

# Homework Assignment for Senior Marketing Analyst

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# About me

## Rafael Fagundes

**Data & CRM Analyst with 10+ years experience turning data into growth**



- 10+ years in data, CRM & marketing analytics
- Experience at Dell, Nestlé, Samsung, HP in international & multicultural teams
- Skilled in SQL, Python, BI tools (Power BI, Tableau, Looker)
- Strong background in data-driven growth, campaign performance & funnel optimization
- Excited to help Eduki optimize marketing performance and make smarter, data-driven decisions

# 1) Revenue Contribution by First-Touch Channel

Exercise 1

RunSave queryShareScheduleOpen inMore

```
1 WITH
2   first_touch AS (
3     SELECT
4       user_id,
5       traffic_source AS first_touch_source,
6       SUM(revenue) OVER (PARTITION BY user_id ) AS user_total_revenue
7     FROM
8       eduki_test.marketing_analytics
9     QUALIFY
10    ROW_NUMBER() OVER (PARTITION BY user_id ORDER BY purchase_date ) = 1 )
11 SELECT
12   first_touch_source,
13   ROUND(SUM(user_total_revenue), 2) AS total_revenue,
14   ROUND( 100 * SUM(user_total_revenue) / SUM(SUM(user_total_revenue)) OVER (), 2 ) AS revenue_share
15 FROM
16   first_touch
17 GROUP BY
18   first_touch_source
19 ORDER BY
20   total_revenue DESC;
```

✓ This query will process 103.71 KB when run.

No cached results

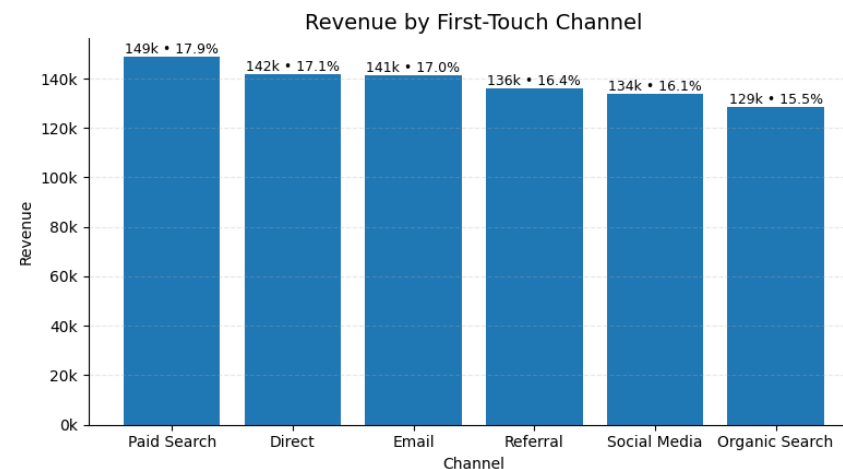
Query results

Job informationResultsVisualizationJSONExecution detailsExecution graph

Row	first_touch_source	total_revenue	revenue_share
1	Paid Search	148772.73	17.9
2	Direct	141955.49	17.08
3	Email	141477.52	17.03
4	Referral	136105.47	16.38
5	Social Media	134015.42	16.13
6	Organic Search	128657.41	15.48

**Q1:** Calculate the revenue contribution of each traffic source, considering only first-touch attribution. Which traffic source has the highest impact on revenue?

- Paid Search drives the highest revenue (17.9%), but Direct (17.1%) and Email (17.0%) are nearly as impactful.
- This shows multiple channels contribute strongly at the start of the funnel.



## 2) Repeat Purchases Within 30 Days

Exercise 2

RunSave queryShareScheduleOpen inMore

```
1 WITH
2   first_rows AS (
3     SELECT
4       user_id,
5       purchase_date,
6       LEAD(purchase_date) OVER (PARTITION BY user_id ORDER BY purchase_date) AS next_purchase
7     FROM
8       `eduki_test.marketing_analytics`
9     QUALIFY
10      ROW_NUMBER() OVER (PARTITION BY user_id ORDER BY purchase_date) = 1 )
11  SELECT
12    ROUND(100 * COUNTIF(TIMESTAMP_DIFF(next_purchase, purchase_date, DAY) <= 30) / COUNT(*), 2) AS pct_second_purchase
13  FROM
14    first_rows;
```

✓ This query will process 46.88 KB when run.

