UDACITY

Marketing Data and Technology

Draw Insights from Marketing Data

Part One: Setting Goals

Identify Key Business Objectives

Key Business Objective: A defined goal or outcome used to plan the desired direction of your company. Write at least 3 but no more than 5 business objectives that support your business model. Each objective should be SMART.	
1	*Drive at least 50 leads to my website every week*
2	*Increase conversion rate by 30% in 6 months*
3	*Increase number of sales by 10% in 6 months*
4	*Increase number of social media followers by 20% in 6 months*
5	*Key Business Objective 5 (optional)*

Identify Key Performance Indicators

Key Performance Indicator (KPI): A quantifiable metric used to determine how effectively your key business objectives are being met. Ensure that the specific metric is clearly identified.	
1	*Number of leads*
2	*Conversion Rate*
3	*Sales*
4	*Number of followers*
5	*Key Performance Indicator 5 for Key Business Objective 5 (optional)*

Part Two:
A/B Testing Proposal

A/B Testing Proposal: KPI, Variable, and Hypothesis

KPI used as the basis for an A/B Test:

Conversion Rate

Identify a variable that will have an impact on the KPI and metric

A campaign, testing paid traffic to two versions of a landing page

Determine a hypothesis for your A/B Test. Your hypothesis should include the variable you are testing and your predicted outcome.

I predict that landing page A will have a higher conversion rate than landing page B because landing page A has a simple form to fill out whereas landing page B has multiple-step forms to fill out.

A/B Testing Proposal: Testing Process

Describe the steps you would take to perform the A/B test.

We create two landing pages for Website campaign testing the variable (Landing pages). We will run the campaign for two weeks and users will be randomly divided with 50% shown landing page A and the other 50% shown landing page B. Page A has a simple form to fill out, while page B has multiple-step form to fill out

Describe how you would determine the results of the A/B test.

At the end of 2 weeks, we will access the result using Google Analytics. The landing page with the higher conversion rate will be the better result and will be considered for future campaigns.

