

# Looker Studio Capstone Project

## Dashboard Structure

### *Page 1: Overview & Navigation*

- **Purpose:** Provide a summary of key metrics and offer navigation buttons to detailed analysis pages.

#### Key Sections:

##### 1. Header:

- Title: "Smartphone Market Analysis Dashboard"
- Subtitle: "An overview of smartphone trends, features, and performance insights"

##### 2. Key Metrics Cards:

- **Total Number of Models:** Total count of unique smartphone models.
- **Average Price:** The average price of all smartphones.
- **Average Rating:** The overall average user rating.
- **5G Adoption Rate:** Percentage of 5G smartphones in the dataset.
- **Top Brand by Average Rating:** Brand with the highest average rating.

##### 3. Data Overview Charts:

- **Brand Distribution:** Pie chart showing the percentage of smartphones by brand.
- **Price Range Distribution:** Histogram or bar chart showing the count of smartphones in different price ranges (e.g., low, mid, high).
- **Rating Distribution:** Bar chart displaying the count of models by avg\_rating ranges.

##### 4. Navigation Buttons:

- **Button 1:** "Market Segment Analysis"
- **Button 2:** "Performance & Price Analysis"
- **Button 3:** "Feature Analysis (Camera, Battery, Memory)"
- **Button 4:** "User Satisfaction Analysis"

### *Page 2: Market Segment Analysis*

- **Purpose:** Provide insights into smartphone market segments based on brand, price, and 5G availability.

#### Visualizations:

1. **Brand vs. Average Rating:** Bar chart comparing avg\_rating across different brands.
2. **5G vs. Non-5G Models:** Pie chart showing the distribution of 5G and non-5G smartphones.
3. **Price Range Analysis:** Stacked bar chart showing the number of models in different price ranges for each brand.
4. **Top 5 Brands by Sales (if sales data is available):** Horizontal bar chart with the top 5 brands based on avg\_rating.

#### Navigation:

- "Back to Overview" button.

### Page 3: Performance & Price Analysis

- **Purpose:** Analyze the relationship between smartphone pricing and their features.

#### Visualizations:

1. **Price vs. Average Rating Scatter Plot:** Highlights if higher prices lead to better ratings.
2. **Processor Analysis:** Bar chart showing avg\_rating by processor\_brand and num\_cores.
3. **Battery Capacity & Fast Charging Impact:** Box plot comparing avg\_rating based on battery capacity and fast charging availability.

#### Navigation:

- "Back to Overview" button.

### Page 4: Feature Analysis (Camera, Battery, Memory)

- **Purpose:** Provide in-depth analysis of key features that influence customer preferences.

#### Visualizations:

1. **Camera Quality Impact:** Scatter plot showing the relationship between primary\_camera\_rear megapixels and avg\_rating.
2. **Battery Life vs. Customer Rating:** Line chart showing avg\_rating based on battery\_capacity.
3. **RAM & Internal Memory Analysis:** Bar chart comparing avg\_rating across different RAM and internal memory sizes.

#### Navigation:

- "Back to Overview" button.

## *Page 5: User Satisfaction Analysis*

- **Purpose:** Analyze factors affecting user satisfaction and overall ratings.

### **Visualizations:**

1. **Average Rating by OS (iOS vs. Android):** Bar chart showing avg\_rating comparison between different operating systems.
2. **Screen Size & Refresh Rate Impact:** Heatmap showing the avg\_rating based on different screen sizes and refresh rates.
3. **Correlation Analysis:** Correlation matrix to identify features with the highest impact on avg\_rating.

### **Navigation:**

- "Back to Overview" button.

### **Additional Tips:**

- **Interactive Filters:** Allow users to filter by brand, price range, 5G availability, and rating range across all pages.
- **Tooltips:** Add tooltips to visualizations for more detailed information on hover (e.g., showing exact values and model names).
- **Export Options:** Provide export buttons for users to download specific data insights as CSV or Excel files.