trends and insights were found which the business can use to optimise for growth and efficiency.

The findings are summarised as:

- Expansion into the Sunshine Coast area as the trends regarding range & product popularity are alike in higher performing regions (Brisbane & Gold Coast).
- To introduce a 4kg product offering of the Cafe Blend as this product is top performing of all products and all zones. Furthermore, having a consistent stock level of this product would also be strategic as it consistently sells during year and is the top performing product from all zones. Having high stock levels also reduces the risk if there is a delayed batch or quantity from the supplier as this will directly impact the revenue of the business.
- The removal of the 2kg Single Origin Customer blend as this the lowest performing product which only sells during half of the year (Summer and Winter) and furthermore is only sold

to the Gold Coast zone. To make the business for efficient, removing this product offering is logical as it can put efforts into other ranges which are currently more popular, e.g. stocking cafe blend.

- The removal of the 4kg Everyday Blend. This is the second lowest performing product with insights showing that it sells throughout all seasons but only in the Gold Coast region. If the business doesn't want to remove this product, the reduction into a 1 or 2 kg product offering is recommended as this is more efficient and could potentially increase the sales of the product.
- Insights show purchase spike trends for the dark blend, light roast, smooth blend products, these trends from last year can be used to strategically prepare and potentially reduce operational costs for the upcoming year. E.g. increasing stock levels prior to the spike period so more orders can potentially be fulfilled.

In addition to these insights, additional information regarding profits margins for products could be extremely beneficial, below represents that although the Cafe Blend is still the product with highest revenue, the Dark blend is almost tied with it being around 10% less of product sold compared to the cafe blend. This premium product could be looked into further as profitability of the business and product offerings is also extremely useful and can optimise the business for growth and expansion. It was thought about discounting should be used as a recommendation but there isn't enough information and the lack of financial information to make this a feasible recommendation for the business.

```
[61]: df.head()
product_revenue_pie = df.groupby(['Product'])['Revenue'].sum().reset_index()
#df['Revenue'].sum()
fig = px.pie(product_revenue_pie, values='Revenue',
             names='Product', color_discrete_map = product_palette, hole=.5,
             title='Product Revenue Chart')
fig.show()
```

Product Revenue Chart



```
[62]: product_qty_pie = df.groupby(['Product'])['Qty'].sum().reset_index()
#df['Revenue'].sum()
fig = px.pie(product_qty_pie, values='Qty', names='Product', color_discrete_map=
             product_palette, hole=.5, title='Product Qty Chart')
fig.show()
```

Product Qty Chart



1.2 Summary Recommendations

- Using the insights from both tasks, what recommendations would you suggest are relevant for the business to address the main business concern?*

From the first section: The findings are summarised as:

- Expansion into the Sunshine Coast area as the trends regarding range & product popularity are alike in higher performing regions (Brisbane & Gold Coast).
- To introduce a 4kg product offering of the Cafe Blend as this product is top performing of all products and all zones. Furthermore, having a consistent stock level of this product would also be strategic as it consistently sells during year and is the top performing product from all zones. Having high stock levels also reduces the risk if there is a delayed batch or quantity from the supplier as this will directly impact the revenue of the business.
- The removal of the 2kg Single Origin Customer blend as this the lowest performing product which only sells during half of the year (Summer and Winter) and furthermore is only sold to the Gold Coast zone. To make the business for efficient, removing this product offering is logical as it can put efforts into other ranges which are currently more popular, e.g. stocking cafe blend.
- The removal of the 4kg Everyday Blend. This is the second lowest performing product with insights showing that it sells throughout all seasons but only in the Gold Coast region. If the business doesn't want to remove this product, the reduction into a 1 or 2 kg product offering is recommended as this is more efficient and could potentially increase the sales of the product.
- Insights show purchase spike trends for the dark blend, light roast, smooth blend products, these trends from last year can be used to strategically prepare and potentially reduce operational costs for the upcoming year. E.g. increasing stock levels prior to the spike period so more orders can potentially be fulfilled.

In addition to these insights, additional information regarding profits margins for products could be extremely beneficial, below represents that although the Cafe Blend is still the product with highest revenue, the Dark blend is almost tied with it being around 10% less of product sold compared to the cafe blend. This premium product could be looked into further as profitability of the business and product offerings is also extremely useful and can optimise the business for growth and expansion. It was thought about discounting should be used as a recommendation but there isn't enough information and the lack of financial information to make this a feasible recommendation for the business.