**The step-by-step process to design an HR analytics dashboard in Power BI, focusing on creating KPIs, designing charts, and adding interactivity.**

**Steps to Create the Dashboard**

**1. Designing KPIs**

**1.1 Overall Employees (First KPI)**

1. Select the **Card** from the visualization pane.
2. Drag the Employee Count field into the **Fields** section.
3. Adjust size and background:
   * Go to the **Format** pane > **Canvas Background** > Set color and transparency.
4. Customize the card:
   * Turn off the **Category Label**.
   * Go to **General** > **Title**, and update the title text (e.g., "Overall Employees"). Customize font, size, and alignment.
   * Under **Properties**, adjust height and width.
   * Add a border:
     + Go to **Effects** > **Border**. Set color and adjust corner rounding.
5. First KPI is ready.

**1.2 Attrition (Second KPI)**

1. Create a conditional column:
   * Go to **Add Column** > **Conditional Column**.
   * Name it Attrition Count and set the condition:
     + If Attrition = "Yes", then output 1; otherwise, 0.
   * Change the datatype of the Attrition Count column to **Whole Number**.
2. Drag the Attrition Count field into the card.

**1.3 Attrition Rate (Third KPI)**

1. Create a new measure:
   * Right-click on the HR Data table > **New Measure**.
   * Use the formula:

Attrition Rate = SUM('HR Data'[Attrition Count]) / SUM('HR Data'[Employee Count])

1. Drag the Attrition Rate field into the card and format it as a percentage.

**1.4 Active Employees (Fourth KPI)**

1. Create a new measure:

Active Employees = SUM('HR Data'[Employee Count]) + SUM('HR Data'[Attrition Count])

1. Drag the Active Employees field into the card.

**1.5 Average Age (Fifth KPI)**

1. Drag the Age field into the card.
2. Change the aggregation to **Average** in the fields dropdown.
3. Format the decimal places to 0 in the **Callout Value** section.

**2. Designing Charts**

**2.1 Pie Chart (Department-Wise Attrition)**

1. Select the **Pie Chart** visualization.
2. Set the fields:
   * Legend: Department.
   * Values: Sum of Attrition Count.
3. Customize:
   * Change the title to "Department-Wise Attrition".
   * Adjust height, width, background, border, and font color.

**2.2 Frequency Chart (Employees by Age Group)**

1. Select the **Column Chart** visualization.
2. Set the fields:
   * X-Axis: CF\_Age Band.
   * Y-Axis: Employee Count.
   * Legend: Gender.
3. Customize:
   * Sort by age band or employee count.
   * To sort by age band, create a **Conditional Column** (Sort Age) and assign serial numbers to each age group.

**2.3 Heat Map (Job Satisfaction Rating)**

1. Select the **Matrix Chart** visualization.
2. Set the fields:
   * Rows: Job Role.
   * Columns: Job Satisfaction (Rating).
   * Values: Sum of Employee Count.
3. Customize:
   * Turn off **Row Subtotals**.
   * Apply background colors for a heat map effect in **Cell Elements**.

**2.4 Bar Chart (Education Field-Wise Attrition)**

1. Select the **Bar Chart** visualization.
2. Set the fields:
   * Y-Axis: Education Field.
   * X-Axis: Sum of Attrition Count.
3. Customize:
   * Turn off the X-Axis title.

**2.5 Donut Charts (Attrition Rate by Gender and Age Group)**

1. Select the **Donut Chart** visualization.
2. Set the fields:
   * Legend: Gender.
   * Values: Sum of Attrition Count.
   * Details: CF\_Age Band.
3. Add filters:
   * Create five copies of the chart for different age groups:
     + Under 25, 25-34, 35-44, 45-54, Above 55.
   * Apply filters for each age group using the **Filter Pane**.
4. Add a small card with Attrition Count to the center of each donut chart.

**3. Adding Filters and Interactivity**

**3.1 Title for Dashboard**

* Add a **Text Box** and set the title as "HR Analytics Dashboard". Format as needed.

**3.2 Slicer**

* Add a slicer for Education and format it as horizontal.

**3.3 Interactivity**

* Enable interactivity:
  + Click on a chart, go to **Format** > **Edit Interactions**.
  + Set **Filter** or **Highlight** for other visuals.
  + Disable interactions if not required by unchecking the edit interactions option.