Data-driven Analysis of **Customer Orders** and Website Traffic



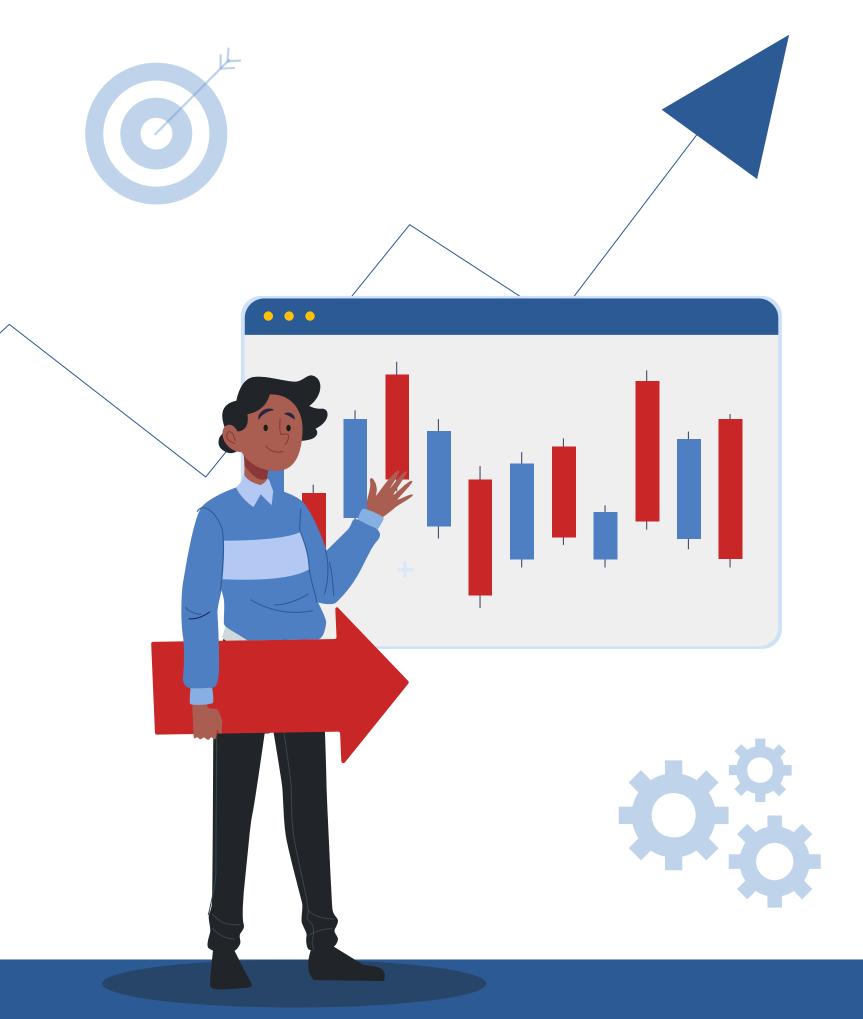
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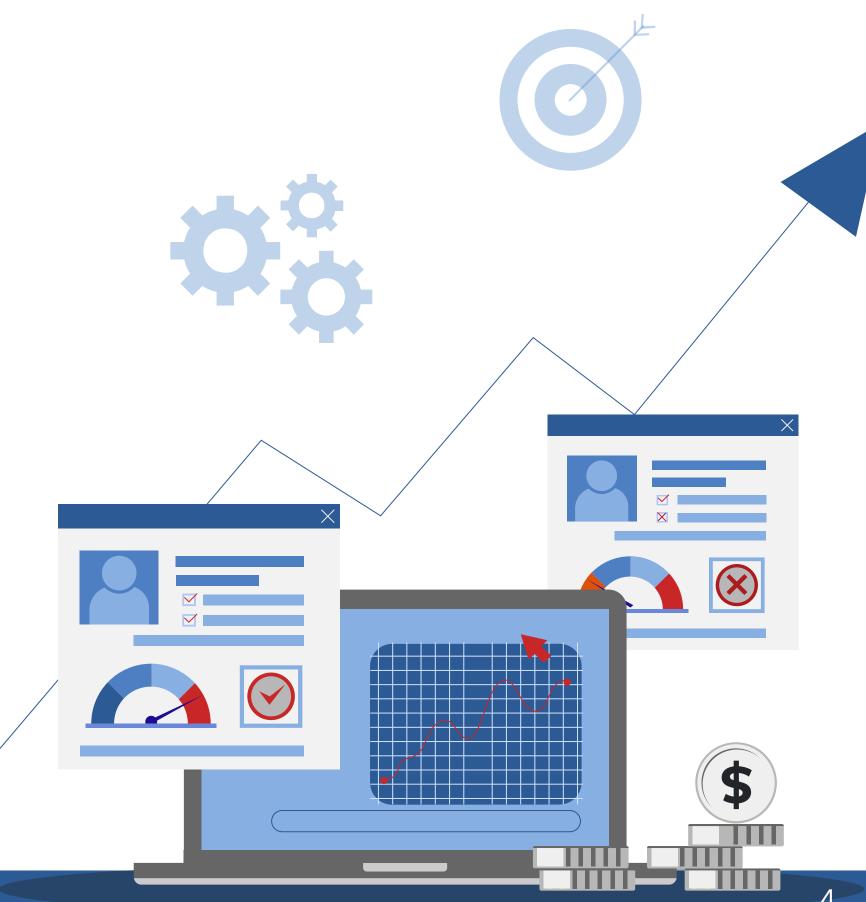
O3 Traffic source performance data