Part Three: Data Exploration

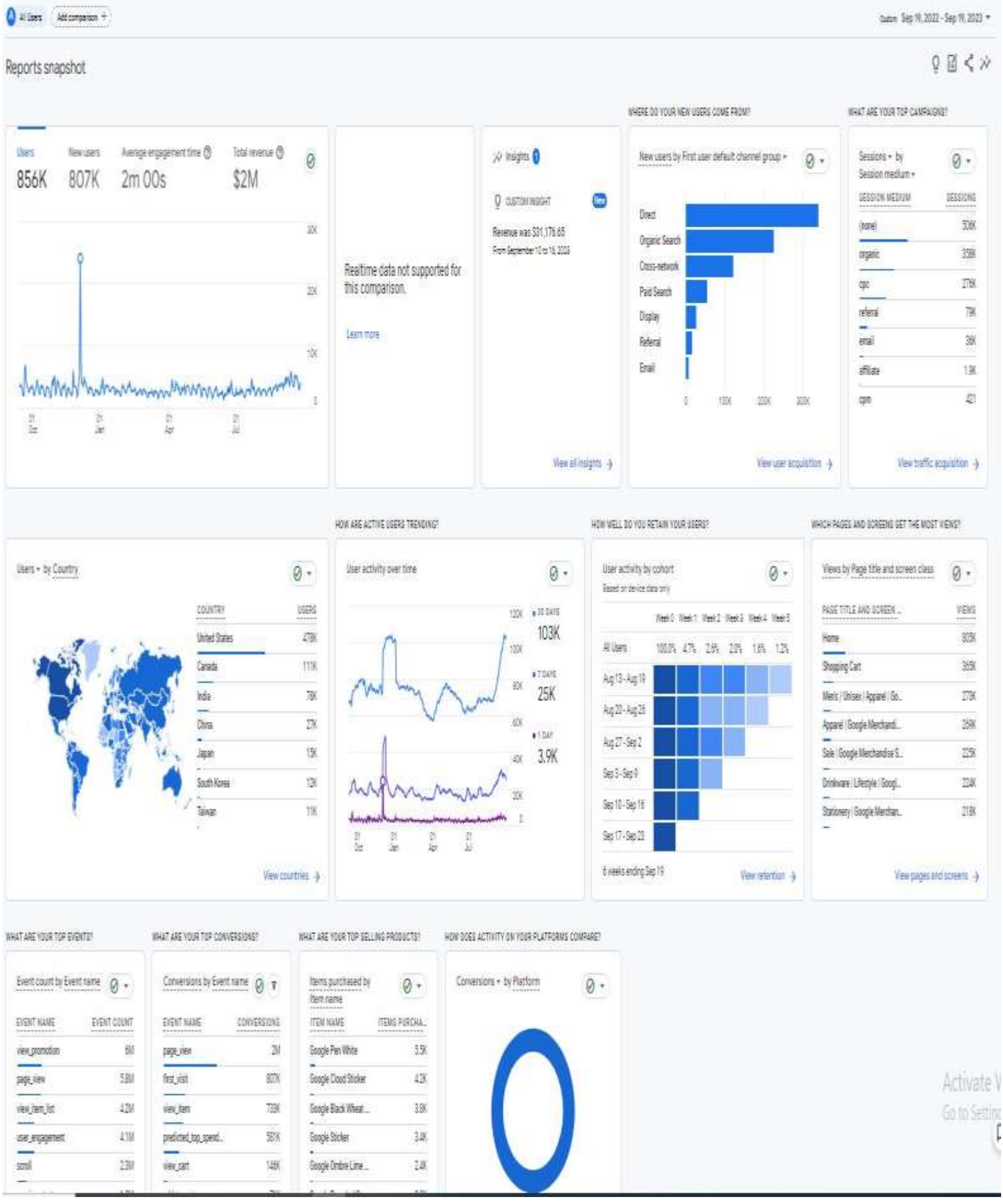
Reports Snapshot

From the Reports Snapshot, select a twelve month time period you would like to explore.

Ensure that the following are visible in the screenshot:

- Timeframe
- New users
- Axis values

Reports Snapshot



Reports Snapshot

Which month had the most new users, and which month had the fewest new users?

December had the most new users while March had the fewest new users

Do you have any ideas why certain trends are associated with these specific months?

December is a month filled with festivities/special celebrations which is why it has the most new users and there's little or no holiday in the month of March that is why it has the fewest new users.

User Tech

Please go into the User → Tech → Tech overview report for the following:

