



# Data-to-Insight AI Analyst

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

## ② 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)

<https://.../your-data.csv or .xlsx>

Drag  
Or upload to sandbox  
and  
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



Basic Data Analysis (Trends, WoW, Anomalies)



Auto-run when input changes

Run Agent in E2B Sandbox



## Executive Business Summary

## Executive Overview

The overall revenue performance demonstrates a steady upward trend with weekly increases averaging around 6289 dollars. Recent weeks affirm healthy momentum, evidenced by a +3.01% week-over-week growth in revenue. No significant anomalies were detected, suggesting consistent sales patterns and stable operations. However, deeper group-level analysis reveals opportunities and risks, as Region A Electronics Online segment surged by over 10,000, whereas Region C Apparel Online experienced a notable decline of above 5,000 last week.



## Key Insights

Total weekly revenue is currently around \$378,029, up 3.01% from the previous week.

Revenue growth trend is positive with an estimated weekly increase of approximately \$6289.

No weekly revenue anomalies were observed across the dataset period.

The top performing group last week was Region A Electronics Online with an increased revenue of \$10,090.50 week-over-week.

The group Region C Apparel Online saw the largest decline with a revenue drop of \$5,343.67 last week.



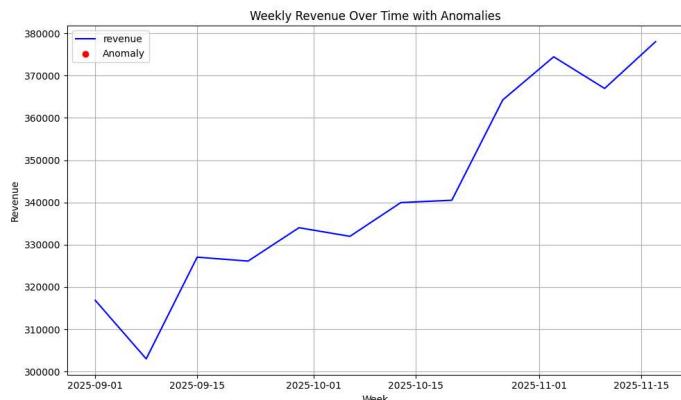
## Recommendations

- Investigate drivers behind the revenue decline in Region C Apparel Online to mitigate potential risks.

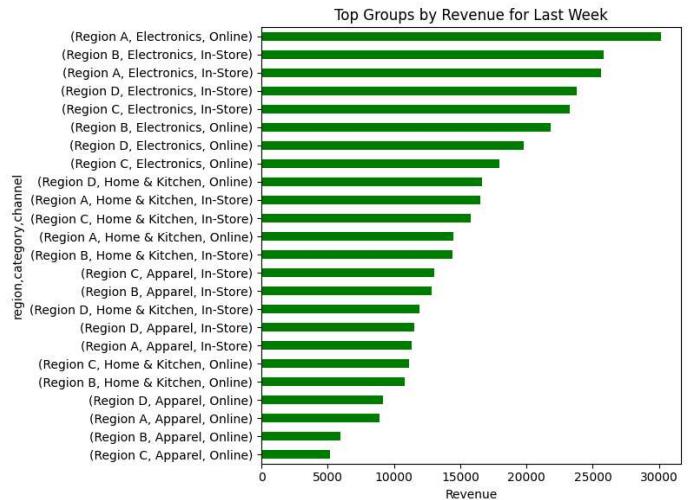
➡ Leverage successful strategies from the Region A Electronics Online segment to replicate growth in other regions or categories.



# Visualizations



Line Trend Over Time (with Anomalies)



Bar Segment Performance

▼ ⓘ AI Analysis of This Chart

▼ ⓘ AI Analysis of This Chart

## 1. Top Performers:

- **(Region A, Electronics, Online)**: Highest revenue segment.
- **(Region B, Electronics, In-Store)**: Second highest.

## 2. Underperformers:

- **(Region C, Apparel, Online)**: Lowest revenue segment.
- **(Region B, Apparel, Online)**: Next lowest.

## 3. Gaps:

- The revenue gap between the top segment, **(Region A, Electronics, Online)**, and the bottom segment,

**Overall Trend:** The overall trend is increasing, with revenue rising from just above 300,000 in early September 2025 to nearly 380,000 by mid-November 2025.