01 Introduction

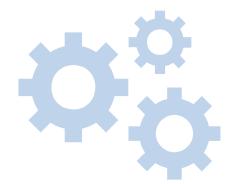
Objectives

- Analyze Historical Sales Data
- Evaluate Traffic Source Performance
- Identify Opportunities for Double Revenue Growth
- Develop a Concrete Action Plan



About the Two Datasets

- Historical Sales Performance Data
- Traffic Source Performance Data



Historical sales performance data/





Correlation analysis overview

Original Price vs. Selling Price:

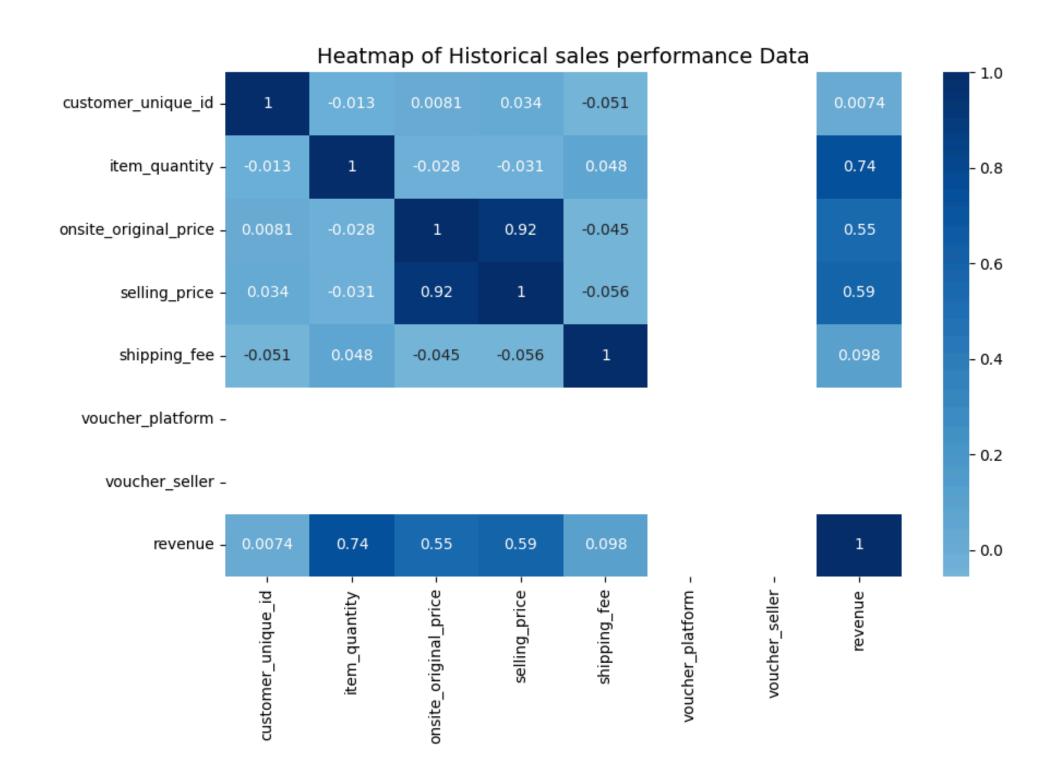
• Strong correlation; promotions directly impact selling prices.

