

Exercise 9.2 Data Visualization for Baseball Game Sales

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Introduction

Data visualization is the process of representing data in a visual format, such as charts, graphs, or heat maps. This translates any complex numerical or textual data into an easily readable visual form, enabling users to quickly grasp the insights, patterns, and relevant trends in the data.

Its purpose is to communicate information clearly and effectively through graphical means which helps large and complex datasets to be more accessible to wider audience, including those without extensive data expertise.

Data visualization for Basketball game sales

We will apply data visualization using Basketball game sales data (excel) and generate 4 Data visualizations using Power BI tool.

Price by Item

The below chart shows the Clustered column chart that represents the price by item. The x-axis represents the items sold during the Basketball game sales and y-axis represents the sum of price of each item.

For example: Beer sold for a total of \$80 which is highest and hot dog at \$23 in total which is the lowest in price.



Chart 1: Price by Item

Price & Actual profit by Item

The below chart shows the Line and stacked column chart that represents the Price and Actual profit by Item. The x-axis represents the Items sold during the Basketball game sales and primary y-axis represents the price of each item. The secondary y-axis represents the actual profit received for each Item.

For example: the price of popcorn is \$5 while the profit earned is \$4. The line graph shows the sales went well without a minimum of \$0.5 to \$4 profit with no loss made on any item.



Chart 2: Profit and Actual Profit by Item

Actual profit by Day

The below chart shows the Line chart that represents the Actual profit by Day. The x-axis represents the dates spread for 30 days during the Basketball game sales and y-axis represents the Actual profit made. From the below chart, the trend shows that on Day 4, the actual profit made was \$73, while on last day the Actual profit made was \$3.5. This shows that there was a good amount of profit made by each Item.

