#### 1. Total Conversions Over Time 📈

- **Observation**: Daily conversions range roughly between **10 and 25**, with occasional spikes above 20.
- **Trend**: Conversion counts **gradually increase later in the year**, with more frequent 20–25 conversion days from Q3 onward.

#### Insight:

- Conversion volume is improving overall, indicating increased campaign effectiveness.
- Despite daily fluctuations, the upward shift in the latter part of the year suggests cumulative optimization or seasonal gains.

#### 2. Monthly Performance Summary

(Monthly average for Conversions, Cost & Cost per Conversion)

#### Month Avg. Conversions Avg. Cost Avg. Cost per Conversion

Jan	16.5	221.9	14.40
Feb	16.7	220.1	13.43
Mar	16.9	224.7	13.89
Apr	17.4	232.3	14.00
May	16.8	208.2	12.90
Jun	17.7	230.2	13.56
Jul	18.4	223.1	12.47
Aug	17.16	219.2	13.49
Sep	18.8	228.2	12.59
Oct	19.0	224.8	12.32
Nov	18.2	219.5	12.51
Dec	18.94	221.3	12.09

# Insights:

- Conversions steadily increased from ~16 in Jan to ~19 in Oct-Dec.
- Cost per conversion dropped by 16% from ~14.4 in January to ~12.1 in December.
- Best months in terms of cost efficiency: May, July, October–December (< 13 avg cost/conv).

#### 3. Platform Comparison (Better CTR & Conversion Days)

- Better CTR Platform: Facebook led 303 days, AdWords only 62.
- Better Conversion Rate: Facebook outperformed AdWords on 365 days (every observed day).

# Insight:

**Facebook consistently outperforms AdWords** in both CTR and conversion efficiency—virtually every day.

# 4. Cost per Conversion Over Time

- Range: Daily cost/conv swung between **\$5 to \$28**, with greater volatility early in the year.
- Trend: Daily spikes are less frequent in later months, and rates stabilize between \$10-\$15.

#### Insight:

Reduction in volatility suggests **improved cost control**—possibly from campaign optimization or budget smoothing.

# 5. CTR Trends Over Time (FB vs AdWords)

- Facebook CTR consistently between 1.5–5.0%, with frequent peaks above 3%.
- AdWords CTR remained stable in the 0.8–1.8% range.

#### Insight:

Facebook draws significantly better engagement—**CTR remains 2–3× higher** than AdWords throughout the year.

# 6. Conversion Rate Trends Over Time (FB vs AdWords)

- Facebook Conversion Rate ranged approximately **22–40%**, with occasional peaks above 45%.
- AdWords Conversion Rate hovered between 8–18%.

# Insight:

When someone clicks, **Facebook is more likely to convert**—with conversion rates more than double compared to AdWords.

# 7. Correlation Heatmap

Key correlations identified:

- Total Clicks ↔ Total Conversions: strong positive correlation (~0.76) clicks strongly predict conversions.
- Total Cost  $\leftrightarrow$  Total Views: ~0.75 spend aligns with campaign reach.
- Cost per Click ↔ Conversion Rate: negative correlation (~-0.54 for Facebook, -0.64 for AdWords) — lower CPC tends to improve conversion efficiency.

# Insight:

- Clicks are a better driver of conversions than overall spend.
- Lower cost per click improves conversion efficiency, especially in Facebook campaigns.

# Summary: Key Campaign Insights

# 1. Conversion Trends

• Daily conversions improved (~10 to 25 conversions/day), with consistent monthly gains.

# 2. Cost Efficiency

• Monthly cost per conversion reduced from ~\$14.4 to ~\$12.1 (~16% improvement).

# 3. Platform Advantage

• **Facebook dominates**: higher CTR, better conversion rates, and more days with better performance than AdWords.

# 4. Align Spend with Engagement

• **Clicks outperform spend** as predictors of conversions. Optimize for engagement (clicks), not just budget.

# 5. Cost per Click Strategy

• Lower CPC correlates with higher conversion rates—focus on ad relevance and targeting to lower CPC.

# Recommendations for Next Steps

- Shift budget toward Facebook to leverage its superior performance.
- Focus on click-driven campaigns, optimizing ad targeting to reduce CPC and improve conversions.
- Monitor CPC volatility early in campaigns, and apply strategies that increased stability later in the year.
- Deep dive seasonal spikes (e.g., October spikes) to replicate successful campaign tactics.