Selling Price vs. Revenue:

• Strong correlation; price adjustments significantly affect revenue.

Item Quantity vs. Revenue:

 Strong correlation; more items per order increase revenue.



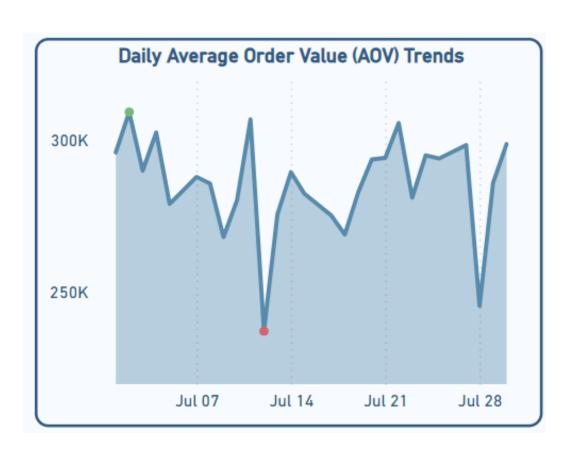
Sales Performance Overview – July

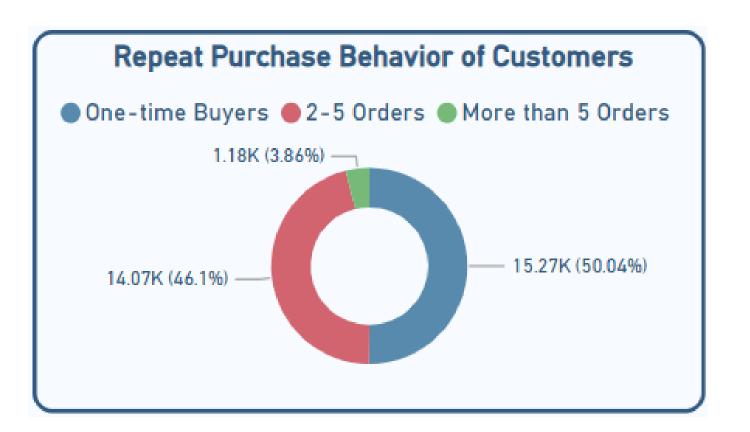


- The highest revenue peak was recorded on **July 12th**, potentially driven by promotional campaigns or marketing pushes.
- However, sales significantly dropped right after, similar to the low-performing period in early July.
- **Fridays** consistently **outperformed** in both revenue and customer volume, while Wednesdays and Thursdays also showed strong performance. **Sundays** contributed a **notable share**, making weekends a valuable sales window.

	Total Sales	Total Quantity	Total Orders	Total Customers
Mon	779049490	3521	2695	2454
Tue	813722870	4204	2877	2536
Wed	1096344560	5712	3890	3521
Thu	1449606260	7318	4805	4253
Fri	3969524700	31977	16538	13546
Sat	741205020	3328	2547	2288
Sun	1216402270	5668	4483	4041

Sales Performance Overview – July





- Interestingly, days with the highest number of orders, such as **July 12th**, were also the days with the **lowest AOV**. This suggests a trade-off between order volume and order value, possibly due to discounts or low-priced product focus.
- A large share of revenue came from new customers and light repeat customers (2–5 orders), emphasizing the importance of both customer acquisition and retention.

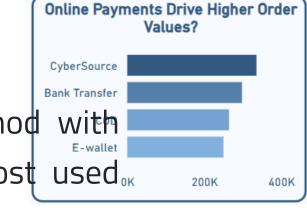
Order Cancellations

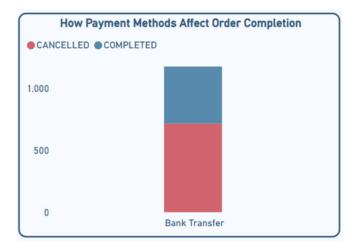


• Canceled orders accounted for 19.46% of total orders — a significant share, raising concerns about factors driving cancellation.