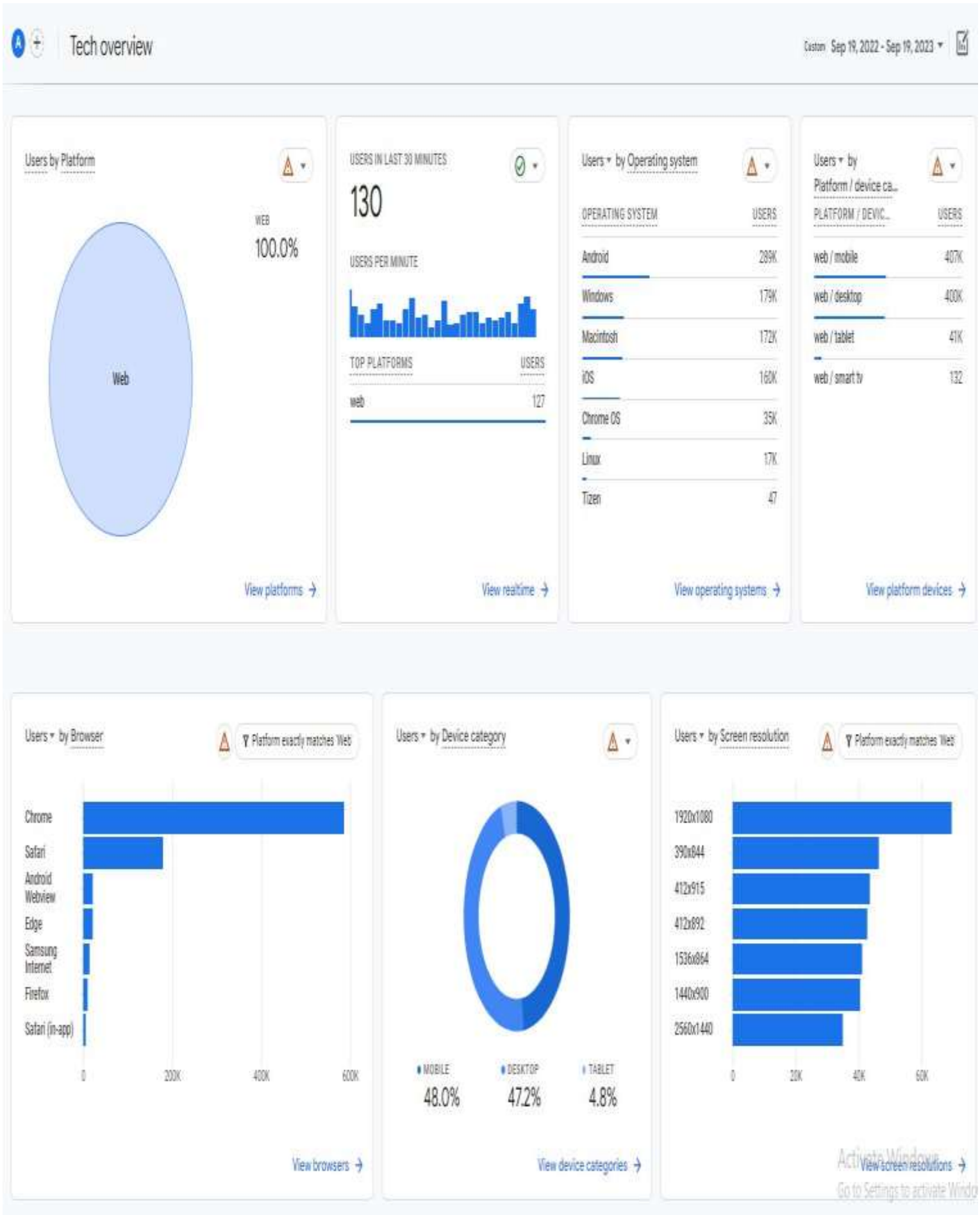
For the twelve month period you've chosen, provide a screenshot showing percentage chart (donut charts) of All Users that came from mobile, desktop, and tablet devices.

Ensure that the following are visible in the screenshot:

- Device Category
- Donut chart showing % breakdown by device

Note that the time frame selected does not need to be visible in the screenshot..

User Tech


Tech overview
Custom Sep 19, 2022 - Sep 19, 2023
Users by Platform
WEB
100.0%
Web
View platforms
USERS IN LAST 30 MINUTES
130
USERS PER MINUTE
TOP PLATFORMS
USERS
web
127
View realtime
Users by Operating system
OPERATING SYSTEM
USERS
Android 289K
Windows 179K
Macintosh 172K
iOS 165K
Chrome OS 35K
Linux 17K
Tizen 47
View operating systems
Users by Platform / device ca...
PLATFORM / DEVIC...
USERS
web / mobile 407K
web / desktop 400K
web / tablet 41K
web / smart tv 132
View platform devices
Users by Browser
Platform exactly matches Web
Chrome
Safari
Android Webview
Edge
Samsung Internet
Firefox
Safari (in-app)
0
200K
400K
600K
View browsers
Users by Device category
MOBILE
48.0%
DESKTOP
47.2%
TABLET
4.8%
View device categories
Users by Screen resolution
Platform exactly matches Web
1920x1080
390x844
412x915
412x892
1536x864
1440x900
2560x1440
0
20K
40K
60K
View screen resolutions
Activate Windows
Go to Settings to activate Windo

User Acquisition

For this section, if you are using your own business's Google Analytics data but do not have eCommerce capabilities established, please use the Google Analytics demo data provided from the Google Merchandise store.

Take a screenshot that shows the Engagement rate of the different acquisition channels over a 12 month period.

