In [15]:

```python
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns
from sklearn.linear_model import LinearRegression
from sklearn.model_selection import train_test_split
from sklearn.metrics import r2_score, mean_absolute_error

plt.style.use("ggplot")
np.random.seed(42)
```

In [16]:

```python
n = 100

data = pd.DataFrame({
    "date": pd.date_range(start="2025-01-01", periods=n, freq="D"),
    "source": np.random.choice(["Google", "Facebook", "LinkedIn", "Email"], n),
    "campaign": np.random.choice(["Winter", "Spring", "Summer", "Brand"], n),
    "country": np.random.choice(["USA", "UK", "Canada", "India"], n),
    "sessions": np.random.randint(50, 300, n),
    "conversions": np.random.randint(5, 80, n),
    "cost": np.random.uniform(500, 3000, n)
})

data["revenue"] = data["conversions"] * np.random.uniform(100, 600, n)

data.head()
```

Out[16]:

| | date | source | campaign | country | sessions | conversions | cost | revenue |
|---|---|---|---|---|---|---|---|---|
| **0** | 2025-01-01 | LinkedIn | Summer | Canada | 274 | 29 | 1977.083151 | 14599.103719 |
| **1** | 2025-01-02 | Email | Spring | India | 178 | 22 | 576.250625 | 13095.556562 |
| **2** | 2025-01-03 | Google | Spring | Canada | 196 | 70 | 593.370472 | 21441.618692 |
| **3** | 2025-01-04 | LinkedIn | Brand | USA | 175 | 58 | 2556.501402 | 16588.524488 |
| **4** | 2025-01-05 | LinkedIn | Spring | India | 179 | 39 | 1400.476604 | 19040.052734 |

In [17]:

```
data["conversion_rate"] = (data["conversions"] / data["sessions"]) * 100
data["cpa"] = data["cost"] / data["conversions"]
data["roas"] = data["revenue"] / data["cost"]
data["revenue_per_session"] = data["revenue"] / data["sessions"]

data.describe()
```

Out[17]:

| | date | sessions | conversions | cost | revenue | conversion_rate | cpa | roas | revenue_per_s |
|---|---|---|---|---|---|---|---|---|---|
| **count** | 100 | 100.000000 | 100.000000 | 100.000000 | 100.000000 | 100.000000 | 100.000000 | 100.000000 | 100.0 |
| **mean** | 2025-02-19 12:00:00 | 186.100000 | 41.260000 | 1646.923827 | 15151.605734 | 26.771134 | 53.686314 | 11.732328 | 94.0 |
| **min** | 2025-01-01 00:00:00 | 51.000000 | 6.000000 | 535.983722 | 634.060934 | 3.389831 | 8.476721 | 0.628890 | 4.5 |
| **25%** | 2025-01-25 18:00:00 | 145.750000 | 26.000000 | 933.178019 | 7535.923859 | 12.886636 | 25.204300 | 5.001835 | 43.0 |
| **50%** | 2025-02-19 12:00:00 | 195.000000 | 38.000000 | 1707.237130 | 14767.443959 | 23.347684 | 40.917849 | 8.510549 | 77.2 |
| **75%** | 2025-03-16 06:00:00 | 234.500000 | 58.000000 | 2240.412365 | 21292.034546 | 33.612440 | 66.624677 | 13.598306 | 125.9 |
| **max** | 2025-04-10 00:00:00 | 298.000000 | 73.000000 | 2939.630199 | 41157.285466 | 125.000000 | 235.735641 | 65.403731 | 398.8 |
| **std** | NaN | 63.602697 | 19.000595 | 732.647523 | 9487.075506 | 20.190896 | 45.120494 | 11.378049 | 72.7 |

In [18]:

```
total_revenue = data["revenue"].sum()
total_cost = data["cost"].sum()
overall_roas = total_revenue / total_cost

print("Total Revenue:", round(total_revenue,2))
```

```python
print("Total Cost:", round(total_cost,2))
print("Overall ROAS:", round(overall_roas,2))
```

```
Total Revenue: 1515160.57
Total Cost: 164692.38
Overall ROAS: 9.2
```

In [19]:
```python
campaign_summary = data.groupby(["source","campaign"]).agg({
    "sessions":"sum",
    "conversions":"sum",
    "revenue":"sum",
    "cost":"sum"
}).reset_index()

campaign_summary["roas"] = campaign_summary["revenue"] / campaign_summary["cost"]

campaign_summary.sort_values("revenue", ascending=False)
```

Out[19]:

| | source | campaign | sessions | conversions | revenue | cost | roas |
|---|---|---|---|---|---|---|---|
| **15** | LinkedIn | Winter | 1971 | 503 | 223573.472327 | 17388.574972 | 12.857493 |
| **2** | Email | Summer | 2750 | 452 | 160123.815016 | 18214.841188 | 8.790843 |
| **5** | Facebook | Spring | 1575 | 291 | 142805.389534 | 17320.304312 | 8.244970 |
| **9** | Google | Spring | 933 | 234 | 116958.993583 | 5032.267313 | 23.241809 |
| **8** | Google | Brand | 1440 | 286 | 106674.910330 | 13954.351654 | 7.644562 |
| **4** | Facebook | Brand | 1063 | 282 | 104615.249467 | 11431.398449 | 9.151571 |
| **3** | Email | Winter | 751 | 217 | 102427.215537 | 10477.483334 | 9.775937 |
| **6** | Facebook | Summer | 843 | 291 | 94386.810951 | 9752.137770 | 9.678576 |
| **7** | Facebook | Winter | 1248 | 373 | 94169.331543 | 11264.308908 | 8.359974 |
| **13** | LinkedIn | Spring | 768 | 162 | 65082.650388 | 5198.953044 | 12.518415 |
| **0** | Email | Brand | 1267 | 275 | 63397.194544 | 7769.019539 | 8.160257 |
| **12** | LinkedIn | Brand | 640 | 181 | 62248.061864 | 6217.584117 | 10.011616 |
| **10** | Google | Summer | 909 | 135 | 60521.889035 | 9692.525845 | 6.244181 |
| **1** | Email | Spring | 534 | 130 | 47999.084487 | 4680.914613 | 10.254211 |
| **14** | LinkedIn | Summer | 1229 | 196 | 38297.513067 | 8054.174105 | 4.754989 |
| **11** | Google | Winter | 689 | 118 | 31878.991754 | 8243.543546 | 3.867147 |

In [20]:

```
country_summary = data.groupby("country").agg({
    "revenue":"sum",
    "cost":"sum"
}).reset_index()
```

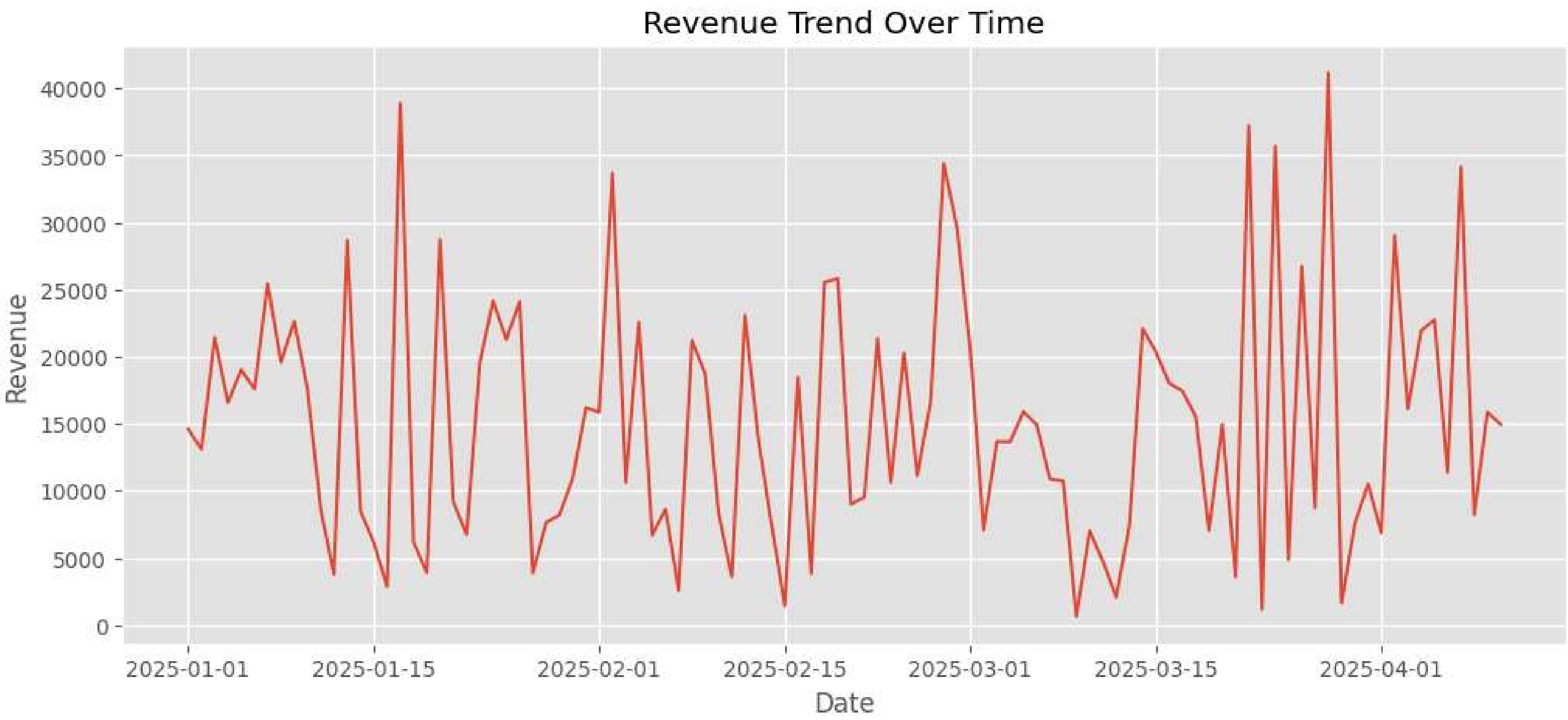
```
country_summary["roas"] = country_summary["revenue"] / country_summary["cost"]

country_summary
```

