**Expanded Sample Dataset Features:**

| **Column Name** | **Description** |
| --- | --- |
| site\_id | The identifier for different e-commerce platforms (e.g., Desktop, Mobile). |
| date | The date for each data point, typically collected daily or hourly. |
| kpi\_name | Name of the Key Performance Indicator (e.g., sales, page\_views). |
| kpi\_value | The actual value of the KPI on the given day. |
| region | The geographical region (e.g., US, EU, APAC) of the site. |
| device\_type | The type of device used (e.g., Desktop, Mobile, App). |
| is\_holiday | Boolean flag indicating if the date is a holiday (0 = No, 1 = Yes). |
| traffic\_source | The source of traffic (e.g., Organic, Paid, Referral, Social Media). |
| avg\_session\_duration | Average duration of user sessions on the site (in seconds). |
| bounce\_rate | Percentage of visitors who leave the site after viewing only one page. |
| cart\_abandonment\_count | Number of users who added items to their cart but did not complete the purchase. |
| checkout\_attempts | Number of checkout attempts made by users on that day. |
| new\_vs\_returning | Ratio of new users to returning users visiting the site (e.g., New:Returning). |
| customer\_feedback\_score | Average feedback score given by customers (on a scale of 1 to 5). |
| promotional\_activity | Indicates if there was a promotion running on that date (0 = No, 1 = Yes). |
| inventory\_level | Number of items in stock for popular products (could affect sales). |

**Sample Data with Expanded Features:**

Here’s an example of what the dataset might look like with these features included:

csv

Copy code

site\_id,date,kpi\_name,kpi\_value,region,device\_type,is\_holiday,traffic\_source,avg\_session\_duration,bounce\_rate,cart\_abandonment\_count,checkout\_attempts,new\_vs\_returning,customer\_feedback\_score,promotional\_activity,inventory\_level

1,2024-01-01,sales,1500,US,Desktop,0,Organic,180,45.0,200,150,2:1,4.2,0,500

1,2024-01-02,sales,2000,US,Desktop,0,Paid,160,50.0,150,160,3:2,4.5,0,400

1,2024-01-03,sales,1800,US,Desktop,0,Referral,170,48.0,250,140,1:1,4.0,0,300

1,2024-01-04,sales,3000,US,Desktop,1,Social Media,220,30.0,180,180,1:2,4.8,1,600

1,2024-01-05,sales,1600,US,Desktop,0,Organic,190,47.0,220,150,2:3,3.5,0,350

2,2024-01-01,page\_views,10000,EU,Mobile,0,Paid,120,60.0,300,250,2:1,4.1,0,800

2,2024-01-02,page\_views,11000,EU,Mobile,0,Referral,130,55.0,320,240,3:2,4.6,0,750

2,2024-01-03,page\_views,10500,EU,Mobile,0,Social Media,125,62.0,280,230,1:1,4.3,0,720

2,2024-01-04,page\_views,15000,EU,Mobile,1,Organic,150,40.0,350,300,1:2,4.9,1,900

2,2024-01-05,page\_views,9800,EU,Mobile,0,Paid,135,58.0,310,220,2:3,3.8,0,700

3,2024-01-01,conversion\_rate,0.025,APAC,App,0,Referral,110,65.0,50,40,1:1,4.0,0,500

3,2024-01-02,conversion\_rate,0.028,APAC,App,0,Social Media,115,68.0,60,45,2:2,4.7,0,550

3,2024-01-03,conversion\_rate,0.022,APAC,App,0,Organic,108,67.0,40,38,1:1,4.1,0,480

3,2024-01-04,conversion\_rate,0.035,APAC,App,1,Paid,130,45.0,80,60,1:3,4.8,1,620

3,2024-01-05,conversion\_rate,0.020,APAC,App,0,Referral,112,66.0,70,50,2:1,4.2,0,530

**Key Features Explained:**

1. **traffic\_source**: Different sources through which users arrive at the site; can affect the user behavior and KPI values.
2. **avg\_session\_duration**: A longer session duration may correlate with higher sales; useful for analyzing user engagement.
3. **bounce\_rate**: A high bounce rate can indicate issues with site content or user experience.
4. **cart\_abandonment\_count**: Tracking this helps identify potential issues in the checkout process.
5. **checkout\_attempts**: Indicates how many times users tried to complete a purchase, which can signal friction points.
6. **new\_vs\_returning**: Understanding the balance between new and returning users can provide insights into customer loyalty.
7. **customer\_feedback\_score**: Can help correlate user satisfaction with KPI performance.
8. **promotional\_activity**: Assess the impact of promotions on various KPIs.
9. **inventory\_level**: Stock levels can directly impact sales; low inventory may lead to lost sales opportunities.