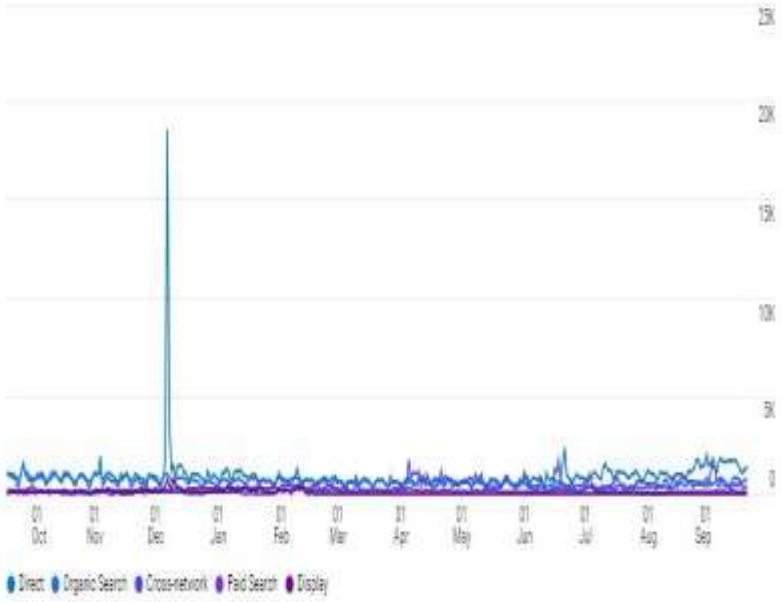
Ensure that the following are visible in the screenshot:

- Channel group
- Users
- Engagement Rate

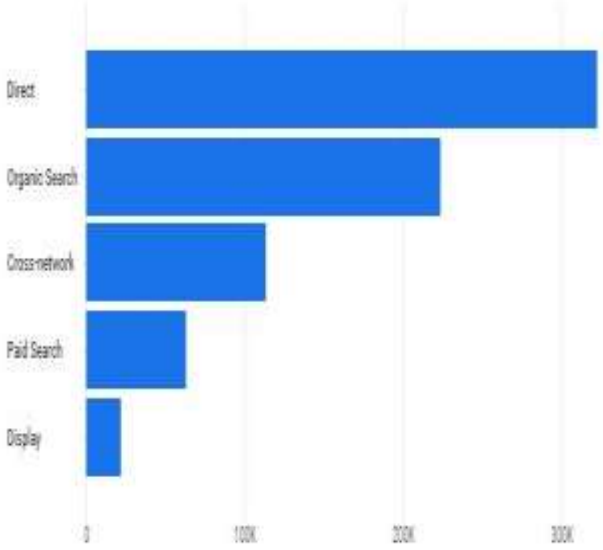
Note that the time frame selected does not need to be visible in the screenshot, but will be reflected by the number of users.

User Acquisition

New users by First user default channel group over time



New users by First user default channel group



Search...

Rows per page: 10 Go to: 1 1-10 of 13

	First user defa... channel group	New users	Engaged sessions	Engagement rate	Engaged sessions per user	Average engagement time	Event count All events	Conversions All events	Total revenue
		786,017 100% of total	1,032,726 100% of total	80.5% Avg 0%	1.22 Avg 0%	2m 02s Avg 0%	28,423,578 100% of total	4,331,316.00 100% of total	$1,966,022.85 100% of total
1	Direct	322,566	487,463	75.99%	1.31	2m 32s	15,001,250	2,012,565.00	$1,351,720.13
2	Organic Search	223,380	281,652	83.49%	1.24	1m 57s	7,406,849	1,055,506.00	$381,661.33
3	Cross-network	113,341	132,443	91.16%	1.15	1m 16s	1,886,388	436,659.00	$36,614.22
4	Paid Search	62,881	73,233	81.03%	1.16	0m 41s	842,468	168,763.00	$15,139.33
5	Display	22,156	20,690	68.13%	0.93	0m 35s	344,903	44,222.00	$0.00
6	Referral	16,118	24,649	85.89%	1.46	2m 59s	908,727	93,363.00	$62,857.89
7	Email	7,084	13,706	79.22%	1.93	6m 24s	628,133	50,360.00	$88,081.66
8	Organic Social	6,827	9,812	80.38%	1.39	3m 16s	329,605	45,411.00	$28,349.64
9	Organic Video	3,577	2,984	67.15%	0.83	0m 50s	65,328	5,471.00	$159.60
10	Unassigned	3,233	2,628	60.25%	0.82	0m 09s	927,457	467,207.00	$0.00

Activate Windows
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User Acquisition

During the twelve month period you've selected, which channel groups had the highest and lowest engagement rates and the highest and lowest total revenue?