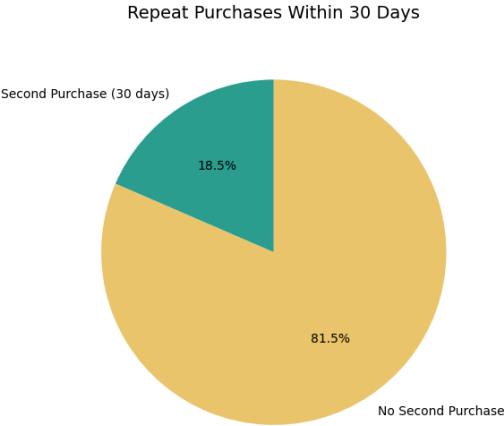
Query results

Job informationResultsVisualizationJSONExecution detailsExecution graph

Row	pct_second_purc...
1	18.51

**Q2:** Identify customers who made a second purchase within 30 days after their first purchase. What percentage of total customers do they represent?

- 18.5% of customers made a second purchase within 30 days of their first order.
- This shows that nearly 1 in 5 customers return quickly, highlighting an opportunity to focus on early retention campaigns (e.g., post-purchase email flows, cross-sell offers).

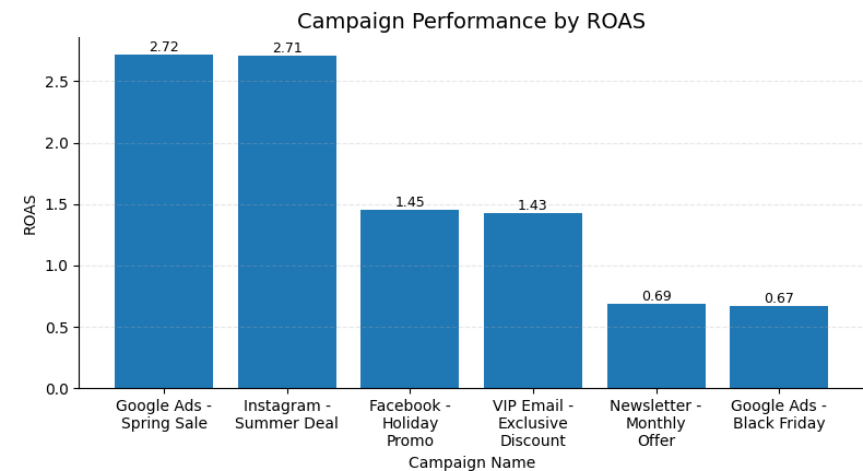


### 3) Campaign Performance by ROAS

Exercise 3		Run	Save query	Share	Schedule	Open in	More
<pre>1 SELECT 2   campaign_id, 3   campaign_name, 4   ROUND(SUM(ad_spent),2) AS ad_spent, 5   ROUND(SUM(revenue),2) AS revenue, 6   ROUND(SAFE_DIVIDE(SUM(revenue),SUM(ad_spent)),2) AS ROAS, 7   CASE 8     WHEN SAFE_DIVIDE(SUM(revenue),SUM(ad_spent)) &lt; 1 THEN 'Optimize or Pause' 9     ELSE 'Performing well' 10  END 11 AS Recommendation 12 FROM 13   `eduki_test.marketing_analytics` 14 WHERE 15   campaign_name IS NOT NULL 16 GROUP BY 17   campaign_id, 18   campaign_name 19 ORDER BY 20   ROAS DESC;</pre>							
This query will process 87.69 KB when run.							
Query results							
Job information		Results	Visualization	JSON	Execution details	Execution graph	
Row	campaign_id	campaign_name	ad_spent	revenue	ROAS	Recommendation	
1	101	Google Ads - Spring Sale	28297.52	76971.18	2.72	Performing well	
2	202	Instagram - Summer Deal	25303.84	68617.28	2.71	Performing well	
3	201	Facebook - Holiday Promo	42161.41	61287.46	1.45	Performing well	
4	302	VIP Email - Exclusive Discount	47631.24	68170.07	1.43	Performing well	
5	301	Newsletter - Monthly Offer	98896.04	67744.99	0.69	Optimize or Pause	
6	102	Google Ads - Black Friday	117236.17	78600.42	0.67	Optimize or Pause	

**Q3:** Compute the ROAS (Return on Advertising Spend) for each campaign. Which campaigns are below the break-even point and should be optimized or paused?

- Two campaigns, Newsletter (ROAS 0.69) and Google Ads Black Friday (ROAS 0.67), are below break-even and should be optimized or paused.
- Other campaigns, such as Spring Sale (ROAS 2.72) and Instagram Summer Deal (ROAS 2.71), are performing strongly and should continue to receive investment.



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