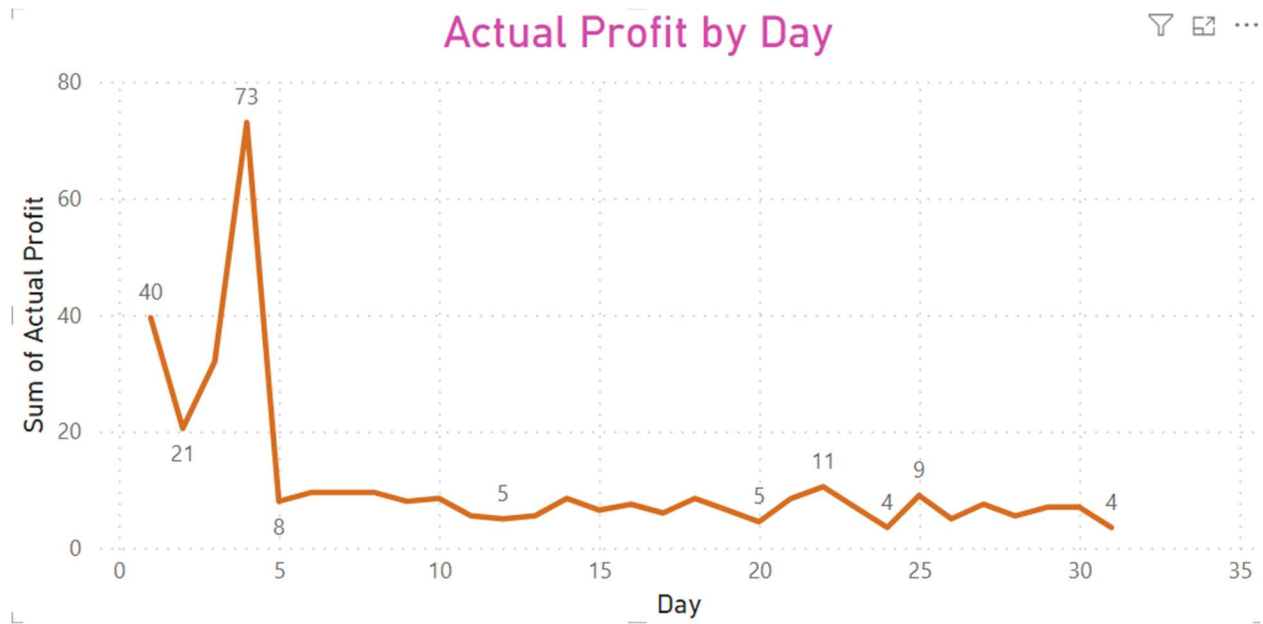


Chart 3: Profit by Day

Calories by Item

The below Clustered bar chart shows the average calorific value for each Item sold during the Basketball game sales. The x-axis represents the average calories and y-axis represents the list of items. From the below chart, the highest calorific value is for Nachos with 560 calories, while Soda with 120 calories.

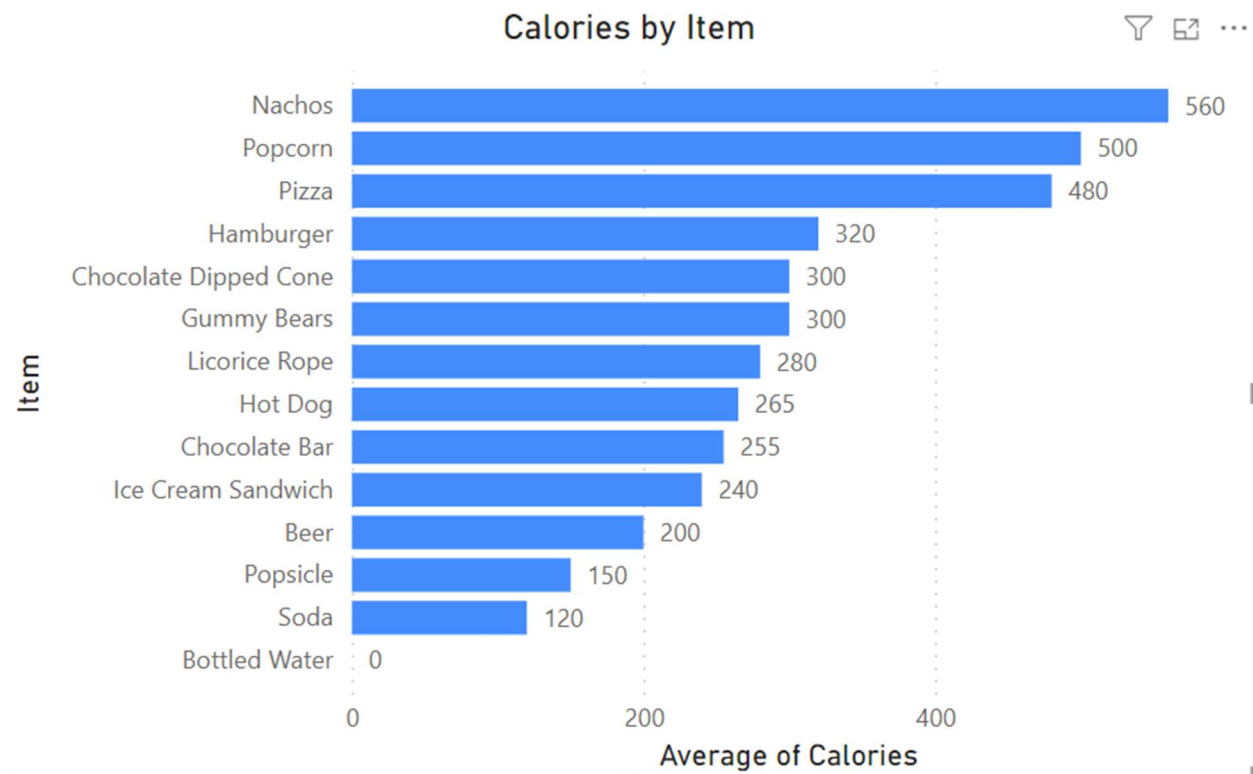


Chart 4: Calories by Item

Conclusions

Data visualization transforms complex datasets into insightful visuals, enabling better comprehension, communication with the utilization of Power BI data on the Basketball game sales numbers which brings the data to life in a visually appealing and insightful way.