Out[20]:

| | country | revenue | cost | roas |
|---|---|---|---|---|
| **0** | Canada | 291655.047564 | 33124.860315 | 8.804718 |
| **1** | India | 480165.938350 | 47081.320271 | 10.198651 |
| **2** | UK | 354351.356148 | 36970.748678 | 9.584641 |
| **3** | USA | 388988.231363 | 47515.453447 | 8.186563 |

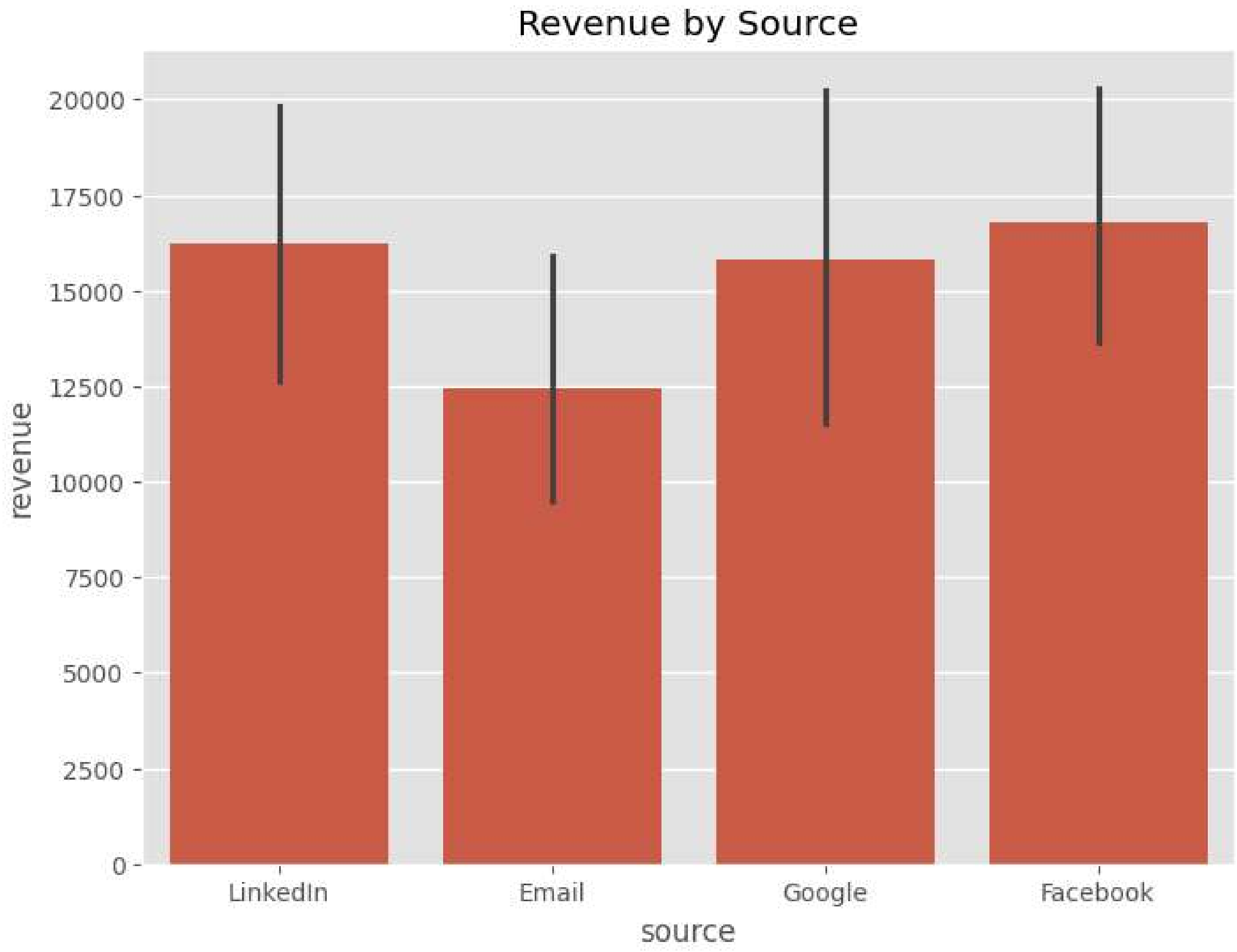
In [21]:

```
plt.figure(figsize=(12,5))
plt.plot(data["date"], data["revenue"])
plt.title("Revenue Trend Over Time")
plt.xlabel("Date")
plt.ylabel("Revenue")
plt.show()
```



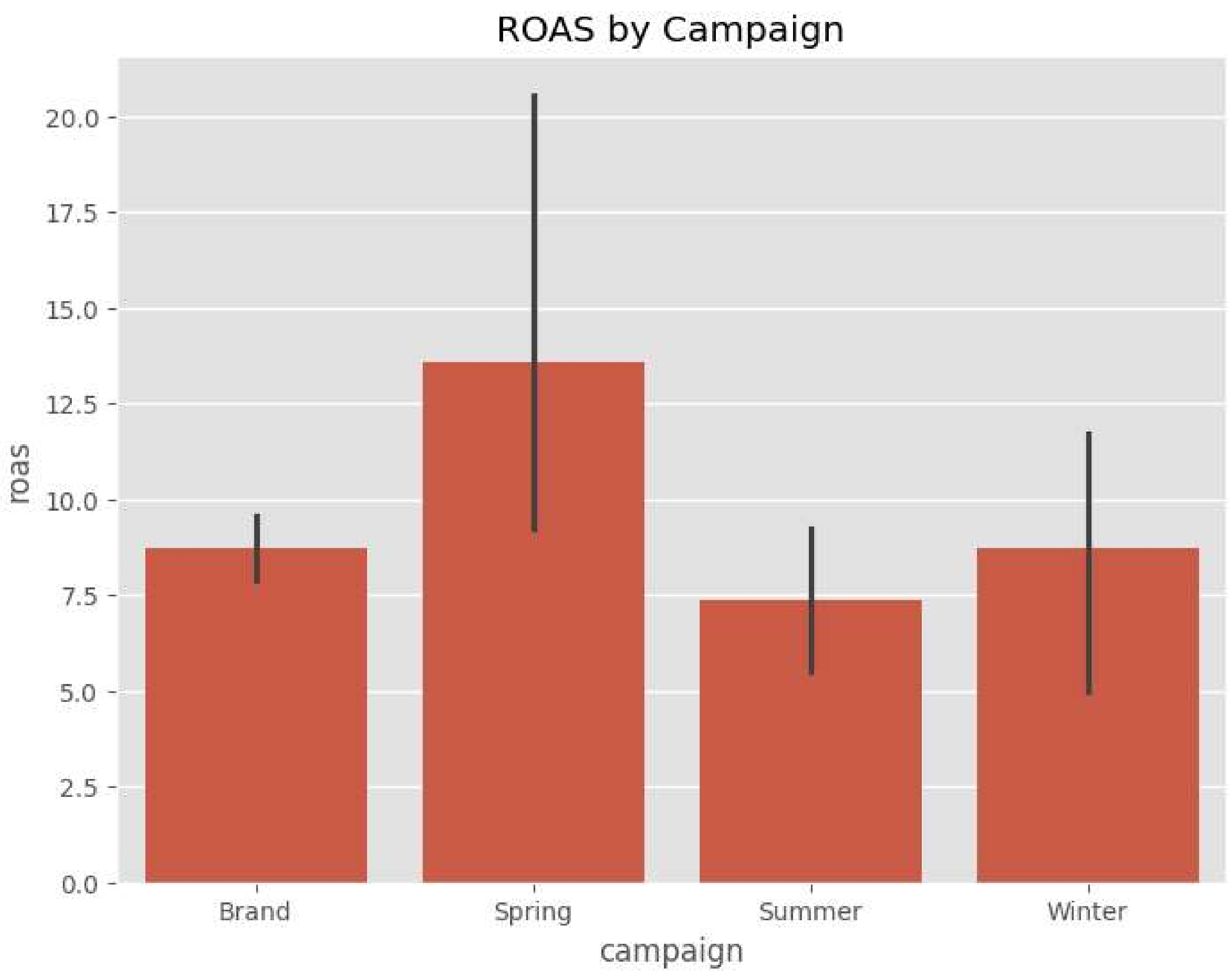

In [22]:

```
plt.figure(figsize=(8,6))
sns.barplot(data=data, x="source", y="revenue")
plt.title("Revenue by Source")
plt.show()
```



