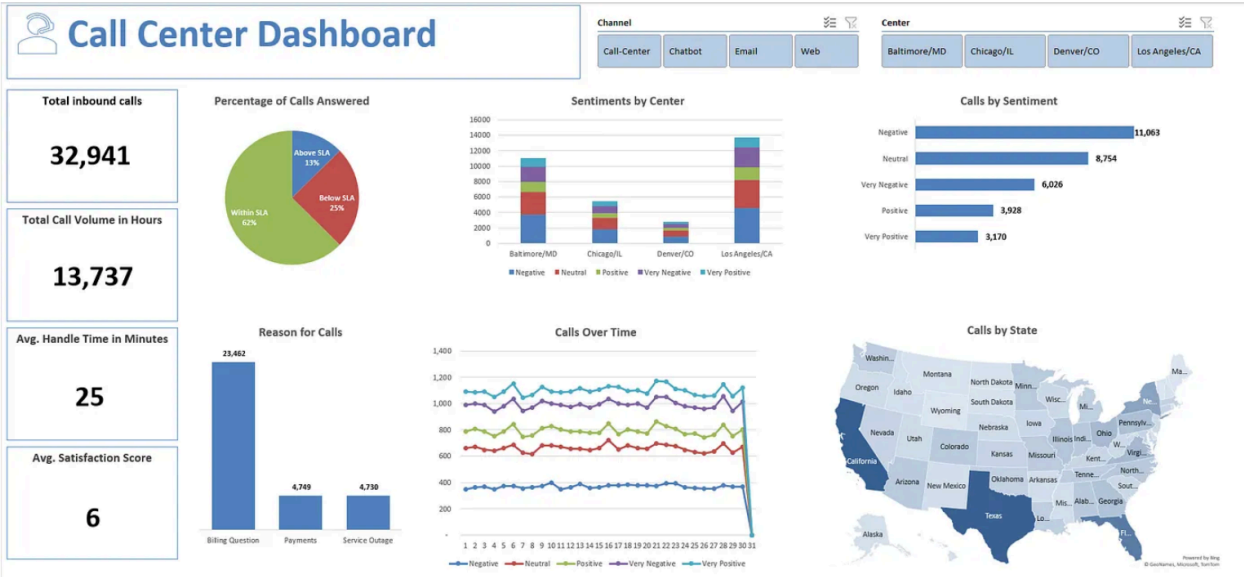
CaseStudy

Project Brief: CX Access & Operational Intelligence



Company: Thriveworks (Case Study)

Objective: Evolving Call Center Analytics from Excel Prototypes to a High-Performance Looker Semantic Layer.

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1. Executive Summary

Following my discussion with **Nikki DaSilva** regarding the Business Analytics role, I've structured this project to demonstrate a "Prototype-to-Production" workflow. At a high-growth mental health company like Thriveworks, the priority is transforming raw call data into trusted, actionable insights that allow leadership to optimize patient intake and agent performance.

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2. The Two-Dashboard Strategy

Dashboard A: The Excel(Leveraging Google Sheets) Operational Prototype

- Focus: Immediate "Speed to Insight" and Daily Cadence.
- Key Visuals: Hourly Call Volume, SLA Thresholds, and Abandonment Rates.
- Purpose: To serve as a sandbox for testing new logic (e.g., defining "Successful Intake" vs. "Initial Inquiry") before committing to code.

Dashboard B: The Looker Production Environment

- Focus: Scalability, Governance, and Self-Service.
- Key Visuals: Long-term Cohort Trends, Agent Performance Quartiles, and Regional Heatmaps.
- Purpose: To provide VPs and Directors a "Single Source of Truth" where definitions are locked in via LookML, ensuring Finance and Operations are always looking at the same numbers.

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3. Metrics for Mental Health Excellence

I've prioritized metrics that impact Thriveworks' ability to serve clients effectively:

KPI	Thriveworks Business Impact	Looker (LookML) Implementation
SLA (Speed to Answer)	Ensures patients in need aren't left waiting.	Measure: % of calls answered < 30s
Conversion Rate	Measures the transition from "Caller" to "Scheduled Appointment."	Measure: Total Appointments / Total Inbound
AHT (Handle Time)	Balances clinical empathy with operational efficiency.	Dimension Group: Duration by Minute/Second
Agent Quartiles	Identifies top-tier intake specialists for peer-mentoring.	Logic: NTILE(4) ranking based on Conversion %

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4. The Looker Architecture (The "Nikki" Connection)

To meet the "Looker experience" requirement, this project utilizes a professional development workflow:

- Centralized LookML: Rather than buried Excel formulas, I use a central view file to define KPIs. This ensures that if the SLA definition changes, I update it in one place, and every dashboard at Thriveworks updates automatically.
- User-Centric Explores: I've designed the Explore layer so that Workforce Management (WFM) can "self-serve" by dragging and dropping dimensions like Agent Team or Call Type without needing a SQL request.
- Actionable Alerts: Built-in Looker schedules that push "Low SLA" alerts to Slack, allowing managers to adjust staffing in real-time as call volumes spike.

