

Digital Advertising



Plan a Multichannel Campaign



Campaign Brief



Background

Advertiser:

Spoke Bicycles

Marketing Objective:

Drive \$1 million in cycling product sales across target audiences in next quarter with 25% of this sales growth from new customers.

Target Audience:

Cycling enthusiasts who are not yet customers and people actively researching or planning to buy cycling products in cities with Spoke Bicycle shops



Background

Profit Margin:

On average, Spoke has a 50% profit margin for each sale. In other words, it makes \$50 in profit for each \$100 in cycling product sales.

Campaign:

Although Spoke would like to grow its market share with new customers, it does not want to lose money while advertising to these target audiences ($ROI > 0$).

Conversion Assumptions:

On average, a store visit results in \$25 product sales.

On average, 25 ad clicks result in 2 store visits.



Formulas

Profit:

$\text{Profit} = \text{Product Sales} * \text{Margin}$

Return-on-Investment:

$\text{ROI} = \text{Profit} / \text{Ad Cost}$

Cost Per View:

$\text{CPV} = \text{Campaign Cost} / \text{Views}$

Cost Per Action:

$\text{CPA} = \text{Campaign Cost} / \text{Store Visits}$

Budget:

$\text{Budget} = \text{Target Profit} / \text{Target ROI}$



Part 1

Evaluate Campaign Effectiveness



Campaign Effectiveness

Spoke used YouTube video ads to drive considerations among new customers and shopping display ads to drive sales among in-market audiences. Its **marketing goal was to achieve \$1 million in sales** by driving store visits - with a growth objective of 25% new customers.

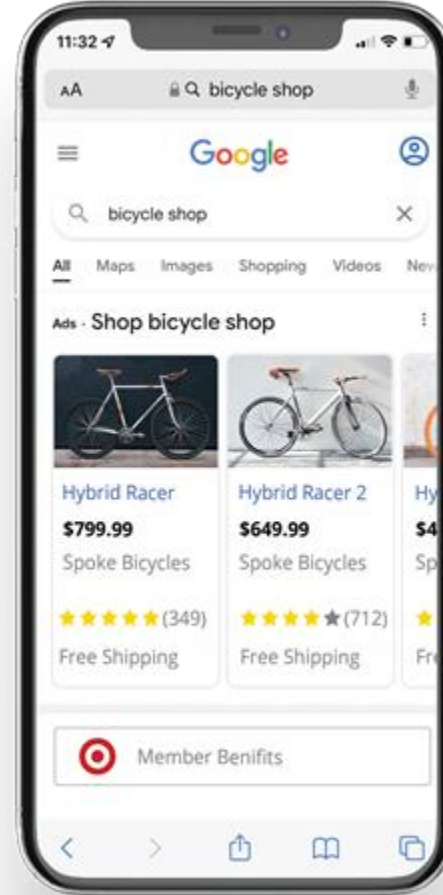
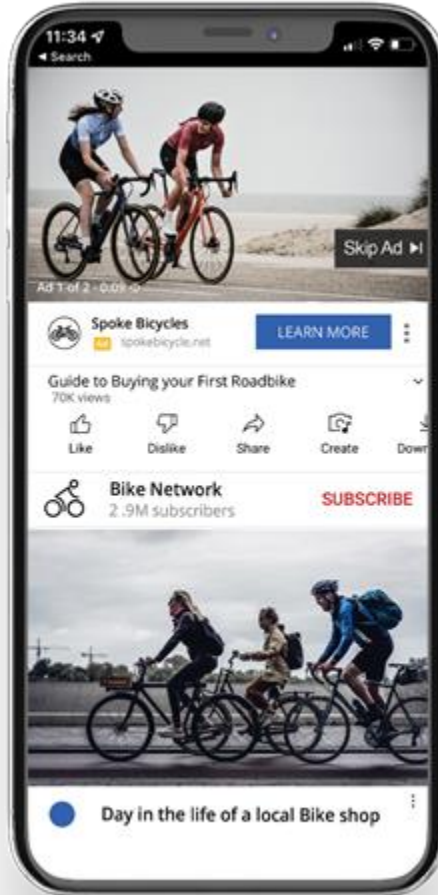
Campaign Setup

Campaign	Campaign Goal	Bid	Target
YouTube Video	Product Considerations	CPV	\$0.033
Shopping Display	Product Sales	CPA	\$9.375

Note: Stoke tracks store visits as a key metric across the customer journey. All transactions are fulfilled locally at the bike shops with customers visiting the stores to purchase there or pickup cycling products purchased online.