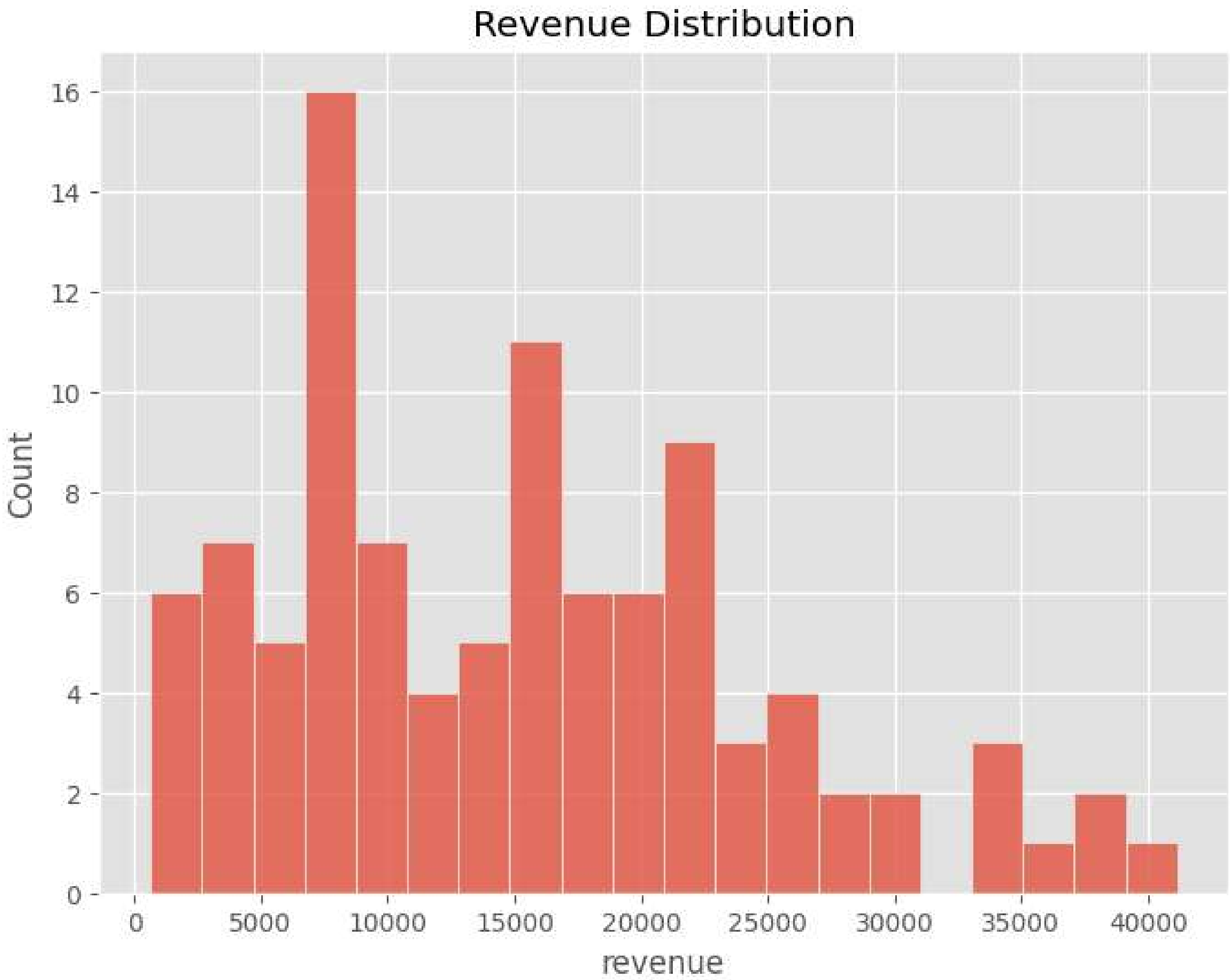

In [23]:
```
plt.figure(figsize=(8,6))
sns.barplot(data=campaign_summary, x="campaign", y="roas")
```

```
plt.title("ROAS by Campaign")
plt.show()
```



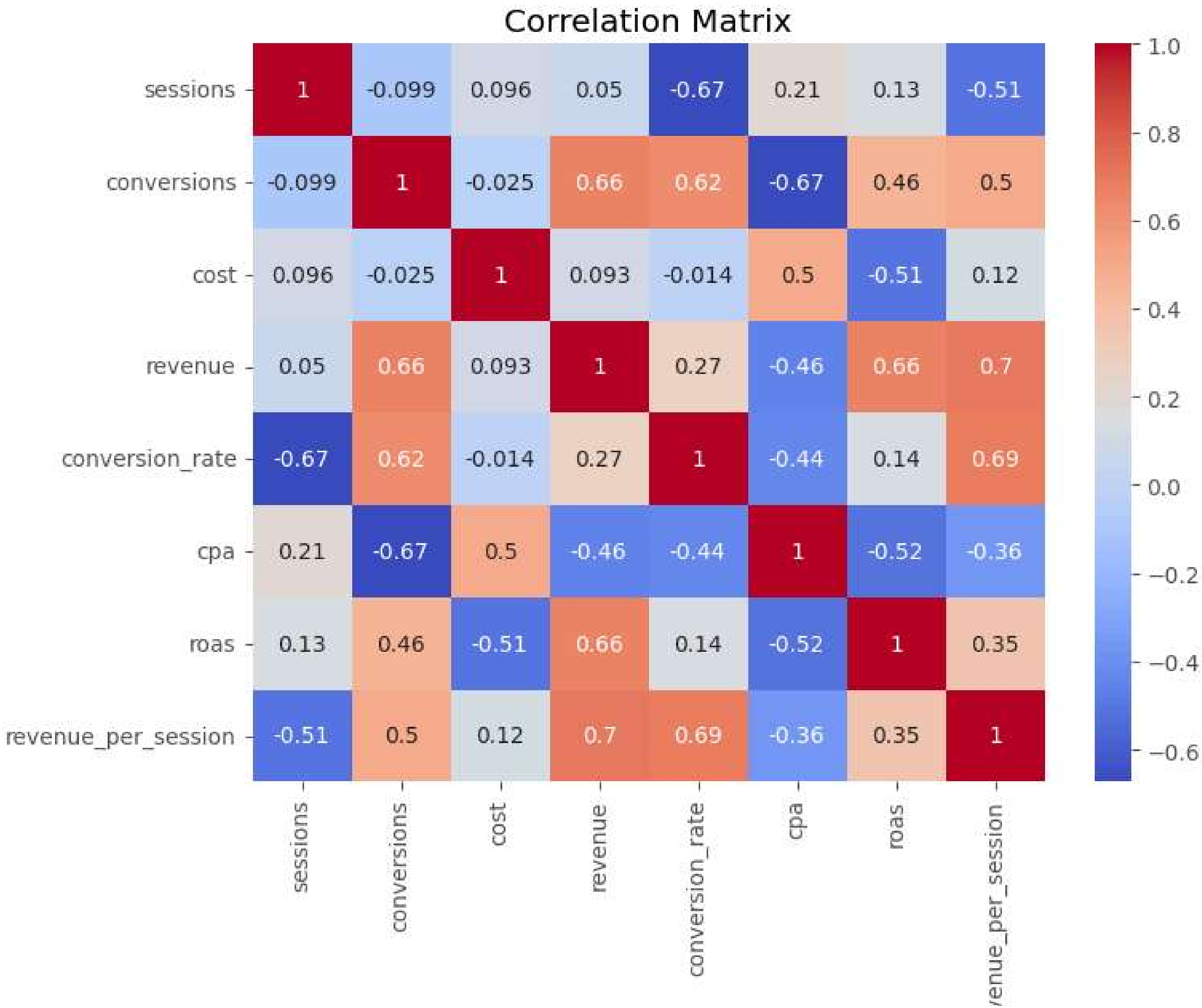
In [24]:

```
plt.figure(figsize=(8,6))
sns.histplot(data["revenue"], bins=20)
plt.title("Revenue Distribution")
plt.show()
```