The channel with the highest engagement rate is the Cross Network channel while lowest engagement rate is the unassigned channel

The channel with the highest total revenue is the direct channel while Organic video channel has the lowest total revenue. Unassigned & Display has 0 as total revenue.

What do these metrics mean, based on your experience?

The metrics means that most new users visited the Google Merchandise store by directly searching for the website on their browser, users that visited the website through the direct channel also has the highest engagement sessions, conversion and total revenue

Monetization

For this section, if you are using your own business's Google Analytics data but do not have eCommerce capabilities established, please use the Google Analytics demo data provided from the Google Merchandise store.

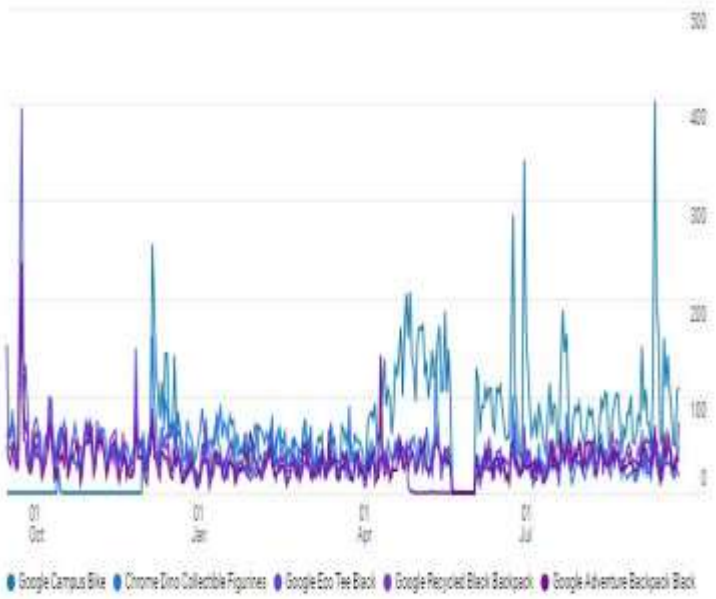
During the twelve month period you've selected, provide a screenshot that shows the Item name that contributed the highest number of unique purchases and the item name that was responsible for the largest percentage of revenue? (Screenshot(s) only; no annotation required.)

Ensure that the following are visible in the screenshot:

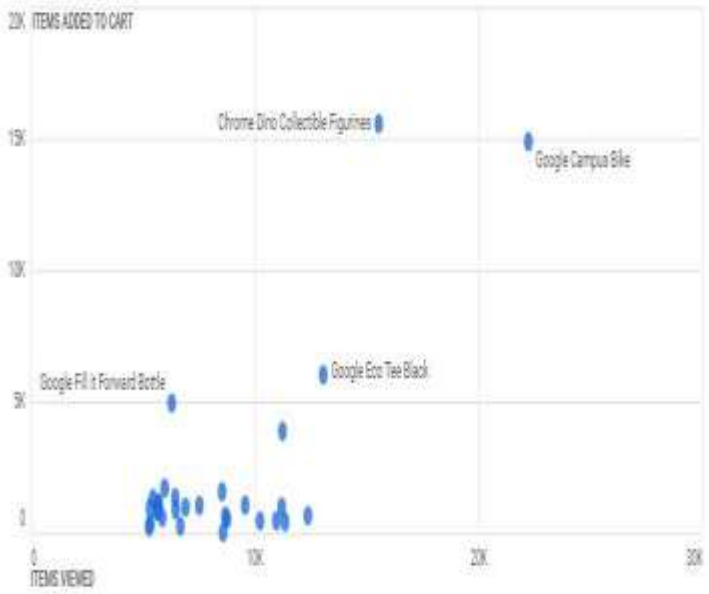
- Item names
- Number of items purchased
- Item revenue

Monetization

Items viewed by Item name over time



Items viewed and Items added to cart by Item name



Search...