Campaign Effectiveness - Ads





Campaign Effectiveness

1. Calculate the total values and the actual KPI-s
2. Answer the questions below the data

Campaign	Cost	Views	Store Visits	Sales	Bid Strategy	Target KPI	Actual KPI
YouTube Video	\$240,000	6,000,000	7,680	\$192,000	CPV	< \$0.033	\$0.4
Shopping Display	\$282,000	35,250,000	32,000	\$800,000	CPA	< \$9.375	\$8.8125
Total	\$5,22,000	4,12,50,000	39680	\$9,92,000			

Did the overall campaign achieve the sales objective?

Target sale was \$1 Million sales, but actual sale was 9,92,000. Means it was short by \$8000.
Hence, they were close to achieve the sales target.

Did each strategy deliver on its target KPI?

Not quite, Youtube Video was not able to confine itself under \$0.033. On the other hand the Shopping Display was able to meet its target KPI as its actual CPA was \$8.8125.



Calculate the ROI

Calculate the target profits and budget below

Campaign	Budget	Target Sales	Target Profit	Target ROI
YouTube Video	N/A	\$250,000	\$1,25,000	N/A
Shopping Display	N/A	\$750,000	\$3,75,000	N/A
Total	\$5,00,000	\$1,00,000	\$5,00,000	1.0

Calculate the actual profit and ROI below

Campaign	Cost	Sales	Profit	ROI
YouTube Video	\$240,000	\$192,000	\$96,000	0.4
Shopping Display	\$282,000	\$800,000	\$4,00,000	1.418
Total	\$522,000	\$992,000	\$4,96,000	0.950



Calculate the ROI

What was the overall ROI of the campaign? Was it positive or negative?

The campaign delivered an overall ROI of **0.95**, which falls slightly below expectations and, when evaluated purely on short-term performance metrics, appears negative. However, this assessment does not fully capture the campaign's true impact.

From a **brand awareness perspective**, the campaign performed exceptionally well, reaching **approximately 4.12 crore viewers**. For many of these users, this was likely their **first interaction with the brand**, creating meaningful top-of-funnel exposure and laying the foundation for future consideration and conversions.

While the campaign may show a **negative ROI in the short term**, its strong reach and visibility indicate significant **long-term brand value**. As awareness builds and recall strengthens, this exposure has the potential to translate into **future customers and positive returns over time**.

In summary: short-term ROI appears negative, but from a long-term strategic and brand-building standpoint, the campaign has the potential to generate positive outcomes.



YouTube ads recommendations

Provide **at least three suggestions** to improve this campaign so that it can achieve its marketing objective and deliver a positive ROI for its brand advertising tactics aimed at audiences who are not yet Spoke customers.

(Answers might include things like: different creative, changes to targeting, A/B testing, measurement updates, and more)

These are the following suggestions to improve the campaign and Positive ROI:-

1. **Make a demarcation of display ads based on users age and geography**

For example parents of kids aged 3 to 7 years- Balanced bikes/ small bicycles with training wheels. 8 to 14 years- basic geared bikes. Youth population above 14 years- geared mountain bikes.

Cycle choices depend on geography: cities suit road or folding bikes, rural and hilly areas need sturdy mountain bikes, while coastal regions require fat-tire cycles.

So, the ads on their feeds must align with their choices.



2. Target only to those who are actively searching for the bicycles

Targeting users actively searching for bicycles works because it captures **high-intent buyers** ready to decide. To maximize impact, use **search-led creatives** like *“Best Bicycle for Daily Commute”*, *price-led headlines*, *comparison ads*, and *location-based offers*. These creatives align perfectly with user intent, increasing clicks, conversions, and ROI while minimizing wasted spend.

3. Replace the skippable ad with Bumper ad

The campaign used **skippable YouTube ads**, which resulted in a **high cost per view (CPV)** because many users skipped the ads before watching them fully. To improve efficiency, **bumper ads** should be used instead. Bumper ads are **non-skippable, lower in CPV**, and ensure the message reaches the audience. This helps build **strong brand awareness** and supports future sales more effectively.