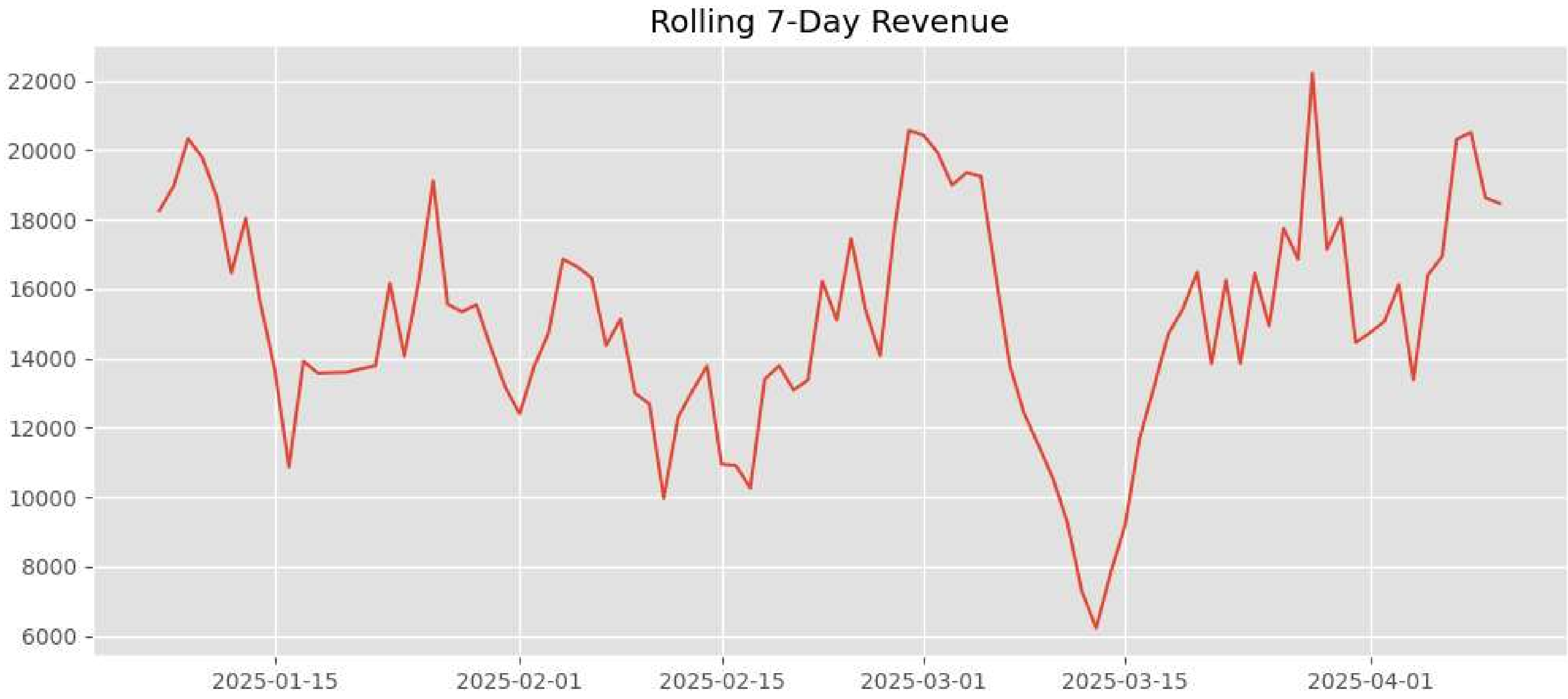

In [25]:
```
plt.figure(figsize=(8,6))
sns.heatmap(data.corr(numeric_only=True), annot=True, cmap="coolwarm")
```

```python
plt.title("Correlation Matrix")
plt.show()
```


Correlation Matrix
sessions
conversions
cost
revenue
conversion_rate
cpa
roas
revenue_per_session
1 -0.099 0.096 0.05 -0.67 0.21 0.13 -0.51
-0.099 1 -0.025 0.66 0.62 -0.67 0.46 0.5
0.096 -0.025 1 0.093 -0.014 0.5 -0.51 0.12
0.05 0.66 0.093 1 0.27 -0.46 0.66 0.7
-0.67 0.62 -0.014 0.27 1 -0.44 0.14 0.69
0.21 -0.67 0.5 -0.46 -0.44 1 -0.52 -0.36
0.13 0.46 -0.51 0.66 0.14 -0.52 1 0.35
-0.51 0.5 0.12 0.7 0.69 -0.36 0.35 1
1.0
0.8
0.6
0.4
0.2
0.0
−0.2
−0.4
−0.6

re\

In [26]:
```
data["rolling_7day_revenue"] = data["revenue"].rolling(7).mean()

plt.figure(figsize=(12,5))
plt.plot(data["date"], data["rolling_7day_revenue"])
plt.title("Rolling 7-Day Revenue")
plt.show()
```




In [27]:
```
data["previous_revenue"] = data["revenue"].shift(1)
data["growth_%"] = ((data["revenue"] - data["previous_revenue"]) / data["previous_revenue"]) * 100

data.tail()
```

Out[27]:

| | date | source | campaign | country | sessions | conversions | cost | revenue | conversion_rate | cpa | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **95** | 2025-04-06 | Facebook | Spring | India | 124 | 29 | 2337.677610 | 11372.557523 | 23.387097 | 80.609573 | 4.8 |
| **96** | 2025-04-07 | Facebook | Spring | UK | 162 | 62 | 2508.702326 | 34135.898325 | 38.271605 | 40.462941 | 13.6 |
| **97** | 2025-04-08 | Email | Brand | Canada | 249 | 67 | 1205.086431 | 8222.453741 | 26.907631 | 17.986365 | 6.8 |
| **98** | 2025-04-09 | Facebook | Winter | USA | 213 | 66 | 943.598859 | 15871.785257 | 30.985915 | 14.296952 | 16.8 |
| **99** | 2025-04-10 | Google | Summer | India | 215 | 26 | 2376.536879 | 14955.349293 | 12.093023 | 91.405265 | 6.2 |

In [28]:

```
data.sort_values("revenue", ascending=False).head(10)
```

Out[28]:

| | date | source | campaign | country | sessions | conversions | cost | revenue | conversion_rate | cpa | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **86** | 2025-03-28 | Facebook | Spring | USA | 257 | 69 | 1297.439076 | 41157.285466 | 26.848249 | 18.803465 | 31.7 |
| **16** | 2025-01-17 | Email | Winter | India | 172 | 71 | 2939.630199 | 38891.074612 | 41.279070 | 41.403242 | 13.2 |
| **80** | 2025-03-22 | LinkedIn | Winter | India | 296 | 64 | 673.403252 | 37223.121262 | 21.621622 | 10.521926 | 55.2 |
| **82** | 2025-03-24 | Google | Spring | UK | 282 | 61 | 545.554564 | 35681.304215 | 21.631206 | 8.943517 | 65.4 |
| **57** | 2025-02-27 | Google | Spring | UK | 234 | 58 | 2087.734127 | 34394.030851 | 24.786325 | 35.995416 | 16.4 |
| **96** | 2025-04-07 | Facebook | Spring | UK | 162 | 62 | 2508.702326 | 34135.898325 | 38.271605 | 40.462941 | 13.6 |
| **32** | 2025-02-02 | Email | Winter | India | 119 | 68 | 2286.489807 | 33647.016855 | 57.142857 | 33.624850 | 14.7 |
| **58** | 2025-02-28 | LinkedIn | Winter | India | 266 | 62 | 613.260024 | 29554.723743 | 23.308271 | 9.891291 | 48.1 |
| **91** | 2025-04-02 | Email | Summer | Canada | 169 | 70 | 795.412069 | 29028.952335 | 41.420118 | 11.363030 | 36.4 |
| **19** | 2025-01-20 | LinkedIn | Winter | Canada | 73 | 52 | 2487.965487 | 28739.931387 | 71.232877 | 47.845490 | 11.5 |