• Cash on Delivery (COD) remains the most preferred payment method with nearly 60,000 orders, which is X times higher than the second most used method, E-wallet (~5,000 orders)

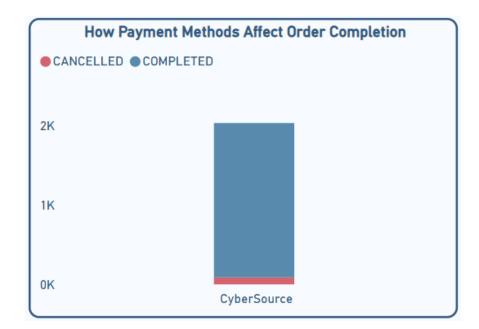


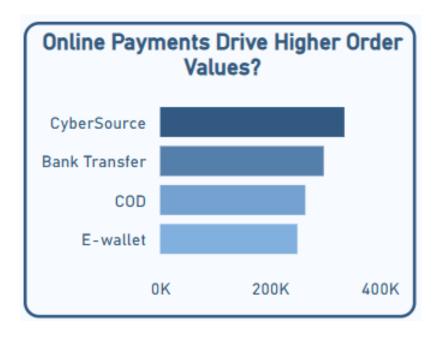


• However, Bank Transfers had a particularly high cancellation rate, with 700+ cancellations out of just 1,000+ orders, possibly due to inconvenient or delayed transaction confirmations.

Order Cancellations

- In contrast, CyberSource showed the lowest cancellation rate (~4.5%), and also delivered the highest AOV, indicating a strong correlation between reliable payment methods and customer confidence.
- E-wallets, despite popularity, recorded lower AOV.

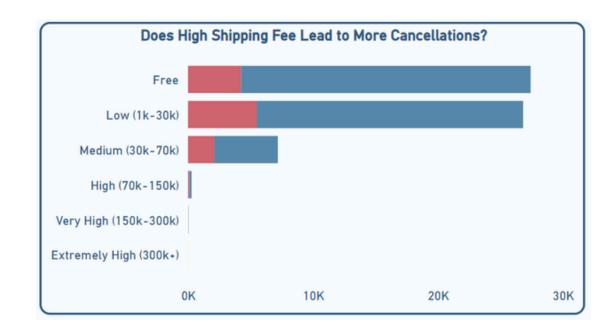




Impact of Shipping Fee on Cancellations

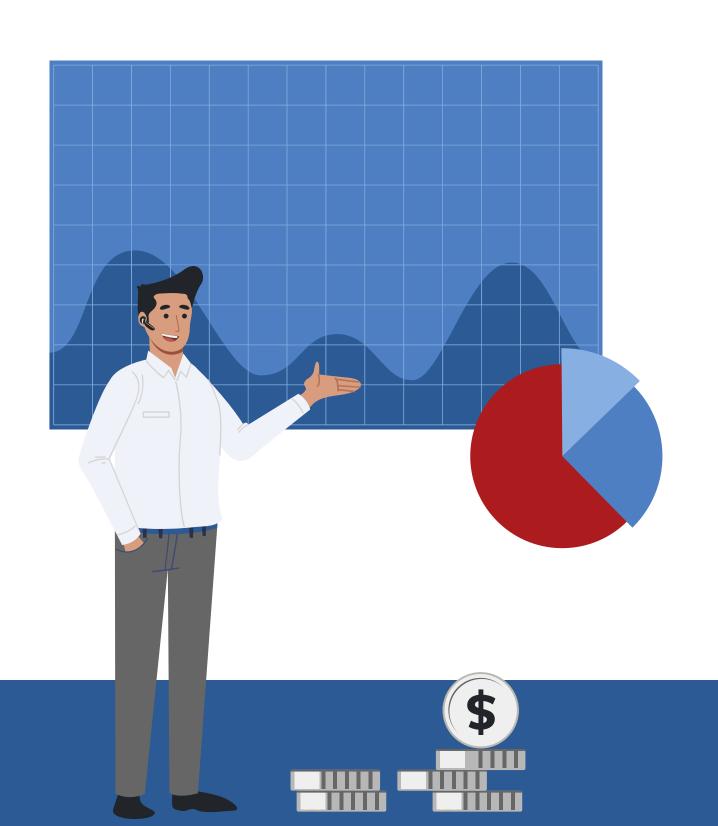
Shipping cost is another major factor behind order cancellations:

- With extremely high shipping fees (>300K VND), the cancellation rate reached 100%.
- High shipping fees (70K–150K) had a nearly 50% cancellation rate.
- In contrast, free shipping reduced cancellation rate to just ~14%.