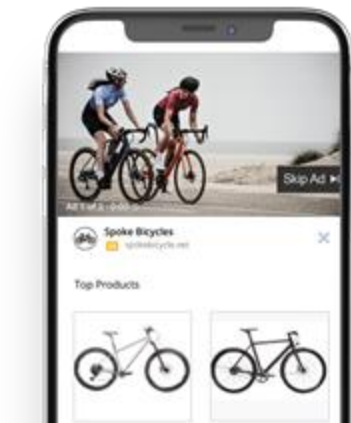
Part 2

Test & Learn to Make Decisions

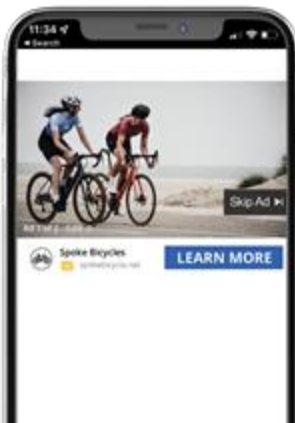


Display Remarketing

In order to improve their current strategy of engaging upper funnel audiences with YouTube video ads while converting lower funnel audiences with Google Shopping display ads, Spoke experimented with a multichannel ad strategy of engaging audiences as they journey down the marketing funnel with both video and display ads. Specially, Spoke's experiment tested its hypothesis that showing display ads to audiences who viewed or interacted with the YouTube videos would drive more store visits and improve its ROI.



Youtube Ads



Google Shopping
Ads





Display Remarketing: KPI

1. Calculate the CPV and the total values
2. Answer the question below the data

Campaign	Ad Cost	Views	CPV
YouTube Video (Test)	\$18,000	450,000	0.04
Display Remarketing (Test)	\$3,000	350,000	0.008
Total	\$21,000	8,00,000	0.0265

Did the test campaign deliver on the target KPI if it was “CPV < \$0.033”?

Yes the campaign delivered on the target KPI of <\$0.033. Its overall CPV is 0.0265 which is less than \$0.033. CPV improved because ads targeted users who had already shown interest. These warmer audiences were more likely to watch the ads, skip less, and engage more, which increased relevance and reduced the cost per view.



Display Remarketing: ROI

1. Calculate the Sales Profit, ROI and the Total values
2. Answer the question below the data

Campaign	Ad Cost	Sales	% Margin	Sales Profit	ROI
YouTube Video (Test)	\$18,000	\$14,400		\$7200	0.4
Display Remarketing (Test)	\$3,000	\$9,600		\$4800	1.6
Total	\$21,000	\$24,000	50%	\$12,000	0.571

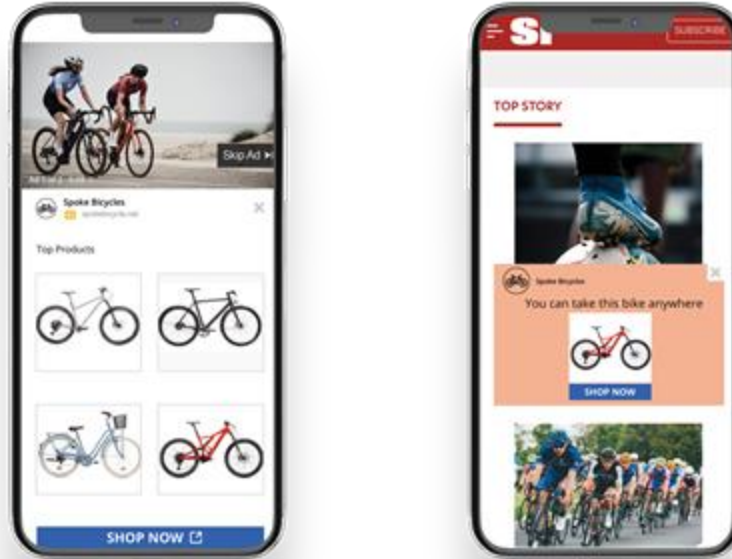
Did the test campaign improve the ROI for its upper funnel ads, if the YouTube Video (Control) ROI was 0.4?

Yes, the test campaign improved ROI. While the YouTube Video (control) campaign had a low ROI of 0.4, adding display remarketing increased the combined ROI to 0.571. This shows that retargeting YouTube viewers with display ads successfully boosted conversions and overall campaign efficiency.



YouTube Video Shopping

Although capturing the user's attention is important to drive video ad views, Spoke experimented to evaluate whether shoppable videos on YouTube will grow sales (and store visits) while optimizing cost per actions to manage the overall costs for this strategy. The YouTube video shopping test campaign includes optimized targeting, call-to-actions, YouTube channel partnerships, and browsable product imagery alongside the video ads.