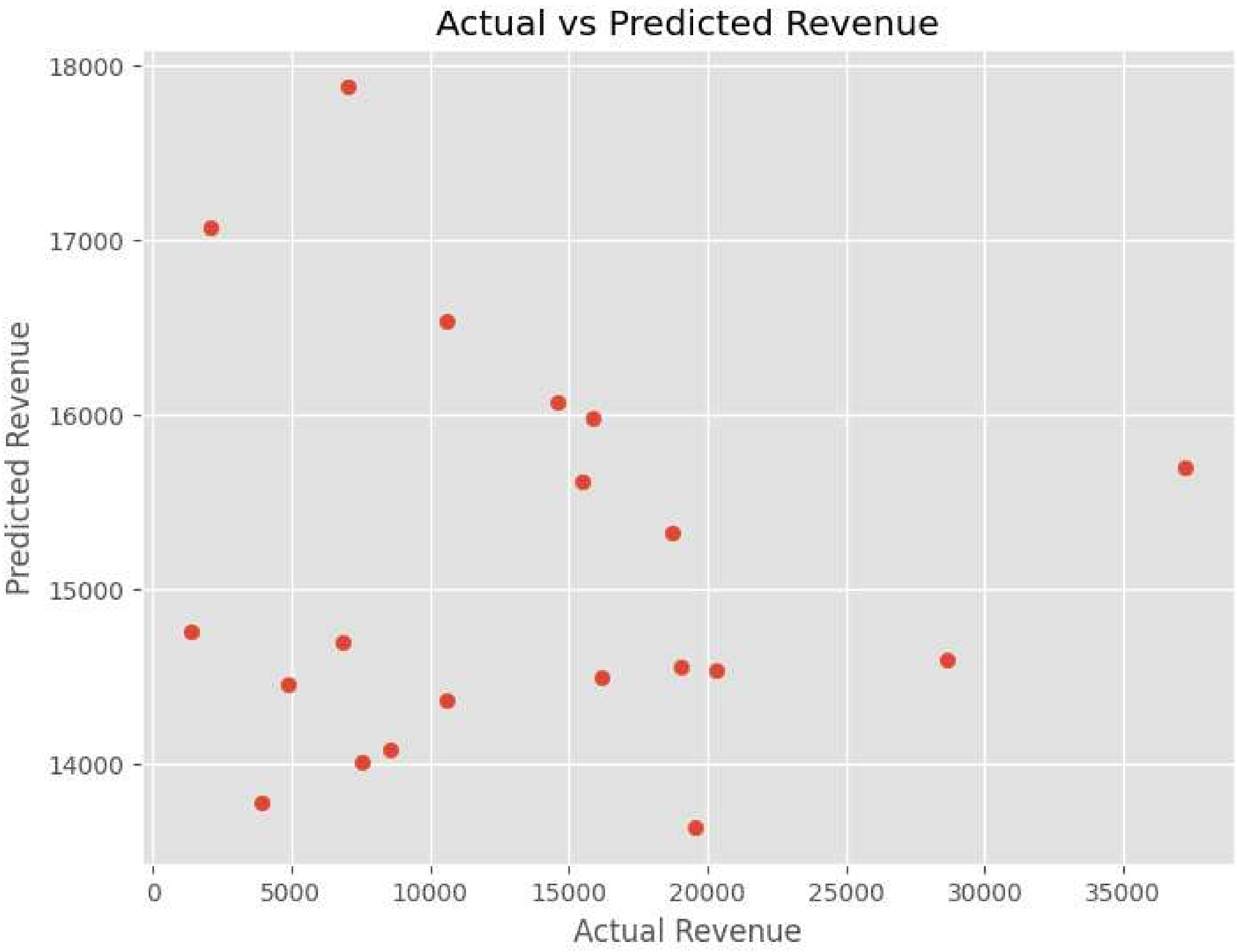
In [29]:

```
data["day_number"] = np.arange(len(data))

X = data[["day_number","sessions","cost"]]
y = data["revenue"]
```

```python
X_train, X_test, y_train, y_test = train_test_split(X,y,test_size=0.2, random_state=42)

model = LinearRegression()
model.fit(X_train,y_train)

predictions = model.predict(X_test)

print("R2 Score:", r2_score(y_test,predictions))
print("MAE:", mean_absolute_error(y_test,predictions))
```

```
R2 Score: -0.06466019919586108
MAE: 7332.063516605073
```

In [30]:
```python
plt.figure(figsize=(8,6))
plt.scatter(y_test, predictions)
plt.xlabel("Actual Revenue")
plt.ylabel("Predicted Revenue")
plt.title("Actual vs Predicted Revenue")
plt.show()
```



Actual vs Predicted Revenue
Predicted Revenue
Actual Revenue
18000
17000
16000
15000
14000
0
5000
10000
15000
20000
25000
30000
35000

**~\Downloads\Market Campaign Attribution.sql**

```sql
WITH base_sessions AS (
    SELECT
        s.session_id,
        s.user_id,
        s.source,
        s.campaign,
        u.country,
        DATE(s.session_date) AS day
    FROM sessions s
    JOIN users u ON s.user_id = u.user_id
),

session_counts AS (
    SELECT
        source,
        campaign,
        country,
        day,
        COUNT(session_id) AS total_sessions
    FROM base_sessions
    GROUP BY source, campaign, country, day
),

conversion_details AS (
    SELECT
        bs.session_id,
        bs.user_id,
        bs.source,
        bs.campaign,
        bs.country,
        bs.day,
        c.conversion_id,
        c.revenue
    FROM base_sessions bs
```

```sql
    JOIN conversions c
        ON bs.user_id = c.user_id
       AND bs.day <= DATE(c.conversion_date)
),

conversion_counts AS (
    SELECT
        source,
        campaign,
        country,
        day,
        COUNT(conversion_id) AS total_conversions,
        SUM(revenue) AS total_revenue,
        AVG(revenue) AS avg_revenue_per_conversion
    FROM conversion_details
    GROUP BY source, campaign, country, day
),

daily_spend AS (
    SELECT
        source,
        campaign,
        spend_date AS day,
        SUM(cost) AS total_cost
    FROM ad_spend
    GROUP BY source, campaign, spend_date
),

combined_metrics AS (
    SELECT
        cc.source,
        cc.campaign,
        cc.country,
        cc.day,
        sc.total_sessions,
        cc.total_conversions,
        cc.total_revenue,
```

```
        cc.avg_revenue_per_conversion,
        ds.total_cost
    FROM conversion_counts cc
    JOIN session_counts sc
        ON cc.source = sc.source
       AND cc.campaign = sc.campaign
       AND cc.country = sc.country
       AND cc.day = sc.day
    JOIN daily_spend ds
        ON cc.source = ds.source
       AND cc.campaign = ds.campaign
       AND cc.day = ds.day
),

kpi_calculations AS (
    SELECT
        *,
        ROUND(total_conversions::numeric / total_sessions * 100, 2) AS conversion_rate_percent,
        ROUND(total_cost / total_conversions, 2) AS cpa,
        ROUND(total_revenue / total_cost, 2) AS roas,
        ROUND(total_revenue / total_sessions, 2) AS revenue_per_session
    FROM combined_metrics
),

rolling_metrics AS (
    SELECT
        *,
        SUM(total_revenue) OVER (
            PARTITION BY source, campaign, country
            ORDER BY day
            ROWS BETWEEN 6 PRECEDING AND CURRENT ROW
        ) AS rolling_7day_revenue,

        AVG(total_revenue) OVER (
            PARTITION BY source, campaign, country
            ORDER BY day
            ROWS BETWEEN 6 PRECEDING AND CURRENT ROW
```

```sql
        ) AS rolling_7day_avg_revenue
    FROM kpi_calculations
),

growth_metrics AS (
    SELECT
        *,
        LAG(total_revenue) OVER (
            PARTITION BY source, campaign, country
            ORDER BY day
        ) AS previous_day_revenue
    FROM rolling_metrics
),

final_growth AS (
    SELECT
        *,
        ROUND(
            (total_revenue - previous_day_revenue)
            / NULLIF(previous_day_revenue,0) * 100,
            2
        ) AS revenue_growth_percent
    FROM growth_metrics
),

ranking_metrics AS (
    SELECT
        *,
        RANK() OVER (
            PARTITION BY source
            ORDER BY total_revenue DESC
        ) AS revenue_rank_within_source,

        DENSE_RANK() OVER (
            ORDER BY roas DESC
        ) AS overall_roas_rank
    FROM final_growth
```