Recommendations



- Focus marketing campaigns on high-performing days, especially Fridays and mid-week days (Wed-Thu).
- Boost AOV on high-sales days by bundling, upselling, or limiting deep discounts.
- Promote low-cancellation payment methods like CyberSource, offering incentives to shift customer preference.
- Enhance shipping strategies: offer free or discounted shipping for high-value orders to reduce cancellations and improve conversion.
- Strengthen loyalty programs to retain repeat buyers and increase lifetime value.



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Traffic source performance data /





Correlation analysis overview

Bounce Rate:

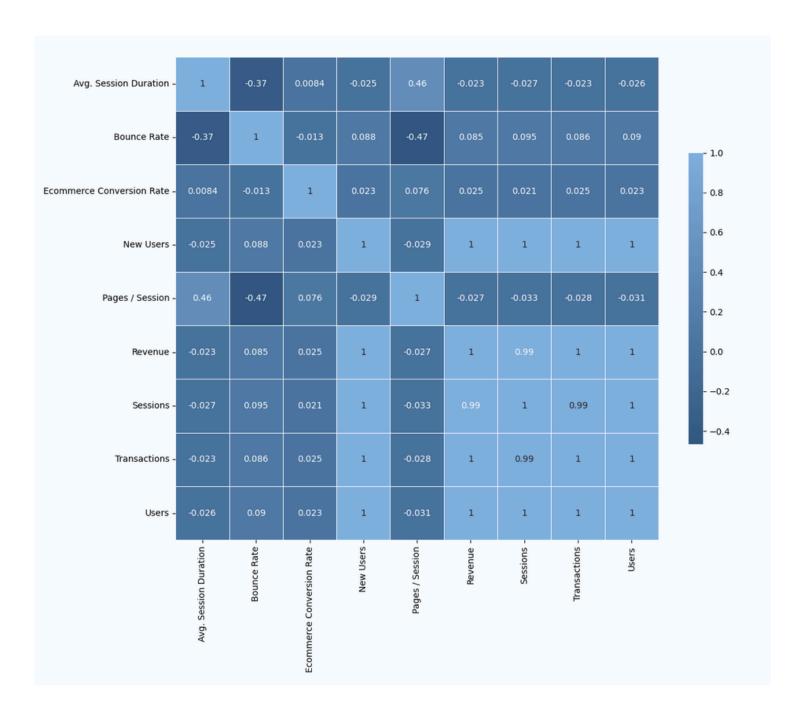
- Weak or negative correlation with most variables.
- Strong negative correlation with Pages/Session (-0.57) and Avg. Session Duration (-0.46).

Ecommerce Conversion Rate:

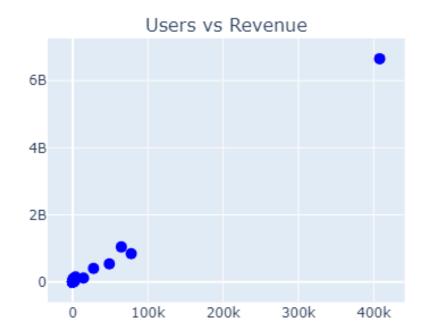
- Weak correlation with other metrics.
- Likely influenced by factors not captured in this data.

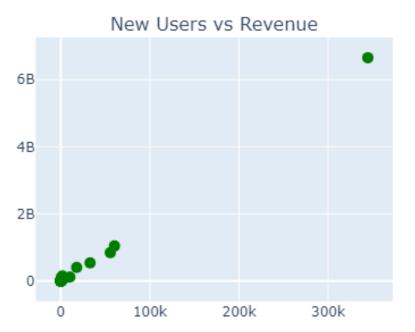
Transactions, Users, Sessions, and Revenue:

- Very strong correlation among these variables.
- Growth in users and sessions correlates with increased revenue and transactions.