YouTube Video Shopping: KPI

1. Calculate the CPA for each campaign
2. Answer the question below the data

Campaign	Ad Cost	Store Visits	CPA
YouTube Video (Control)	\$18,000	576	\$31.25
YouTube Video (Test)	\$18,000	768	\$23.437

Did the test campaign deliver on the target KPI if it was “CPA: < \$30.00”?

Yes, the test campaign delivered on the target KPI.

The YouTube Video (Test) campaign achieved a **CPA of \$23.44**, which is well below the target of **\$30.00**. Compared to the control campaign’s CPA of \$31.25, the test drove more store visits at a lower cost, clearly meeting and exceeding the KPI.



YouTube Video Shopping: ROI

1. Calculate the Sales Profit and the ROI
2. Answer the question below the data

Campaign	Ad Cost	Sales	% Margin	Sales Profit	ROI
YouTube Video (Control)	\$18,000	\$14,400	50%	&7,200	0.4
YouTube Video (Test)	\$18,000	\$19,200	50%	\$96,00	0.53

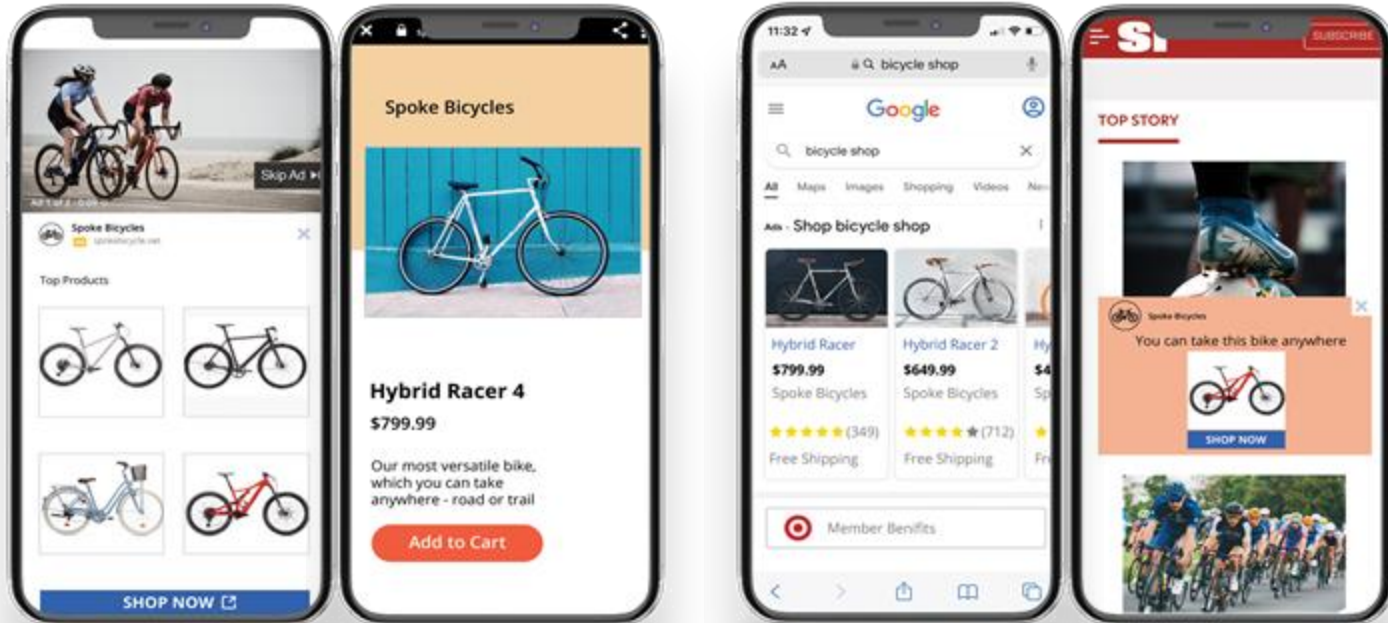
Did the test campaign improve the ROI for its YouTube video ads?

Yes, the test campaign improved the ROI. The Control Campaign has ROI of 0.4, while test campaign achieved 0.53. With the same cost of \$18,000, the test generated higher sales and profit, resulting in a better return on ad spend.