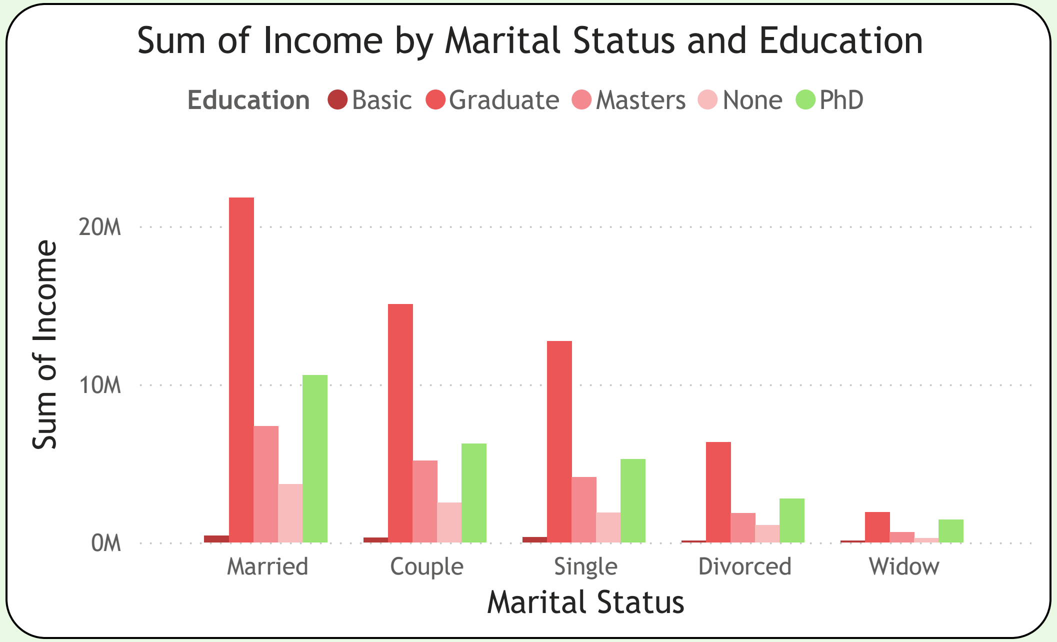
```
),

percentage_contribution AS (
    SELECT
        *,
        ROUND(
            total_revenue /
            SUM(total_revenue) OVER () * 100,
            2
        ) AS revenue_contribution_percent
    FROM ranking_metrics
)

SELECT *
FROM percentage_contribution
WHERE
    total_sessions > 0
    AND total_conversions > 0
    AND total_revenue > 0
    AND total_cost > 0
ORDER BY day DESC, total_revenue DESC
LIMIT 500;
```

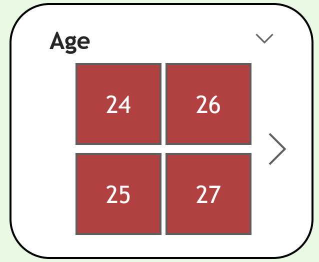
| | source<br>text | campaign<br>text | country<br>text | day<br>date | total_sessions<br>bigint | total_conversions<br>bigint | total_revenue<br>numeric | avg_revenue_per_conversion<br>numeric | total_cost<br>numeric | conversion_rate_percent<br>numeric | cpa<br>numeric |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Facebo... | Summer | UK | 2026-02-... | 5 | 4 | 3503.97 | 875.9925000000000000 | 232.77 | 80.00 | 58.19 |
| 2 | Email | Spring | India | 2026-02-... | 2 | 2 | 1406.07 | 703.0350000000000000 | 430.17 | 100.00 | 215.09 |
| 3 | Facebo... | Brand | India | 2026-02-... | 3 | 2 | 1271.79 | 635.8950000000000000 | 134.00 | 66.67 | 67.00 |
| 4 | Google | Spring | India | 2026-02-... | 3 | 3 | 1138.13 | 379.3766666666666667 | 119.38 | 100.00 | 39.79 |
| 5 | Email | Winter | India | 2026-02-... | 3 | 2 | 1103.85 | 551.9250000000000000 | 512.89 | 66.67 | 256.45 |
| 6 | LinkedIn | Spring | USA | 2026-02-... | 2 | 1 | 894.11 | 894.1100000000000000 | 124.86 | 50.00 | 124.86 |
| 7 | LinkedIn | Summer | India | 2026-02-... | 4 | 1 | 880.87 | 880.8700000000000000 | 229.87 | 25.00 | 229.87 |
| 8 | LinkedIn | Brand | USA | 2026-02-... | 1 | 1 | 854.07 | 854.0700000000000000 | 571.23 | 100.00 | 571.23 |
| 9 | Facebo... | Brand | USA | 2026-02-... | 1 | 1 | 853.48 | 853.4800000000000000 | 134.00 | 100.00 | 134.00 |
| 10 | Google | Winter | UK | 2026-02-... | 3 | 1 | 830.76 | 830.7600000000000000 | 493.76 | 33.33 | 493.76 |
| 11 | LinkedIn | Winter | India | 2026-02-... | 2 | 1 | 792.66 | 792.6600000000000000 | 348.41 | 50.00 | 348.41 |
| 12 | LinkedIn | Summer | USA | 2026-02-... | 3 | 1 | 756.70 | 756.7000000000000000 | 229.87 | 33.33 | 229.87 |
| 13 | Google | Spring | USA | 2026-02-... | 1 | 1 | 749.88 | 749.8800000000000000 | 119.38 | 100.00 | 119.38 |
| 14 | LinkedIn | Spring | Canada | 2026-02-... | 2 | 1 | 738.91 | 738.9100000000000000 | 124.86 | 50.00 | 124.86 |
| 15 | Facebo... | Brand | Canada | 2026-02-... | 1 | 1 | 738.91 | 738.9100000000000000 | 134.00 | 100.00 | 134.00 |
| 16 | Email | Brand | Canada | 2026-02-... | 1 | 1 | 719.91 | 719.9100000000000000 | 243.87 | 100.00 | 243.87 |
| 17 | Facebo... | Summer | India | 2026-02-... | 1 | 1 | 465.96 | 465.9600000000000000 | 232.77 | 100.00 | 232.77 |
| 18 | Email | Brand | India | 2026-02-... | 1 | 1 | 465.96 | 465.9600000000000000 | 243.87 | 100.00 | 243.87 |
| 19 | Email | Winter | Canada | 2026-02-... | 1 | 1 | 455.50 | 455.5000000000000000 | 512.89 | 100.00 | 512.89 |
| 20 | Google | Summer | Canada | 2026-02-... | 3 | 2 | 453.36 | 226.6800000000000000 | 435.56 | 66.67 | 217.78 |
| 21 | LinkedIn | Winter | USA | 2026-02-... | 4 | 6 | 3870.15 | 645.0250000000000000 | 566.24 | 150.00 | 94.37 |
| 22 | LinkedIn | Spring | India | 2026-02-... | 2 | 3 | 2612.57 | 870.8566666666666667 | 359.35 | 150.00 | 119.78 |
| 23 | Facebo... | Spring | USA | 2026-02-... | 2 | 3 | 1985.08 | 661.6933333333333333 | 436.21 | 150.00 | 145.40 |
| 24 | Google | Summer | USA | 2026-02-... | 1 | 3 | 1749.62 | 583.2066666666666667 | 199.52 | 300.00 | 66.51 |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 25 | Email | Summer | India | 2026-02-... | 2 | 2 | 1671.30 | 835.6500000000000000 | 269.31 | 100.00 | 134.66 |
| 26 | Facebo... | Winter | USA | 2026-02-... | 1 | 2 | 1568.28 | 784.1400000000000000 | 181.79 | 200.00 | 90.90 |
| 27 | LinkedIn | Brand | India | 2026-02-... | 2 | 3 | 1499.05 | 499.6833333333333333 | 493.65 | 150.00 | 164.55 |
| 28 | Google | Brand | Canada | 2026-02-... | 3 | 2 | 1349.04 | 674.5200000000000000 | 163.71 | 66.67 | 81.86 |
| 29 | Email | Summer | Canada | 2026-02-... | 2 | 3 | 1285.60 | 428.5333333333333333 | 269.31 | 150.00 | 89.77 |