Rows per page: 10 Go to: 1 1-10 of 697

	Item name	Items viewed	Items added to cart	Items purchased	Item revenue
		1,032,294 100% of total	164,148,883,538,535 100% of total	138,568 100% of total	$1,965,982.85 100% of total
1	(not set)	27,857	0	2	$0.00
2	Google Campus Bike	22,233	14,891	400	$17,811.00
3	Chrome Dino Collectible Figurines	15,549	15,573	292	$8,088.00
4		14,772	0	0	$0.00
5	Google Eco Tee Black	13,069	6,024	0	$0.00
6	Google Recycled Black Backpack	12,387	660	208	$15,750.00
7	Google Adventure Backpack Black	11,363	427	134	$14,185.60
8	Super G Timbuk2 Recycled Backpack	11,247	3,879	196	$20,500.00
9	Chrome Dino Dark Mode Collectible	11,214	990	302	$8,292.00
10	Pixel Superfan Dark Mode Bottle	10,972	466	202	$10,086.10

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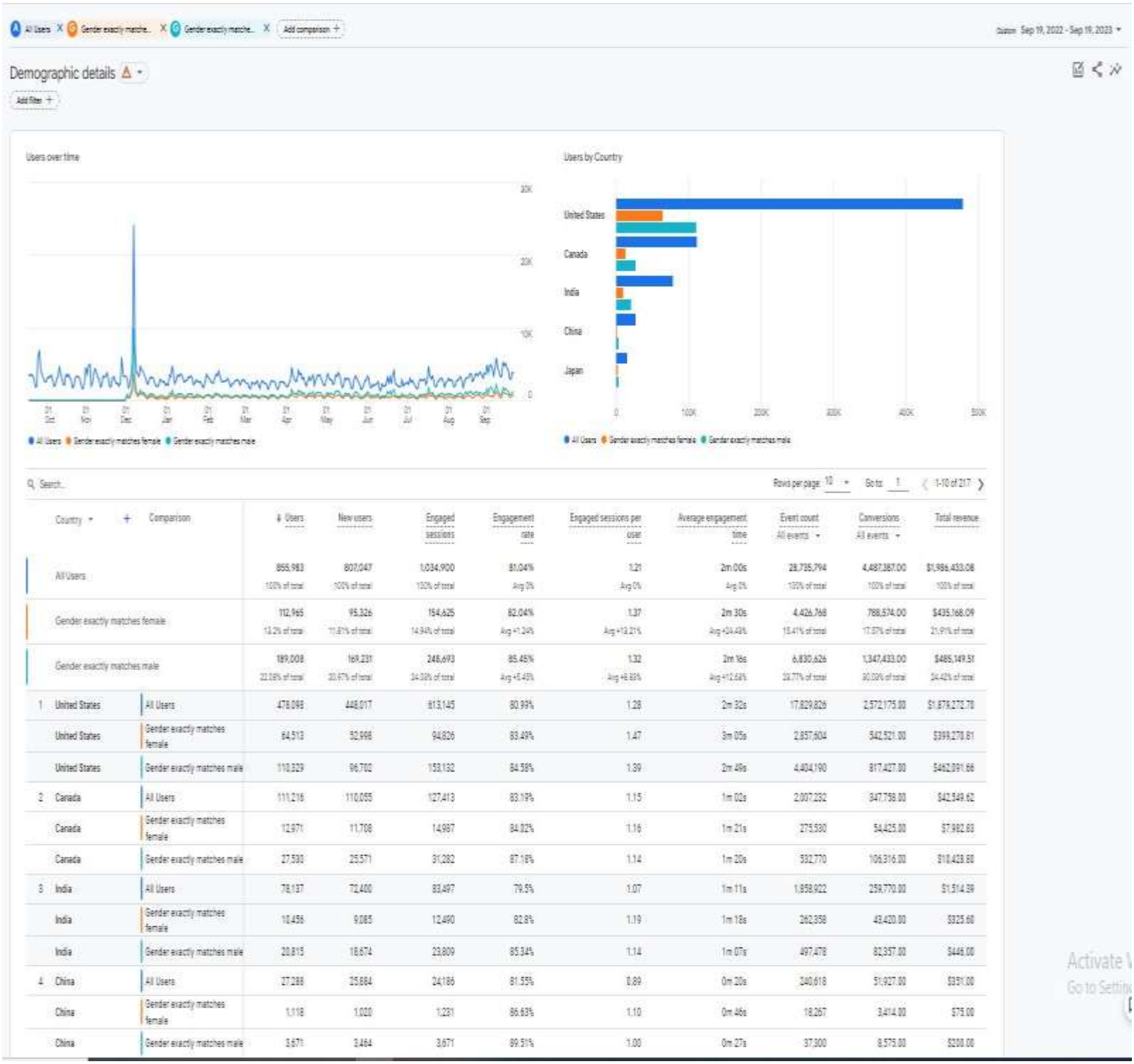
Part Four: Segmentation