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5. Strategic Recommendations

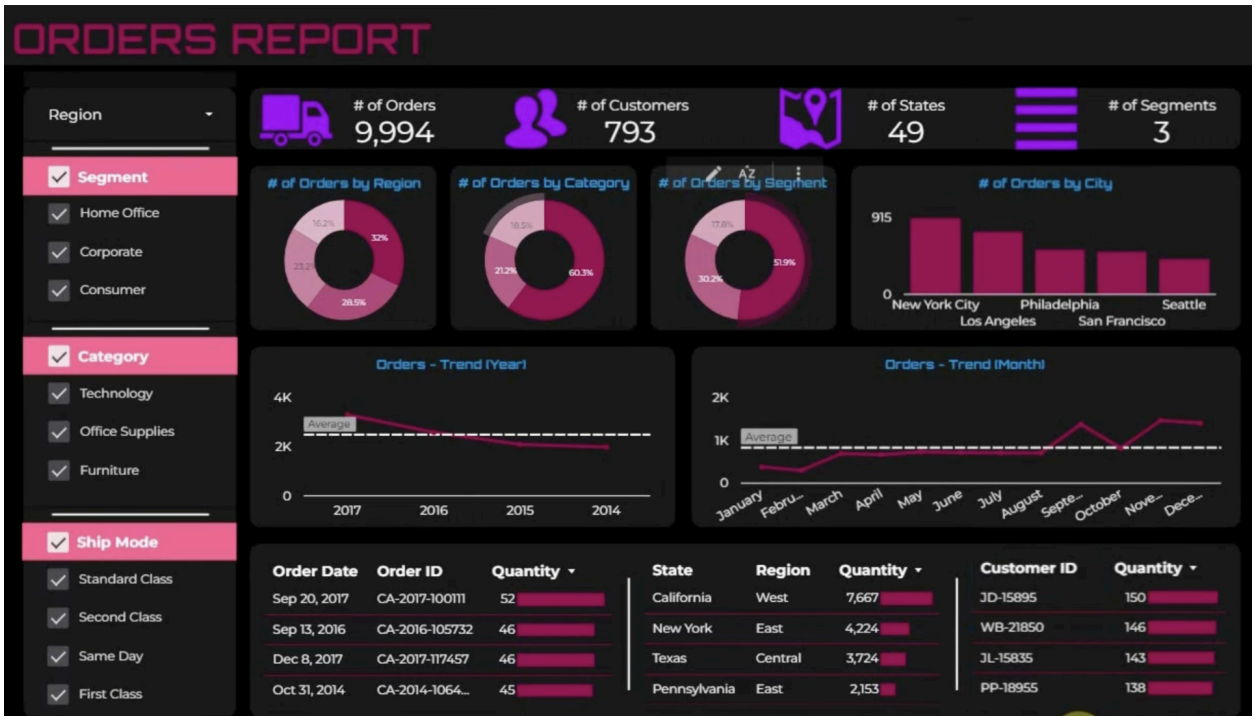
Based on the data trends in this project, I focus on two high-value wins:

1. Intake Optimization: Identifying peak hours where "Abandonment Rate" spikes, suggesting a shift-rebalance to ensure no patient call goes unanswered.
2. Conversion Deep-Dive: Analyzing the "Top Quartile" of agents to see which call scripts or routing paths lead to the highest rate of scheduled mental health sessions.

Looker_Experience

The Vision: Transitioning to Managed Data

While the Excel prototype serves as our operational "sandbox," this Orders & Performance Report demonstrates the production-level scalability required for Thriveworks' growth. It transforms fragmented data into a governed environment where every stakeholder—from Regional Directors to the VP of Finance—is aligned.



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1. Explaining the Dashboard (The Production Look)

This dashboard represents a high-level view of customer access and geographic distribution.

- Primary Volume Metrics: We are tracking 9,994 total orders across 793 unique customers and 49 states. In a Thriveworks context, this allows us to see exactly where our mental health services are most in demand.
- Market Segmentation: The donut charts break down access by Region (Western/Eastern/Central) and Customer Segment (Home Office, Corporate, Consumer). This is critical for identifying which outreach campaigns are successfully converting into clinical appointments.
- Geographic Density: The city-level bar chart identifies New York City, Los Angeles, and Philadelphia as high-volume hubs. This data informs staffing decisions—ensuring we have enough licensed providers in the regions with the highest patient density.