| 30 | LinkedIn | Spring | Canada | 2026-02-... | 2 | 2 | 1228.32 | 614.1600000000000000 | 359.35 | 100.00 | 179.68 |
| 31 | Email | Brand | Canada | 2026-02-... | 3 | 1 | 995.00 | 995.0000000000000000 | 333.05 | 33.33 | 333.05 |
| 32 | Google | Brand | USA | 2026-02-... | 1 | 1 | 973.16 | 973.1600000000000000 | 163.71 | 100.00 | 163.71 |
| 33 | Facebo... | Spring | India | 2026-02-... | 1 | 1 | 948.99 | 948.9900000000000000 | 436.21 | 100.00 | 436.21 |
| 34 | Facebo... | Winter | UK | 2026-02-... | 2 | 1 | 807.06 | 807.0600000000000000 | 181.79 | 50.00 | 181.79 |
| 35 | Email | Winter | USA | 2026-02-... | 1 | 1 | 804.98 | 804.9800000000000000 | 203.81 | 100.00 | 203.81 |
| 36 | LinkedIn | Summer | UK | 2026-02-... | 2 | 1 | 767.54 | 767.5400000000000000 | 197.23 | 50.00 | 197.23 |
| 37 | Facebo... | Brand | UK | 2026-02-... | 3 | 1 | 767.54 | 767.5400000000000000 | 379.15 | 33.33 | 379.15 |
| 38 | LinkedIn | Brand | UK | 2026-02-... | 5 | 1 | 767.54 | 767.5400000000000000 | 493.65 | 20.00 | 493.65 |
| 39 | Email | Summer | USA | 2026-02-... | 1 | 1 | 749.88 | 749.8800000000000000 | 269.31 | 100.00 | 269.31 |
| 40 | Google | Summer | Canada | 2026-02-... | 1 | 1 | 699.28 | 699.2800000000000000 | 199.52 | 100.00 | 199.52 |
| 41 | Google | Spring | Canada | 2026-02-... | 2 | 1 | 502.49 | 502.4900000000000000 | 166.45 | 50.00 | 166.45 |
| 42 | Facebo... | Winter | India | 2026-02-... | 2 | 1 | 424.53 | 424.5300000000000000 | 181.79 | 50.00 | 181.79 |
| 43 | Google | Summer | India | 2026-02-... | 3 | 1 | 373.01 | 373.0100000000000000 | 199.52 | 33.33 | 199.52 |
| 44 | Google | Winter | India | 2026-02-... | 2 | 1 | 356.80 | 356.8000000000000000 | 446.65 | 50.00 | 446.65 |
| 45 | LinkedIn | Winter | India | 2026-02-... | 1 | 1 | 355.38 | 355.3800000000000000 | 566.24 | 100.00 | 566.24 |
| 46 | LinkedIn | Winter | Canada | 2026-02-... | 2 | 1 | 248.35 | 248.3500000000000000 | 566.24 | 50.00 | 566.24 |
| 47 | LinkedIn | Summer | Canada | 2026-02-... | 2 | 1 | 248.35 | 248.3500000000000000 | 197.23 | 50.00 | 197.23 |
| 48 | Facebo... | Brand | Canada | 2026-02-... | 2 | 1 | 248.35 | 248.3500000000000000 | 379.15 | 50.00 | 379.15 |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 50 | Google | Brand | UK | 2026-02-... | 1 | 1 | 234.05 | 234.0500000000000000 | 163.71 | 100.00 | 163.71 |
| 51 | Google | Summer | USA | 2026-02-... | 2 | 4 | 3480.28 | 870.0700000000000000 | 344.14 | 200.00 | 86.04 |
| 52 | Email | Summer | UK | 2026-02-... | 3 | 4 | 3145.95 | 786.4875000000000000 | 290.54 | 133.33 | 72.64 |
| 53 | Email | Spring | UK | 2026-02-... | 1 | 3 | 2818.11 | 939.3700000000000000 | 184.33 | 300.00 | 61.44 |
| 54 | LinkedIn | Brand | UK | 2026-02-... | 3 | 3 | 2818.11 | 939.3700000000000000 | 547.94 | 100.00 | 182.65 |
| 55 | LinkedIn | Winter | USA | 2026-02-... | 3 | 3 | 2749.04 | 916.3466666666666667 | 226.52 | 100.00 | 75.51 |
| 56 | Facebo... | Spring | USA | 2026-02-... | 1 | 3 | 2684.14 | 894.7133333333333333 | 142.66 | 300.00 | 47.55 |
| 57 | Facebo... | Brand | India | 2026-02-... | 3 | 4 | 2095.40 | 523.8500000000000000 | 298.11 | 133.33 | 74.53 |
| 58 | Facebo... | Summer | Canada | 2026-02-... | 2 | 3 | 1937.22 | 645.7400000000000000 | 582.28 | 150.00 | 194.09 |
| 59 | LinkedIn | Winter | Canada | 2026-02-... | 5 | 2 | 1933.21 | 966.6050000000000000 | 226.52 | 40.00 | 113.26 |
| 60 | Email | Winter | UK | 2026-02-... | 3 | 2 | 1925.58 | 962.7900000000000000 | 555.95 | 66.67 | 277.98 |
| 61 | Email | Spring | USA | 2026-02-... | 1 | 2 | 1818.90 | 909.4500000000000000 | 184.33 | 200.00 | 92.17 |
| 62 | Google | Winter | India | 2026-02-... | 2 | 2 | 1717.62 | 858.8100000000000000 | 418.51 | 100.00 | 209.26 |
| 63 | LinkedIn | Summer | India | 2026-02-... | 3 | 3 | 1695.87 | 565.2900000000000000 | 553.42 | 100.00 | 184.47 |
| 64 | Email | Brand | Canada | 2026-02-... | 2 | 2 | 1616.12 | 808.0600000000000000 | 269.88 | 100.00 | 134.94 |
| 65 | Email | Winter | Canada | 2026-02-... | 2 | 3 | 1382.95 | 460.9833333333333333 | 555.95 | 150.00 | 185.32 |
| 66 | Google | Summer | UK | 2026-02-... | 1 | 2 | 1322.68 | 661.3400000000000000 | 344.14 | 200.00 | 172.07 |
| 67 | LinkedIn | Brand | USA | 2026-02-... | 2 | 2 | 1162.80 | 581.4000000000000000 | 547.94 | 100.00 | 273.97 |