Correlation analysis overview



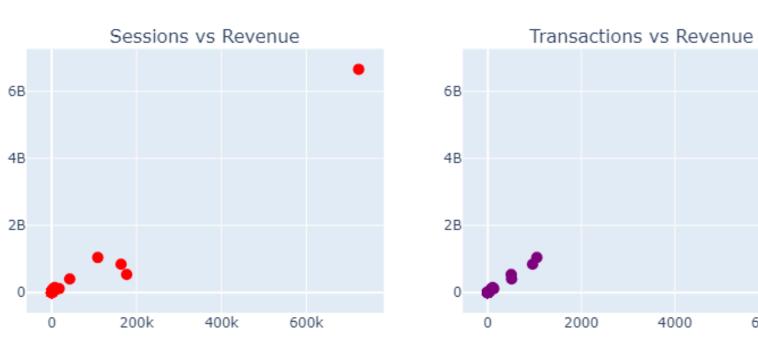


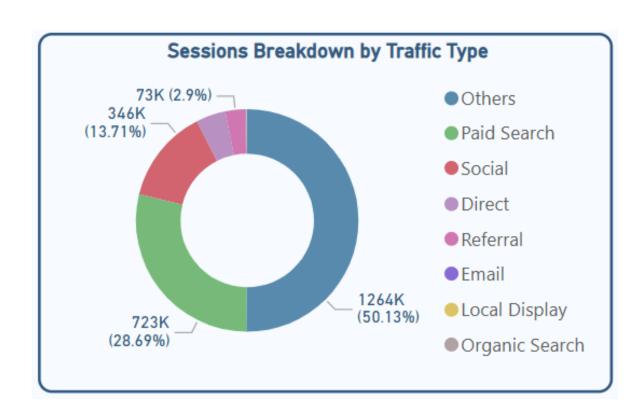
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Users vs Revenue

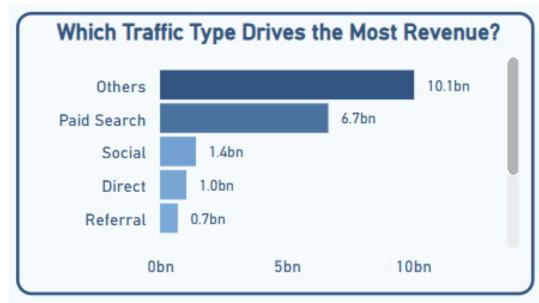
New Users vs Revenue

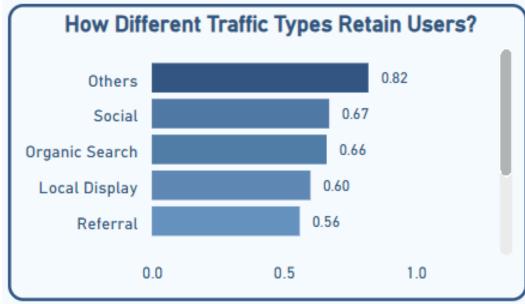
Sessions vs Revenue
 Transactions vs Revenue



