

## 6. DashBoard :

Let's design a dashboard for college food services that brings together student preferences, meal popularity, and food waste data. Below is a ready-to-build dashboard layout and what it can include, along with options to build it in Excel, Power BI, or Python.

### Dashboard Objective:

To help dining services staff and administrators:

Understand student dietary trends

Track popular and unpopular meals

Reduce food waste

Monitor feedback and satisfaction

### DASHBOARD LAYOUT (Sections)

#### 1. Top-Level KPIs (Key Performance Indicators)

Show these at the top:

Metric	Example
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🍽️ Total Meals Served (This Week)	4,200
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🌱 % Plant-Based Meals	42%
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🗑️ Total Food Waste (kg)	123 kg
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★ Average Student Rating	4.2 / 5
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## 2. Meal Popularity (Bar Chart)

Title: Top 10 Meals by Sales

X-axis: Meal names

Y-axis: Times served

Tooltip: Avg rating

 Data: Join menu\_items + transactions + feedback

## 🌡️ 3. Waste Trends (Heatmap or Line Chart)


Title: Daily Waste by Meal Type

X-axis: Date

Y-axis: Meal Category or Name

Color: Waste % or waste weight

 Data: inventory\_waste.csv

 4. Student Feedback (Ratings & Word Cloud)

Box Plot or Bar Chart: Ratings by category

Word Cloud: From comment text (optional with Python or Power BI custom visual)

 5. Dietary Preference Breakdown (Pie or Donut Chart)

Vegan / Vegetarian / Omnivore / Allergies

 Data: students.

 6. Meal Demand Over Time (Line Chart)

Title: Meal Transactions per Day/Hour

Helps plan for peak dining times

 Data: transactions.

 Build Options (Pick One)

☒ Option 1: Excel Dashboard

Use pivot tables for data aggregation

Insert bar/pie/line charts using built-in chart tools

Easy to customize for basic use ☒ I can generate a working .xlsx template for you

### ☒ Option 2: Power BI Dashboard

Drag and drop interactive visuals

Slicers for date ranges, dorms, diet types

Can connect to live Google Sheets or databases ☒ I can help design the Power BI layout with sample data

### ☒ Option 3: Python Dashboard (Plotly Dash / Streamlit)

Ideal for web apps or custom logic

Use Python for full control, analytics, and visuals ☒ I can provide a starter Python script with interactive charts

### Next Step: What Do You Want?

Please choose:

 Tool (Excel / Power BI / Python)

 Do you want mock data files included?

 Do you want a downloadable template or code?

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