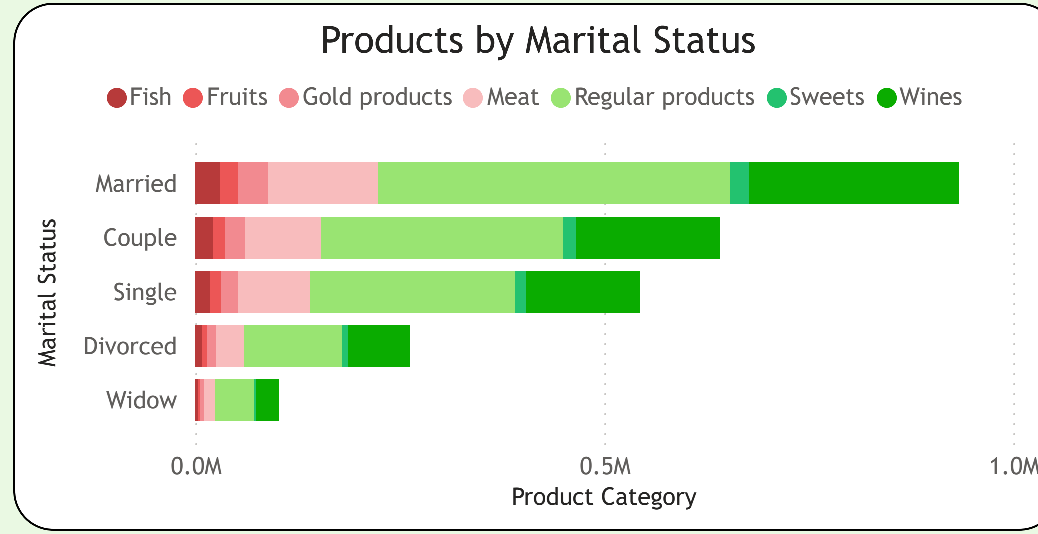
# Customer Analysis for Marketing

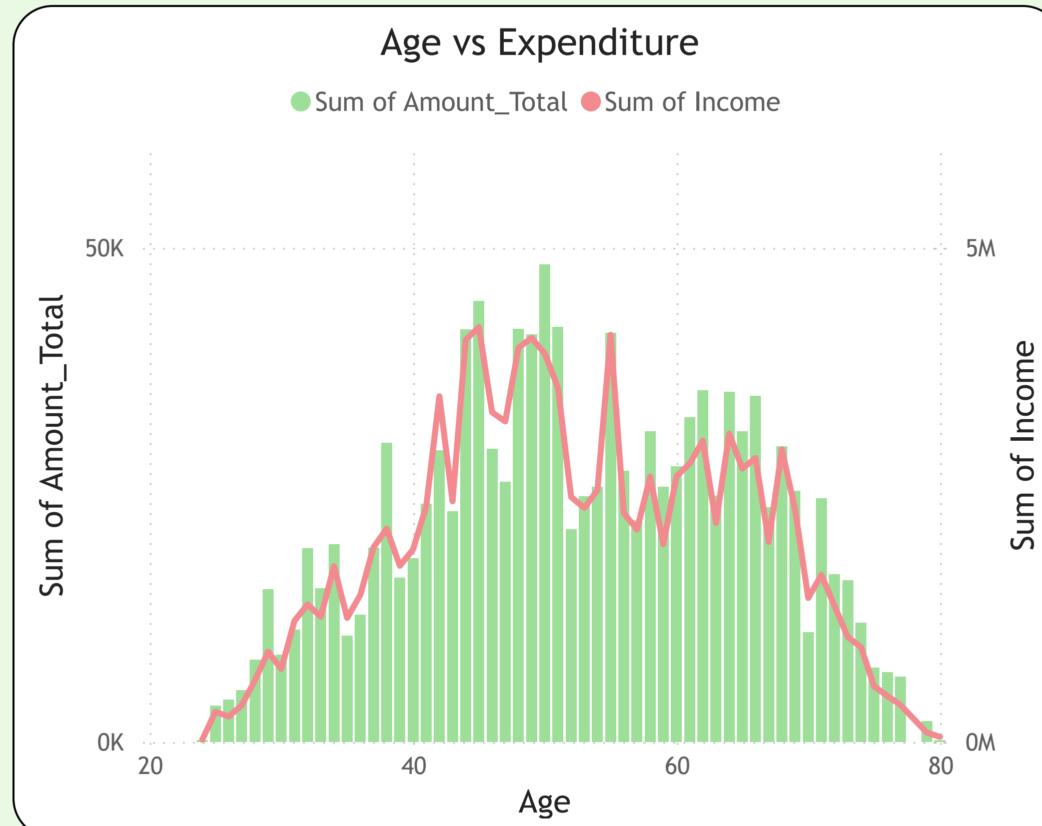


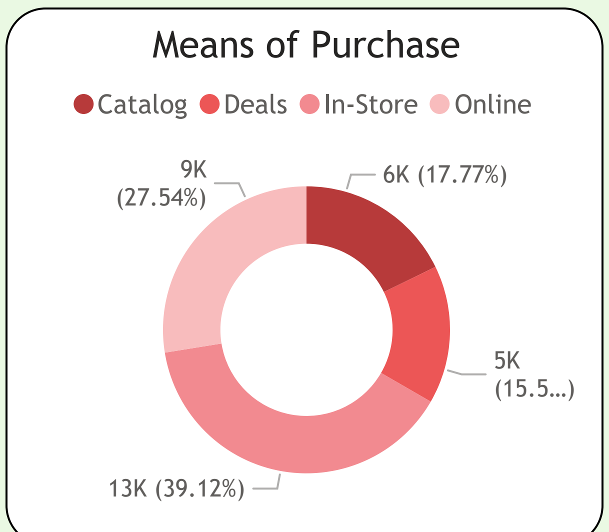



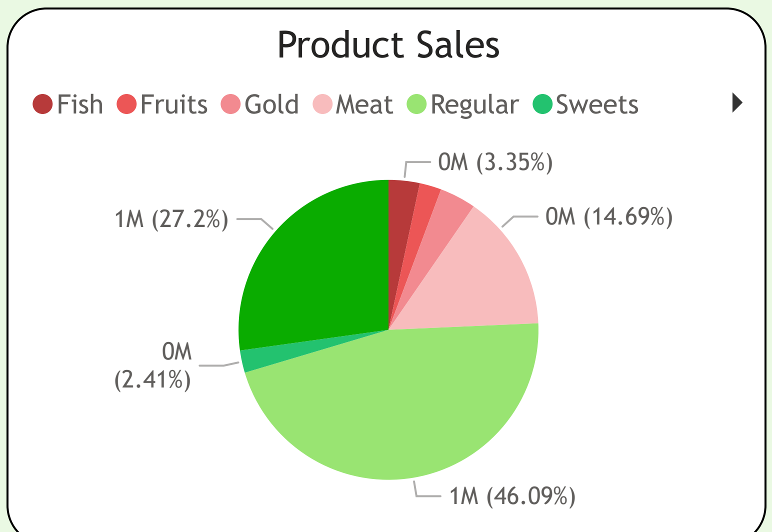

33K
Total Purchase

51.62K
Average of Income

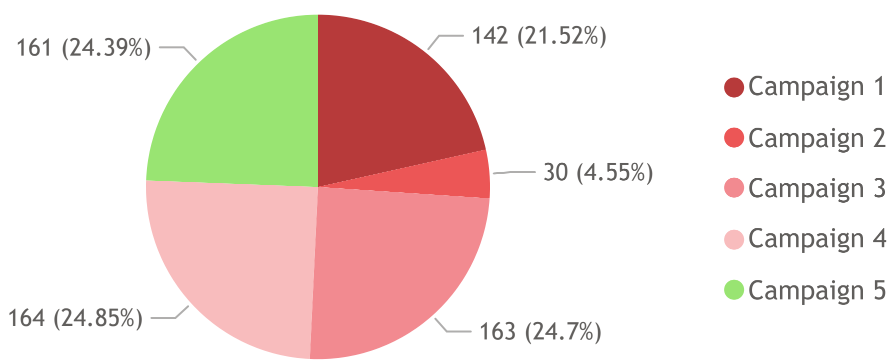


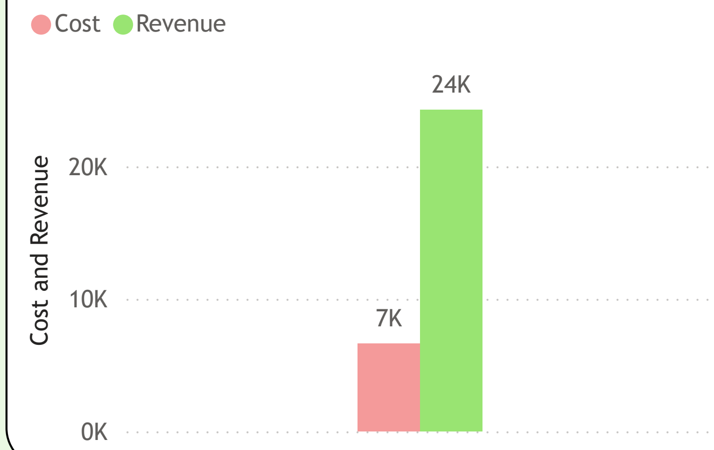



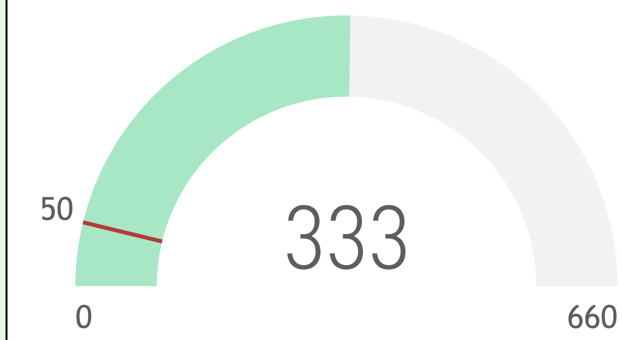
## Campaign Acceptance




## Cost vs Revenue of Campaign




## Campaign Response



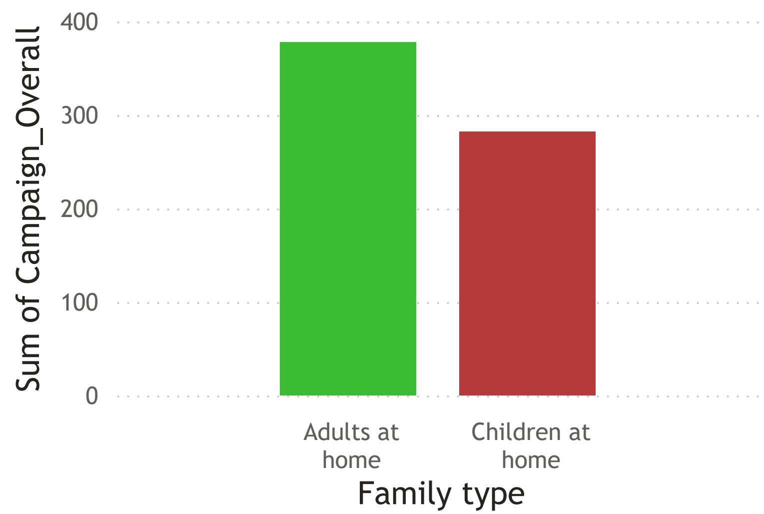

**50.45%**

% Success

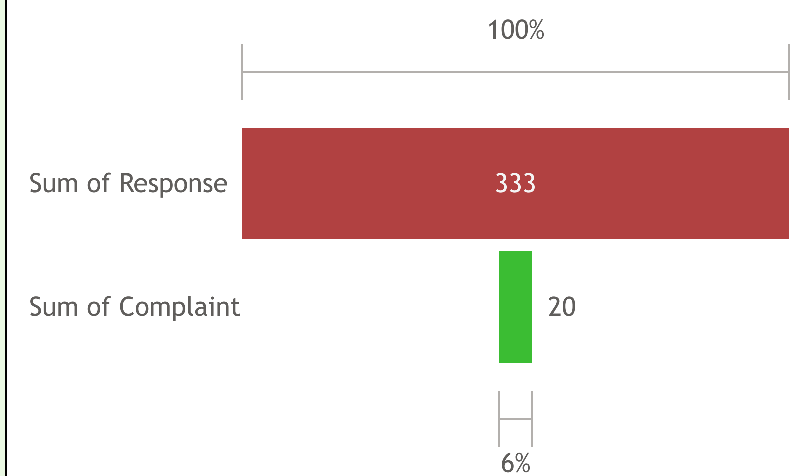
**18K**

Campaign Profit

## Sum of Campaign_Overall by Family type




## Sum of Response and Sum of Complaint




## Insights

- The campaign response has exceeded the anticipated target amount.
- Revenue from the campaigns is 3x the cost of the campaigns.
- Families with no children responded better to the campaign.
- Lesser the complaints, higher the campaign response.

# Marketing Campaign Insights