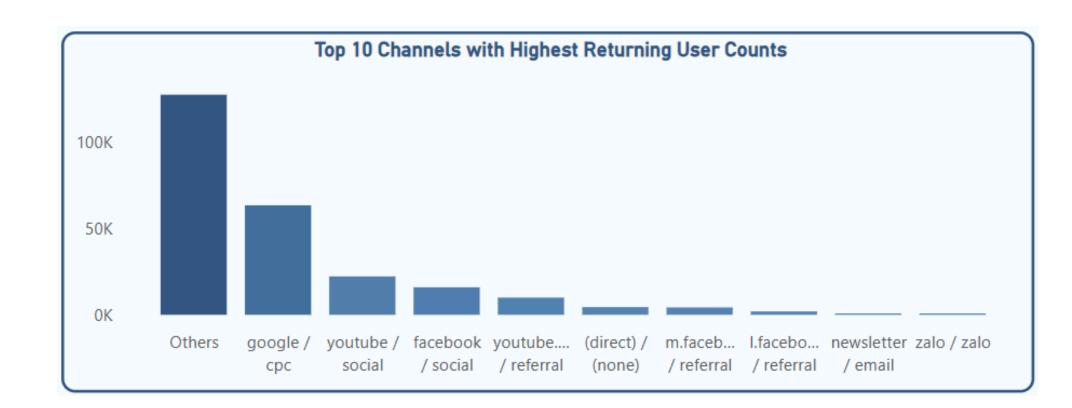


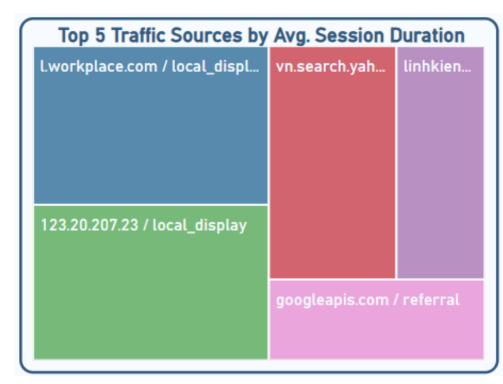
- The majority of website traffic comes from **Paid** and **Organic** channels.
- Paid traffic accounted for the highest share of sessions, indicating strong investment in ads and acquisition.
- Organic traffic still maintained a significant portion, suggesting good SEO or brand recognition.





- Paid traffic leads revenue generation, confirming the effectiveness of paid ads in driving conversions.
- However, **Direct** and **Referral traffic** also contributed meaningful revenue with lower session volumes showing higher efficiency.
- **Social traffic** (especially from platforms like Facebook or YouTube) has high bounce rates, indicating low content engagement or misalignment with audience intent.
- **Direct** and **Paid traffic** had lower bounce rates, showing better user quality.

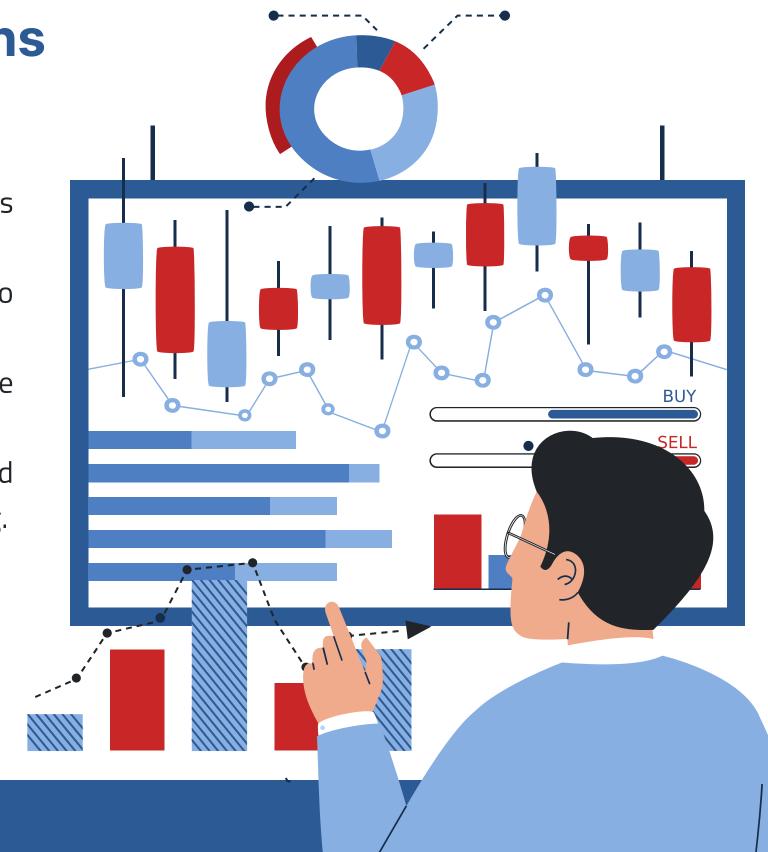




- The top 10 channels with the highest Conversion Rates (ECR) include **Others, Google CPC**, and some **social channels**.
- Some high-traffic sources have low conversion rates, indicating inefficiencies.
- Channels like 'I.workplace.com/local_display' and '123.20.207.23/local_display' drive higher Average Session Duration, which suggests that users from these sources are more engaged with the website content and potentially more interested in the products or services offered.

Recommendations

- Scale up Paid Search campaigns, focusing on top-performing keywords with high ROI.
- **Invest in Direct Traffic tactics** (email remarketing, brand recall) to capitalize on high conversion and loyalty.
- **Optimize social campaigns**: improve landing pages and content to raise ECR for YouTube and Facebook.
- Explore emerging sources like "I.workplace.com/local_display" and "123.20.207.23/local_display with high AOV for niche audience targeting.





THANK YOU!

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