

ROI CALCULATION

The scenario involved analyzing multichannel data and calculating metrics such as ROAS, AOV, LTV, and LTV-to-CAC to support future budget decisions.

PROVIDED MULTICHANNEL DATA:

Multi-channel campaign at 180 days	Overall	Search ads	Display ads	Social ads	Shopping ads
Ad spend	250.000 \$	187.500 \$	32.000 \$	15.000 \$	15.500 \$
Number of new accounts	20.790	8.420	5.816	3.959	2.595
Number of orders	6.237	2.494	2.039	802	902
Average purchase frequency	1,6	1,5	2	1,5	1,5
Number of unique new account purchasers	3.819	1.663	1.020	535	601
Revenue	502.358 \$	320.943 \$	56.288 \$	70.101 \$	55.026 \$
CAC	65 \$	112 \$	31 \$	28 \$	25 \$

ROI calculations for campaign debriefing

ROAS

Formula: ROAS = Revenue/Ad spend

Record your ROAS calculations based on revenue and ad spend in the table below. You can express ROAS as a number, ratio, or percentage. All are correct.

Campaign ROAS	ROAS for search ads	ROAS for display ads	ROAS for social ads	ROAS for shopping ads
201%	171%	176%	467%	355%

AOV

Formula: AOV = Revenue/Number of orders

Record your AOV calculations in the table below.

Campaign AOV	AOV for search ads	AOV for display ads	AOV for social ads	AOV for shopping ads
\$80.55	\$128.69	\$27.61	\$87.41	\$61.00

LTV

Formula: LTV = Average order value (AOV) x Purchase frequency

Record your LTV calculations in the table below.

Campaign LTV	LTV for search ads	LTV for display ads	LTV for social ads	LTV for shopping ads
\$128.88	\$193.04	\$55.22	\$131.12	\$291.50

LTV to CAC ratios

Formula: LTV to CAC ratio = LTV/CAC

Record your LTV to CAC ratios in the table below.

Campaign LTV:CAC	Search ads LTV:CAC	Display ads LTV:CAC	Social ads LTV:CAC	Shopping ads LTV:CAC
1.98	1.72	1.78	4.68	3.66

Percentage of new customers making purchases

Formula: Percentage of new customers making purchases =
(Number of unique new account purchasers / Number of new accounts) x 100

Record your calculated percentages in the table below.

Campaign percentage	Search ads percentage	Display ads percentage	Social ads percentage	Shopping ads percentage
18.37%	19.75%	17.53%	13.51%	23.16%

Future budget decisions

For a future campaign, would you recommend moving some of the budget from a channel with a lower ROAS to a channel with a higher ROAS? If so, which channel(s), and how much of the budget? Enter your recommendation below.

Based on the ROAS analysis, it's recommended to reallocate part of the budget from search ads to social ads, which delivered a higher ROAS of 467% compared to shopping ads (355%) and search ads (171%).

Example budget adjustment: Shift \$37,500 from search ads to social ads. This would leave \$150,000 allocated to search ads and increase social ads to \$52,500. No additional budget should be assigned to shopping ads—despite having the same spend as social ads (about \$15,000), shopping ads generated 20% less revenue. With a stronger ROAS, social ads are likely to provide a better return on investment.

In this scenario, the goal is to make sure the LTV to CAC ratios remain at 2 or higher so channels remain profitable even when absorbing occasional declines in LTV or spikes in acquisition costs. With this information, would you recommend a budget change for channels with results below 2 or above 3? Enter your recommendation below.

Since the LTV to CAC ratios for search ads (1.72) and display ads (1.78) are relatively low, reducing budgets in these channels can help improve overall CAC efficiency. Reallocating some of this budget to social or shopping ads would likely deliver stronger returns.

For example, social ads currently show a high LTV of \$131.12 and a low CAC of \$28, resulting in an LTV to CAC ratio of 4.68. While increasing the budget for social ads may raise CAC and lower the ratio, starting from such a strong position provides room for growth. Even if the ratio declines, as long as it remains above the campaign average of 1.98, the additional volume of new customers makes the investment worthwhile. This adjustment shifts the channel's strategy from pure efficiency toward scalable growth.

For a future campaign, if you have funds available, which channels would you customize landing pages for in an attempt to increase customer conversion rates?

Hint: Refer to the percentages of new customers making purchases to help you decide where you might need customized landing pages. Enter your recommendation and the thought process you went through to reach your decision below.

Recommendation: Customize landing pages for search and social ads.

- Both channels showed a lower purchase frequency (1.5) compared to display ads (2).
- They also had a lower share of new customers making purchases (19.75% for search and 13.51% for social) versus shopping ads (23.16%).

Prioritization if budget allows only one landing page:

- Display ads already perform best on purchase frequency (2), so customization should focus on search, social, or shopping ads.
- Since shopping ads drive the highest percentage of new-customer purchases (23.16%), the stronger opportunity lies with search and social ads.
- Between the two, **social ads should be prioritized**: only 13.51% of new customers made purchases from this channel, compared with 19.75% for search.

Creating a custom landing page for social ads could therefore address its weaker conversion among new customers and deliver the greatest potential uplift.