Audience Segment: Demographics

Insert the screenshot of a view (such as the Reports snapshot) that includes a comparison of your chosen Audience Demographic segment and “All Users”.

Write down or include a screenshot of the values used to create the segment.



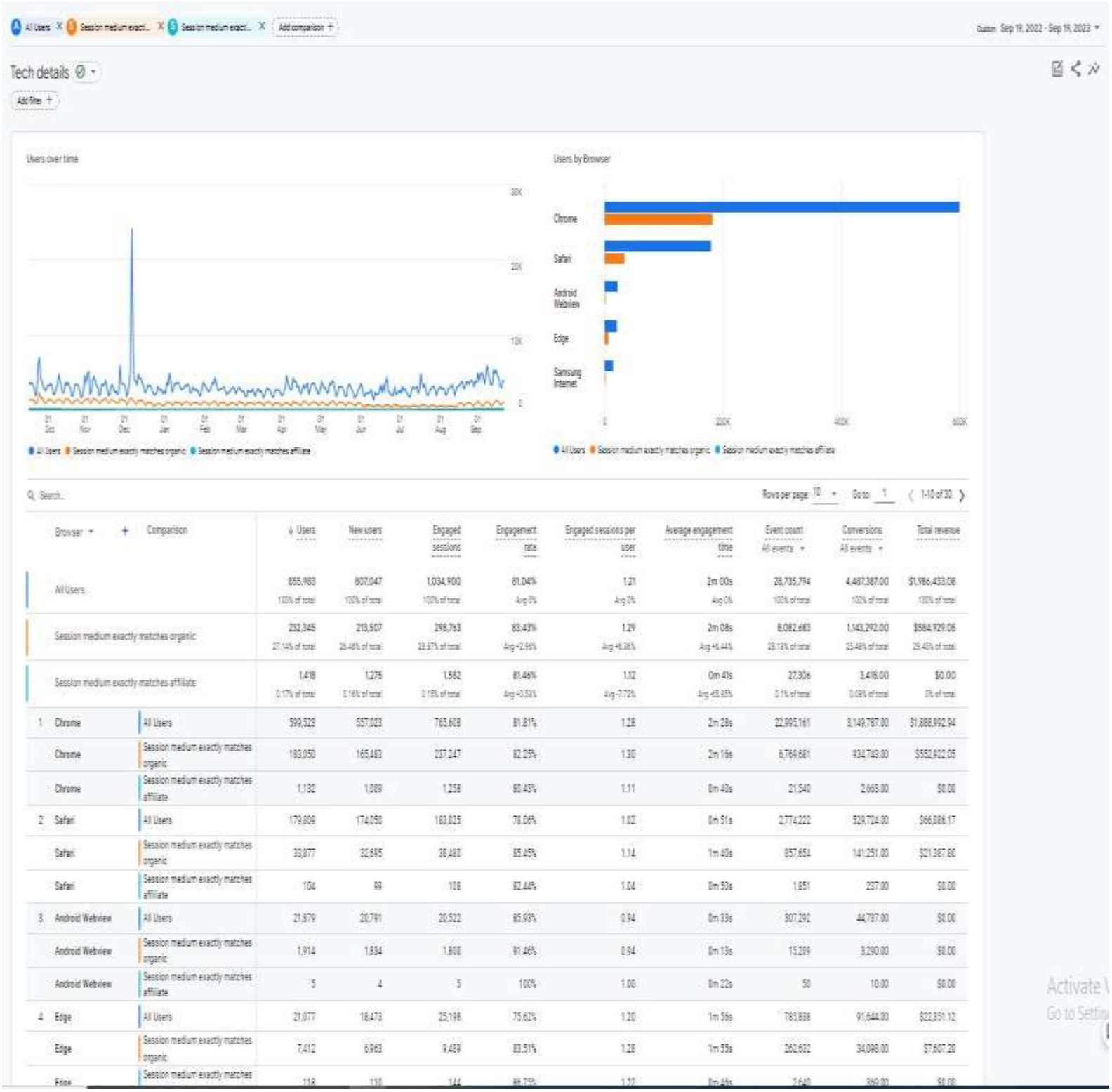
Audience Segment: Demographics

I clicked on the “Add comparison” on top of the panel, it led me to a side bar, which read “Select dimension”, I typed in Gender and selected exactly matches, then female and lastly apply and the female segment was created. I did the same thing for the male segment.

Audience Segment: Technology

Insert the screenshot of a view (such as the Reports snapshot) that includes a comparison of your chosen Technology segment and “All Users”.

Write down or include a screenshot of the values used to create the segment.



Audience Segment: Technology

Clicking on the “Add comparison” on top of the panel, it led me to a side bar, which read “Select dimension”, I searched for session medium, selected exactly matches, then selected organic and lastly apply and the organic segment was created. I followed the same process to create the affiliate segment.

Part Five:
Analysis and Suggestions

Analysis and Suggestions: Business Sales Growth

Analyze your existing marketing campaigns to grow your business. In order to complete this section using your own data, you must have the required data (Campaign, Cost, Revenue, ROAS) for a minimum of two campaigns. If you do not have at least two campaigns or are missing some of the necessary data, you can use the 2021 GSMM Solar YouTube Ad Sales Funnel Campaigns Pitch Deck to answer this question. You are also welcome to add additional data beyond what is specified.

If using your own data, complete the following table adding rows as necessary. If using the provided GSMM Pitch Deck, delete the table.

Analysis and Suggestions: Business Sales Growth

Based on the data and other information provided, how might the campaigns be realigned and improved to potentially achieve a 20% YOY sales growth? You can assume that the c\data will remain consistent over the projected time frame. Please reference specific data to support your answer like metrics and campaigns.