Multichannel Strategy

After confirming its hypothesis that an integrated multichannel strategy with shoppable YouTube video ads and display remarketing ads will improve performance, Spoke ran an experiment to evaluate the overall impact of these tactics when running alongside its shopping display ads for in-market audiences.





Multichannel Strategy: KPI

1. Calculate the CPA for each campaign and the total values
2. Answer the question below the data

Campaign	Ad Cost	Store Visits	CPA
YouTube Video Shopping	\$18,000	768	\$23.43
Display Remarketing	\$3,000	384	\$7.812
Shopping Display	\$28,200	3,200	\$8.8125
Total	\$49,200	4352	\$11.30

Did the test campaigns deliver on the target KPI if it was “CPA: < \$12.5”?

Yes, the campaigns delivered on the target KPI Overall, but not individually. Overall KPI: CPA was \$11.30 which is below \$12.5, mainly driven from strong performance from display remarketing.



Multichannel Strategy: ROI

1. Calculate the Sales Profit and the ROI for each campaign and the totals
2. Answer the question below the data

Campaign	Ad Cost	Sales	% Margin	Sales Profit	ROI
YouTube Video Shopping	\$18,000	\$19,200	50%	\$960	0.53
Display Remarketing	\$3,000	\$9,600	50%	\$480	0.16
Shopping Display	\$28,200	\$80,000	50%	\$40,000	1.418
Total			50%	\$41,440	1.106

What was the overall ROI for the campaigns? Was it positive or negative?

The overall combined ROI is 1.106 which is positive(greater than 1). This means multichannel ad campaign was profitable overall, even though individual campaigns performed differently.



Part 3

Plan a Multichannel Campaign



Set the budget and forecast results

You need to calculate the Store Visits and Ad Costs to know what budget you will need. **To start the calculations, see the campaign brief.**

Audience	CPA	Target Sales	Store Visits	Ad Cost
Lifestyle: Cycling Enthusiasts (+ Not a Customer)	\$18.23	\$250,000	10,000	\$182,300
In Market: Cycling Products & Accessories	\$8.81	\$750,000	30000	\$264,300
Total	\$11.17	\$1,000,000	40000	\$446800

Calculate the target profit, ROI and the budget.

Campaign	Target Sales	Target Profit	Target ROI	Budget
Multichannel (YouTube Video + Display Remarketing/Shopping)	\$1,000,000	\$5,00,000	1.119	446827.52



Inputs to create a campaign in Google Ads

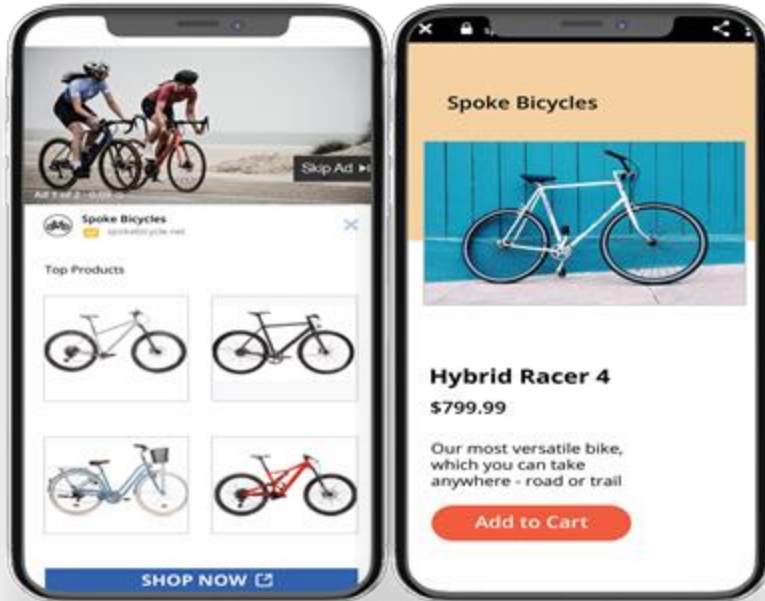
Enter the inputs required to create each campaign in Google Ads below
Enter YouTube, Google Display Network, or Google Shopping for placements.