**Key Patterns:** There is no clear seasonality or cycle observed, but the data shows consistent upward movement with some fluctuations, indicating potential growth phases.

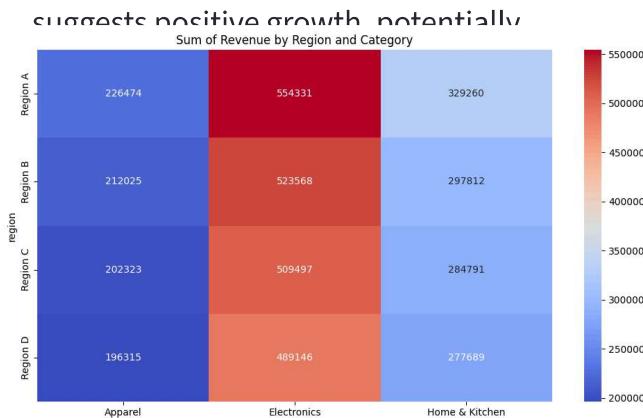
**Anomalies:** A notable dip occurs around mid-September 2025, marked as an anomaly, where revenue briefly drops before rising again.

(Region C, Apparel, Online), is substantial (approximately 27,000).

#### 4. Recommendation:

- Focus on enhancing the "Apparel" category, particularly online channels, across all regions. Strategies might include marketing efforts, promotions, or optimizing the online shopping experience.
- Investigate successful strategies in the "Electronics, Online" segment of Region A to potentially apply to underperforming segments.

## Deep Pattern Analysis



Performance Heatmap

#### ▼ ⚪ AI Analysis of Heatmap

#### Analysis of the Heatmap:

##### 1. Hot Spots:

- The cell with the highest value is in the **Electronics** category for **Region A** with a value of **554,331**.

##### 2. Cold Spots:

- The cell with the lowest value is in the **Apparel** category for **Region D** with a

value of 196,315.

### 3. Patterns:

- **Row Pattern:** Across all regions, the **Electronics** category consistently has the highest revenue compared to **Apparel** and **Home & Kitchen**.
- **Column Pattern:** **Region A** shows the highest revenue for the Electronics category, while **Region D** consistently shows the lowest revenue across all categories.
- **Cluster Pattern:** The Electronics category generally forms a cluster of higher values compared to the other categories, indicating it is the strongest category overall.

### 4. Insight:

- **Cross-Dimensional Insight:** The Electronics category is the most lucrative across all regions, suggesting a strong demand or higher pricing strategy in this segment. Conversely, the Apparel category shows the weakest performance, especially in Region D, which suggests potential issues related to market reach, product appeal, or competition.
- Companies may benefit from focusing efforts on expanding Electronics sales, especially in regions with lower performance like Region D, while evaluating strategies for improving Apparel sales to capture untapped potential.

# 🎯 Recommended Next Actions

Prioritized actions based on data analysis:

## URGENT

Assign data analysts to perform a detailed root cause analysis on the sales drop in Region C Apparel Online segment within 2 weeks.

 **Expected Impact:** Timely remediation can prevent further revenue losses and improve customer retention.

## HIGH

Collaborate with marketing and sales teams to identify tactics driving success in Region A Electronics Online and scale across similar groups over the next 1 month.

 **Expected Impact:** Accelerated growth and increased market share in high potential segments.

## MEDIUM

Continue weekly monitoring of revenue trends and anomalies with automated alerts.

 **Expected Impact:** Proactive response to emerging issues or opportunities.

➤ Artifacts (debug)

➤ Raw insights.json

› Agent run log

## 💬 Chat with Your Data

Ask follow-up questions, request visualizations, or explore patterns

›💡 Example Questions



What's causing the decline in Region B?



The analysis context provided does not mention a decline in Region B. Instead, Region B shows significant week-over-week revenue changes, particularly in the Electronics category and through both In-Store and Online channels, with substantial percentage increases. The detected pattern from the week starting on 2025-09-01 shows revenue of `25,145.73` from In-Store channel and `17,452.44` from the Online channel, both with extremely high week-over-week percentage changes.

If you suspect a recent decline, it might not be captured in the current data context. You might consider examining recent weekly data for Region B or specific channels/categories within this region to identify any recent downward trends or changes. If additional data is available, I can help you analyze it further.



Clear Chat



Export Chat

Ask a question about your data...