Based on the data provided, Solar Leads –In-Stream RT-Conversions campaign had the best ROAS having 6.2. So, we can re-allocate some of the budget from Solar Subscribers - Discovery Keywords – CPV campaign and increase the running time of the Solar Leads - In-Stream RT – Conversions campaign to achieve a 20% YOY sales growth.

Analysis and Suggestions: eCommerce

Now you will evaluate the current state of eCommerce for your business and how it might be improved.

Looking at your website pages or the Google Merchandise store website and current eCommerce experience, identify one change to the eCommerce UX and one additional eCommerce option you would recommend implementing.

Example: One way to improve eCommerce capabilities would be to add the option of a digital wallet with the option to securely store and manage cards that have been used for payment, along with the option of using PayPal or ApplePay.

UX change:

To improve eCommerce user experience, I'll recommend allowing users to have the option of either creating an account, schedule a call or fill out a form for a more personalised experience in the website or just checking out without having to create an account. This is because I understand that some customers might want an account for a more personalised experience while some might not. Thus giving every customer an opportunity to do what they prefer.

Other eCommerce change or addition:

An addition will be, to Include product recommendations based on customer's browsing history.

Analysis and Suggestions: Technology

Now you will look at your existing technology stack and make recommendations for the future. This should include at least two additional technologies that are not currently utilized, one of which is a new emerging technology.

If using your own business, provide both the existing technology stack and the recommended update which.

If you are not using your own business or do not currently have a technology stack, you can use the GSMM 2021 Marketing Technology and Channels Spreadsheet to answer this question or as a template to create your own.

Technologies include Quickbooks, Gusto, Typeform, Zapier, GoHighLevel, Storyblocks, Screencastify, VidIQ Pro, WP Forms etc. Two new technologies I'll recommend will be the emerging visual and voice search technology that'll help customers search for products or information on the website seamlessly.

Secondly, tracking tools like Google Data Studio can be implemented to allow the GSMM to tag, analyse, track and visualize user data and gain insights using the datas.