📈 Data-to-Insight AI Analyst

Upload a CSV or Excel file to automatically generate trends, anomalies, and business recommendations.

😶 Agent (Remote Sandbox)

Run the analysis fully inside an E2B sandbox. Prefer a dataset URL/presigned URL so the sandbox downloads the file directly. The dataset never goes to the LLM.

Dataset URL (preferred)   Drag
                                          Or upload to sandbox
                                                           and
| https://.../your-data.csv or .xlsx | ☁   drop
                                                           file
                                                           here   [Browse files]

                                                 📄 fake_we... 22.5KB ✕

> System check (deployment readiness)

Best place to run E2B: from this server-side app (Streamlit process). Provide presigned dataset URLs so the sandbox downloads the file directly over HTTPS.

Analysis Type

Select analysis type   ⍰

| 🔬 Deep Pattern Analysis (Segment-level, Cross-dimensional)   ⌄ |

☑ Auto-run when input changes

[Run Agent in E2B Sandbox]

📋 Key Insights

The main metric is revenue, totaling over $4.1 million across the dataset.

Weekly revenue shows a positive growth trend with a slope of 6288.71 indicating increasing sales over time.

Week-over-Week revenue change for the latest week is 3.01%, showing sustained growth.

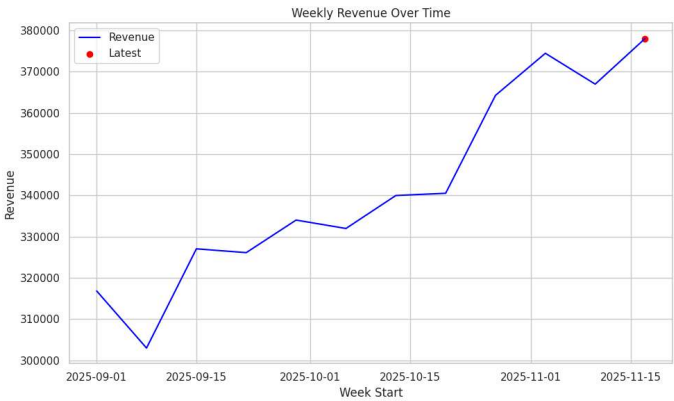No significant anomalies were detected in weekly revenue data (0 anomalies found).

Among groups, Region A leads with a revenue increase of `10,291 WoW, Online channel leads with` `16,959 increase.`
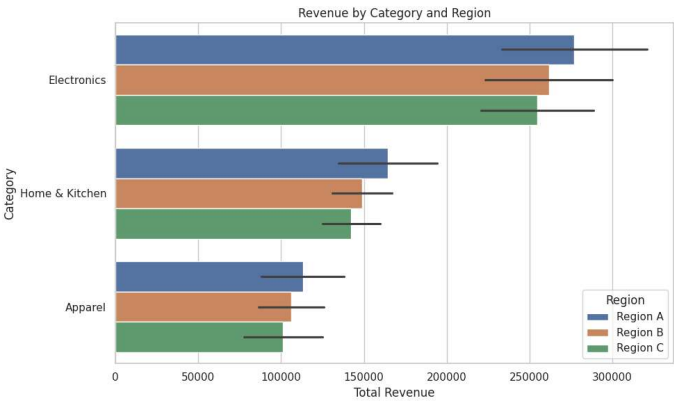
🎯 Recommendations

➡️ Focus marketing and sales efforts on the Online channel, which shows the highest WoW revenue gains.

➡️ Investigate opportunities to further leverage strong-performing Region A and Home & Kitchen category for continued growth.

📊 Visualizations

📈 Trend Over Time (with Anomalies)

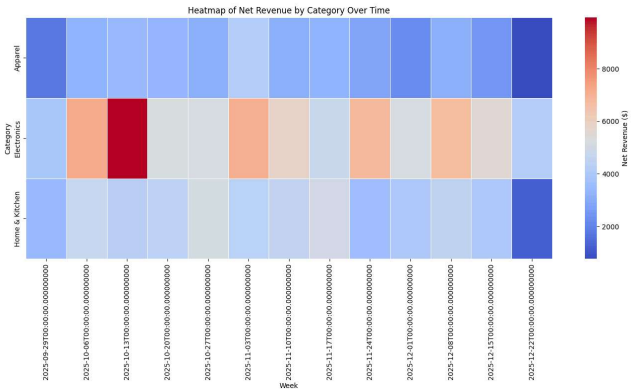📊 Segment Performance

⌄ 👁 AI Analysis of This Chart	⌄ 👁 AI Analysis of This Chart

1. **Overall Trend**: The overall trend in the time series chart is increasing, as indicated by the rise in revenue from around 310,000 in early September 2025 to nearly 380,000 by mid-November 2025.

2. **Key Patterns**: There is no clear seasonality or cyclical pattern evident in the given timeframe, but there is a consistent upward trajectory with some fluctuations.

3. **Anomalies**: A notable dip occurs around September 2025, where revenue drops to approximately 300,000 before recovering and continuing its upward trend.

4. **Business Insight**: The increasing trend in revenue suggests strong business growth. However, the dip in early September indicates potential vulnerability or an external factor affecting performance during that period, necessitating further investigation to mitigate future impacts.

1. **Top Performers**:

   - **Category**: Electronics
   - **Region**: Region A
   - **Value**: Approximately 300,000

2. **Underperformers**:

   - **Category**: Apparel
   - **Region**: Region C
   - **Value**: Approximately 100,000

3. **Gaps**:

   - **Difference**: The gap between the top performer (Electronics, Region A) and the underperformer (Apparel, Region C) is roughly 200,000.

4. **Recommendation**:

   - Focus on boosting Apparel in Region C through targeted marketing and promotions.
   - Investigate and replicate strategies from Electronics in Region A to improve performance in other segments.

🔬 Deep Pattern Analysis

🗺️ Performance Heatmap

⌄ 😑 AI Analysis of Heatmap

1. **Hot Spots**:

   - The highest values are in the "Electronics" category, particularly in the week of 2025-10-06T00:00:00.00, marked by a dark red color.

2. **Cold Spots**:

   - The lowest values are in the "Apparel" and "Home & Kitchen" categories, especially towards the end of the timeline (around 2025-12-22T00:00:00.00), shown by the dark blue color.

3. **Patterns**:

   - **Row Pattern**: "Electronics" consistently shows higher values compared to "Apparel" and "Home & Kitchen."
   - **Column Pattern**: Early October shows a peak in revenue, particularly in electronics, followed by a gradual decline across categories.
   - "Apparel" and "Home & Kitchen" are mostly lower, with minimal variation.

4. **Insight**:

   - The heatmap reveals a strong performance in the "Electronics" category during early October, potentially indicating a successful promotional event or a seasonal trend. Conversely, "Apparel" and "Home & Kitchen" consistently show lower performance, suggesting these categories may require strategic changes to boost revenues. The downward trend across all categories

towards the end of December suggests
a seasonal decline, possibly following
the holiday shopping season.

> Artifacts (debug)

> Raw insights.json

> Agent run log