Campaign Input	Multichannel Campaigns		
	YouTube Video Shopping	Display Remarketing	Shopping Display
Campaign Goal (see list)	Awareness/ sales/ store visit	sales	sales
Campaign Type (see list)	Video	Display	Display shopping
Budget	40%	25%	35%
Bid Strategy	Targeted CPV	Targeted CPA	Targeted CPC and CPA/ Maximize ROAS
Target Bid Value	Store visit and conversion	Store visit/ Purchases	Store visit and purchases
Placements	In stream	Google display network (Remarketing audiences)	Google display network (shopping ads)

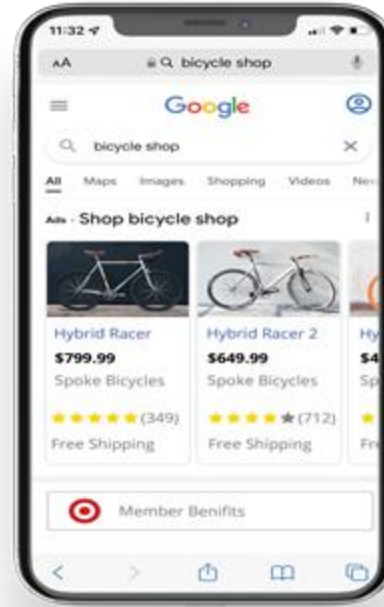


Featured Ads

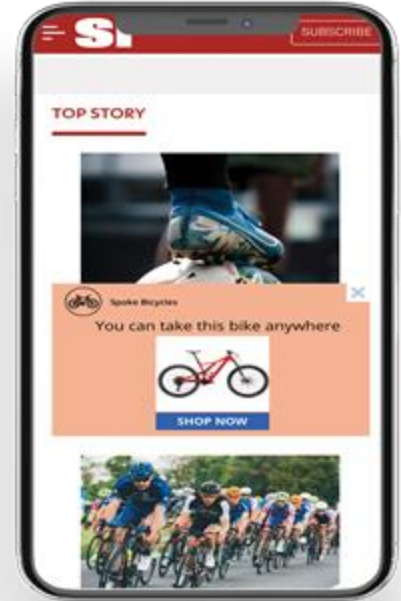
Below are the three ads to feature in the multichannel campaign. Each ad features creative elements which you will use as inputs to create the ads on the next page.



YouTube Video Shopping



Shopping Display



Display Remarketing



Featured Ads

Enter the inputs required to create the ads for each campaign below
Ensure that the inputs match the ads displayed on the previous page

Ad Input	Multichannel Campaigns		
	YouTube Video Shopping	Display Remarketing	Shopping Display
Ad Format	In stream video with product feed	Responsive display ad	Shopping display ad
Call to Action	Shop now	Buy now, view products	N/A
Product Title	Hybrid Racer 4	Hybrid racer 4	Pulled directly from the product feed
Headline	The Versatile Hybrid Bike	Still thinking? Your perfect ride awaits	N/A
Brand Logo (Yes/No)	Yes	Yes	No
Product Image (Yes/No)	yes	Yes	Yes



Part 4

Provide Strategic Recommendations



Optimization for further improvement

Imagine you had additional budget, given your campaign evaluation, how would you use it?

- You may use “bullet points” for your analysis and may add as many slides as needed
- The following prompts can help you structure your answer:
 - Would you focus on certain Ad Groups, Ads or Targeting?
 - Would you change any of your existing Ads or Targeting or add any new ones?
 - Would you set up an A/B test, and if so, how would you go about it?
 - Would you make changes to the landing page, and if so, what kind of changes and why?

Write your recommendations/answers in the next two slides.



- I will analyze the whole data first, and find which users have spent how much time on youtube ad, how many have clicked on the display ad, how many checked the landing pages more than 2 times, how many users have shown some sort of interest in our bicycles specifications. I will make a proper strategy to retarget these users again, and allocate the extra budget on targeting these people first. I will cut out all those audiences with low engagement. And for better precision I will layer demographic and geographic performance insights.
- Reason for doing this is simple, historical performance shows not all audiences convert equally. Optimizing targeting increases conversion probability per dollar spent.



Optimization for further improvement

A/B testing and landing page optimization would be the next key focus. I would test multiple variations of **ad creatives, formats, and audience segments** to identify what performs best. Underperforming variants would be paused, while high-performing ones would be scaled to maximize results.

In parallel, I would optimize the landing pages by improving **page load speed, clarity of messaging, and alignment between ad messaging and landing page content**. This is critical because even strong ads cannot deliver optimal ROI if the creatives or landing pages are weak. Continuous testing and optimization help increase conversion rates **without increasing media spend**, leading to more efficient and sustainable growth.