- Performance Narratives (Trends): The Orders Trend line charts allow us to compare yearly growth ($2014-2017$) against monthly seasonality. This helps leadership predict "The New Year Rush" or "Back-to-School" surges common in mental health.

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2. Multi-Platform Expertise (Power BI, Tableau, & Looker)

I don't just "build charts"; I build data architectures. Having worked across the "Big Three" BI tools, I understand their unique strengths:

- Power BI: Excellent for deep integration with Microsoft ecosystems and rapid DAX-based calculations.
- Tableau: The industry standard for high-fidelity, visual storytelling and complex exploratory data analysis.
- Looker (The Thriveworks Edge): Looker is unique because of LookML. Unlike the other two, Looker centralizes logic. If we change our definition of an "Active Patient," I change it in the code once, and it updates every dashboard across the company. This prevents the "my number doesn't match your number" meetings.

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3. Shortcomings & The Path to Improvement

Here is how I plan to improve the current workflow at Thriveworks by addressing common shortcomings (Probabilistics):

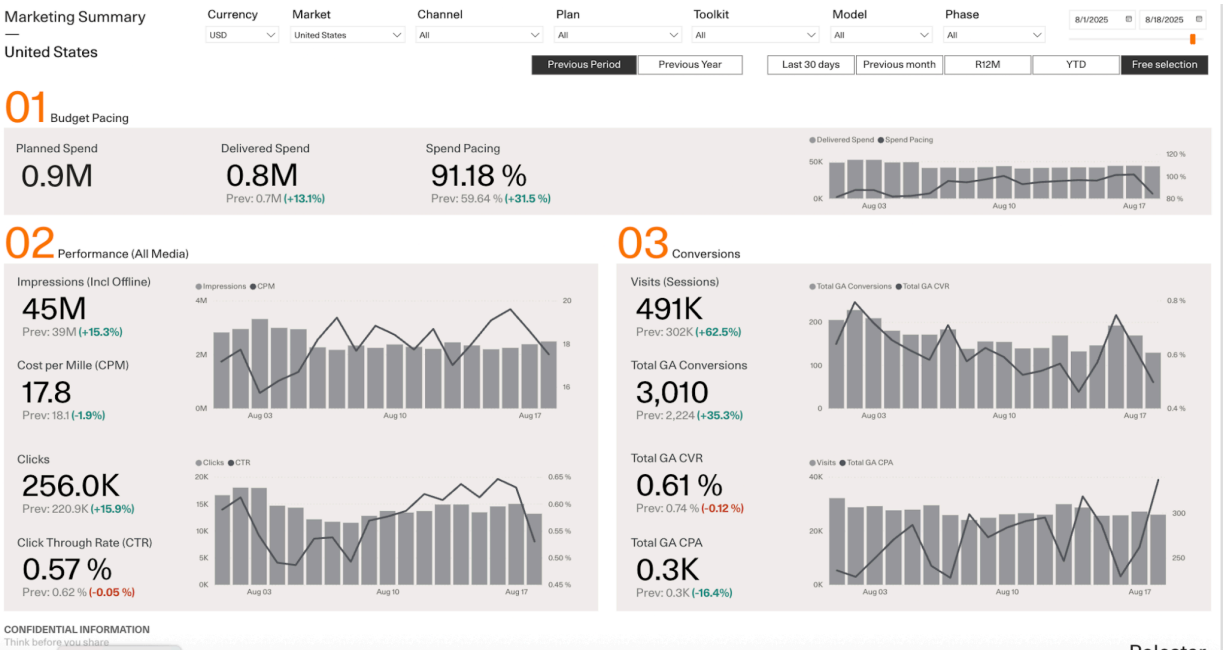
- Shortcoming: **Manual Cleaning Spikes**. As noted in my Excel project, handling "mixed formatting" (dates as text) is a manual drain.
    - The Improvement: Moving this logic into a Looker Persistent Derived Table (PDT). We automate the cleaning in SQL so the data is "born clean" for the end-user.
- Shortcoming: **Static "Snapshots."** Excel dashboards are only as good as the last refresh.
    - The Improvement: Implementing Scheduled Looks and Real-Time Alerts. If the SLA (Service Level Agreement) for patient callbacks drops below our threshold, Looker alerts the Team Lead in Slack immediately.
- Shortcoming: **Calculation Silos**. In many BI tools, formulas are "hidden" inside individual charts.

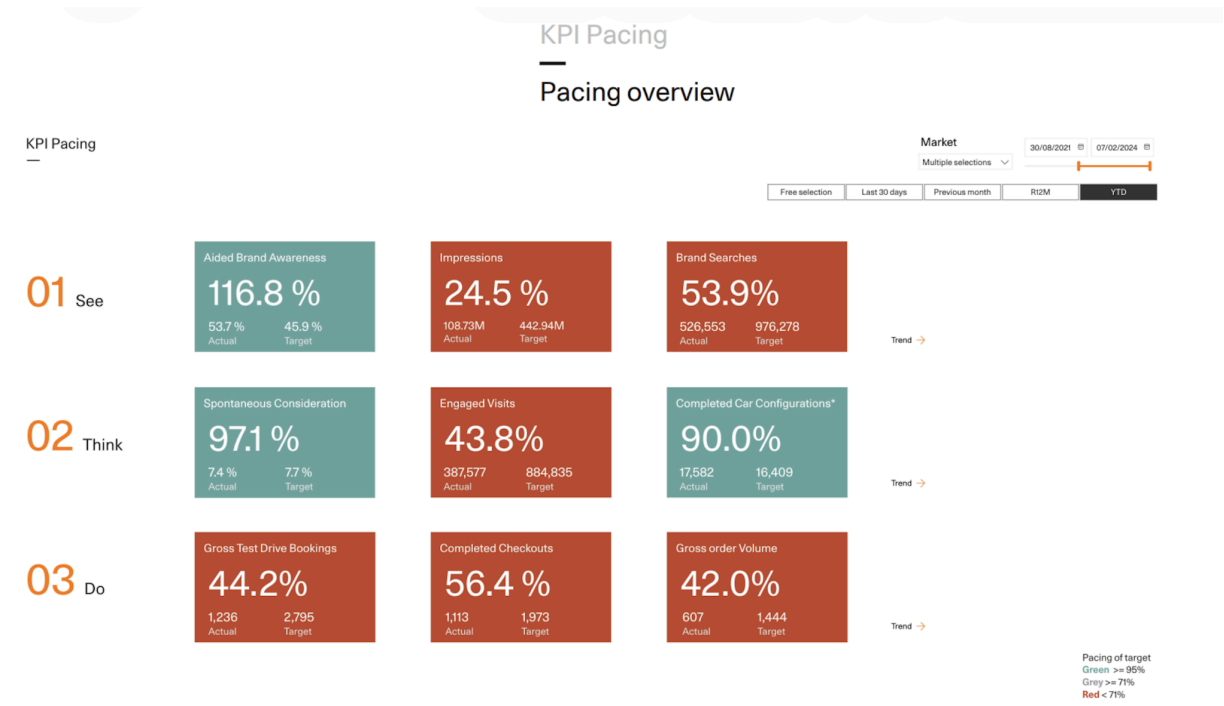
PowerBI_Experience

Cross-Platform Expertise: The BI "Big Three"

I bring a tool-agnostic approach to Thriveworks. I don't just "use" these tools; I architect them to solve specific business problems:

- Power BI (The Polestar Experience): I used Power BI to build a "Marketing Summary" and "KPI Pacing" overview by integrating Salesforce and Google Analytics data. I focused on:
    - Budget Pacing: Ensuring a $0.9M planned spend remained on track through real-time delivery tracking.
    - Conversion Optimization: Tracking Total GA CVR (0.61%) and Visits to correlate marketing spend with actual customer behavior.





- Tableau: I've utilized Tableau for high-fidelity storytelling where deep visual exploration of complex datasets is required.
- Looker (The "Thriveworks" Future): My preference for Looker stems from its LookML engine. It creates a "Source of Truth" that prevents data silos. Unlike Excel, where a formula can be accidentally changed in one cell, Looker's

code-based logic ensures every Director at Thriveworks is looking at the exact same $SLA\%$ calculation.

Financial & Strategic Operations

Beyond dashboarding, I understand the "P&L" side of business analytics. My background includes:

- OPEX Budgeting & Forecasting: Managing operational expenditures for Canada and the USA.
- Accrual Accounting: Utilizing subventions to ensure financial accuracy during forecasting cycles.
- Residual Value Assessment: Managing portfolios where long-term value projection is critical for risk mitigation.

Continuous Improvement: Overcoming Shortcomings

To ensure Thriveworks remains a leader in patient access, I focus on fixing these common process gaps:

1. Eliminating "Data Drudgery": In my Excel project, I noted that cleaning "Mixed Formatting" (text vs. date) is a manual bottleneck.
    - Improvement: I move this into the LookML layer using Persistent Derived Tables (PDTs) so the data is cleaned automatically before it ever reaches a dashboard.
2. Bridging Clinical & Operational Data: A common shortcoming is looking at "Call Volume" in a vacuum.
    - Improvement: I integrate Salesforce CRM data (like I did at Polestar) to see the full patient journey, from the first call to the 5th therapy session.
3. Proactive vs. Reactive Alerts: Static reports are often ignored.
    - Improvement: I set up Looker Alerts. If a specific center (like Baltimore or Chicago) falls Below SLA, the Director receives an immediate notification to adjust staffing.