Optimization for further improvement

To avoid ad fatigue, I would regularly refresh ad creatives with **new visuals and messaging**. These creatives would be structured around the **AIDA framework (Attention, Interest, Desire, Action)** to guide users smoothly from awareness to purchase intent.

All changes would be implemented **gradually through A/B testing**, where multiple creative variations are tested simultaneously. Low-performing ads would be paused, and **high-performing creatives would be prioritized and scaled**.

This approach benefits sales because refreshed, relevant ads maintain user interest, reduce ad fatigue, and improve engagement. When ads clearly align with user intent and guide them toward action, conversion rates increase, leading to **higher sales without increasing media spend**.



Design an experiment

Submit the requirements for an experiment to evaluate your recommendations for optimizing your multichannel channel campaigns.

Experiment Inputs	
Objective What is the goal of this experiment?	The purpose of the experiment is to evaluate whether changing and optimizing ad creatives improves conversion and ROI when combined with remarketing across channels. And most importantly to generate more profits with store visit with limited increase in ad spending.
Hypothesis What do you think the test outcome will be?	If users who have already viewed or engaged with YouTube ads are targeted using clear audience segmentation and shown new, optimized display ads , then store visits and conversions will increase. This will result in a higher ROI compared to the existing strategy, as the ads will reach warmer, more relevant audiences with stronger purchase intent.
Metrics to Test What parameters do you want to evaluate?	CVR, CPA, ROI, CTR, Store visits(for display ads)



Design an experiment

Experiment Inputs	
Test Campaign(s) What are the requirements for the test campaign?	First, clear KPIs should be defined separately for each campaign. For example, YouTube ads can be measured by views or engagement, display ads by clicks, and remarketing display ads by sales or conversions. Based on audience insights, ad formats and messaging should be customized—for instance, hybrid cycle ads for younger audiences and low-frame cycle ads for older users . Strong and relevant call-to-action (CTA) elements should be included in display and remarketing ads to encourage conversions. This approach ensures each campaign is optimized for its specific objective and audience
Control Campaign(s) What is the current state that you will compare?	The control state will be the existing display-only campaign that runs without prior YouTube video exposure. Performance of the test campaigns will be compared against this control using key metrics such as ROI, sales, store visits, engagement, and CPA . The comparison will focus on measuring how YouTube test exposure influences downstream performance—specifically whether it improves display ad engagement, lowers CPA, and increases store visits and ROI compared to the display-only control campaigns. Additionally, the impact of defining clear KPIs for each campaign will be evaluated to determine whether it enables better measurement, optimization, and improved sales performance while maintaining the same budget
Risks What are the risks of running this test to live audiences?	There are several potential risks associated with running this test on live audiences. One risk is budget inefficiency , where spend may be allocated to underperforming variants during the testing phase. Another risk is creative fatigue or creative mismatch , which may reduce engagement if users are repeatedly exposed to similar ads or if messaging is not well aligned with the audience. There is also a risk of disrupting existing brand recall , as frequent changes in creatives may weaken previously established ad memory. Audience overlap between test and control campaigns could contaminate results and make comparisons less reliable. Additionally, attribution ambiguity may arise, as conversions can be influenced by multiple touchpoints, making it difficult to isolate the true impact of the test.



Provide inputs for your campaign

Enter the inputs required to create a new campaign **based on your recommendations**

Enter YouTube, Google Display Network, or Google Shopping for placements.

Campaign	
Setting	Input
Campaign Goal (see list)	More brand awareness, more store visit, and More sales and high ROI.
Campaign Type (see list)	YouTube Video ad, Display ad, remarketing display ad.
Budget	\$5,00,000
Bid Strategy	Targeted CPV for YouTube ads (Awareness), CPC for display ads, CPA for remarketing display ads.



Max Bid	\$0.05-\$0.08 on YouTube video ads(Target CPV), \$0.50 CPC for display ads,\$100-\$120CPA For remarketing display ads
Placements	YouTube bumper ads placed at the start of videos are effective for generating quick and high frequency brand awareness at a low cost per view, making them ideal for upper funnel exposure. Display ads on the Google Display Network across sports fitness and lifestyle websites and relevant mobile apps align well with user interests and support the consideration stage. Remarketing ads shown to users who previously visited websites apps product pages or store locator pages are highly effective for conversions as they target high intent audiences closer to purchase decisions.