

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	<i>Key Business Objective 1 (required)</i> Increase sales and conversion rate of visitors to the website by 20% in the next 3 months
2	<i>Key Business Objective 2 (required)</i> Increase customer engagement by 15% in the next 3 months
3	<i>Key Business Objective 3 (required)</i> Generate New Lead and traffic to the website by 10% in the next 3 months
4	<i>Key Business Objective 4 (optional)</i> Decrease bounce rate from 70% to 30% in the next 3 months
5	<i>Key Business Objective 5 (optional)</i> Increase customers retention by 25% in the next 3 months



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	<i>Key Performance Indicator 1 for Key Business Objective 1 (required)</i> Conversion rate
2	<i>Key Performance Indicator 2 for Key Business Objective 2 (required)</i> Visitors engagement
3	<i>Key Performance Indicator 3 for Key Business Objective 3 (required)</i> Website traffic
4	<i>Key Performance Indicator 4 for Key Business Objective 4 (optional)</i> <i>returning visitors and bounce rate</i>
5	<i>Key Performance Indicator 5 for Key Business Objective 5 (optional)</i> <i>number of impression per reach</i>



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

Increase sales and conversion of visitors to google merchandise store in 3 months.

Insert the variable chosen for the A/B test here.

Discounts VS Free resource offer

Version A: Offer a 10% discount to new visitors in exchange for their email address.

Version B: Provide a free downloadable PDF guide when visitors subscribe.



Continuation

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

Hypothesis

I predict that version A will appeal to visitors who are price sensitive and may convert more lead than version B that may possibly attract customers seeking for some information.

Duration: 2 weeks

Budgets: Cost of softwares and design used



A/B Testing Proposal: Testing Process

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

I will;

Identify one variable I like to test

- *I will be testing the landing page checkout form filling and create different versions to compete against each other. (Version A: Discounts Vs Version B:PDF download.)*
- *I will then divide incoming traffic to the landing page into two equal groups, with one group directed to Version A and the other to Version B.*

Determine a hypothesis for the test that suggest or predict what would happen.

- *I predict that version A will 75% hook customers than version B*
- *Set time duration: The test will run for 2 weeks*
- *Google Analytics will be used to collect the data and to check if the data is statistically significant.*



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

- *The A/B test will check for the most conversion rate between Discounts and PDF downloads. If 70% customers make the actual purchase with 10% discounts and sign up for email listing and 30% sign up for email listing in exchange for a downloadable PDF, then the result is statistically significant and accurate.*
- *I will be using Google Analytics to determine if my metrics (conversion rate and traffic to the website) are statistically significant and accurate to my marketing efforts being performed*



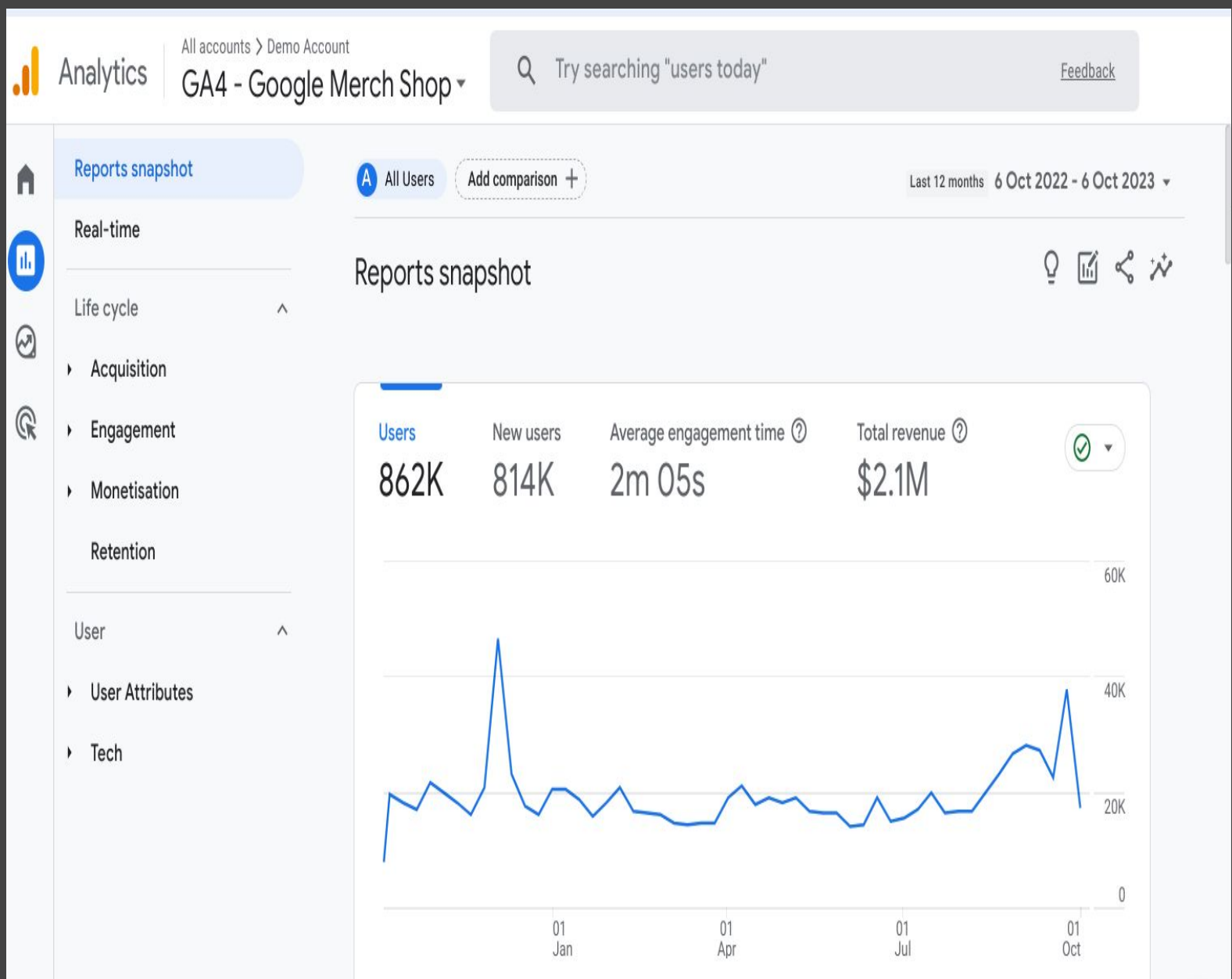
Part Three: Data Exploration



Reports Snapshot

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

- Timeframe
- New users
- Axis values





Reports Snapshot

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

Highest users: **December, 2022**

Users: **40,556**

Fewest users: **October, 2022**

Users: **6070**

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

In December being holiday and festive period, people then to buy more; expectations to meet before the end of the year and also pressure from other shoppers. Holiday sales and discounted sales for christmas. In october market often crash or go down. Business owner often stock goods in this month.

This shows that new users increase exponentially in 04 December - 10 December, 2022 from 20,831 in Nov 27 - 03 December, 2022 to 46,582. There is possibility that users will double in December 2023.



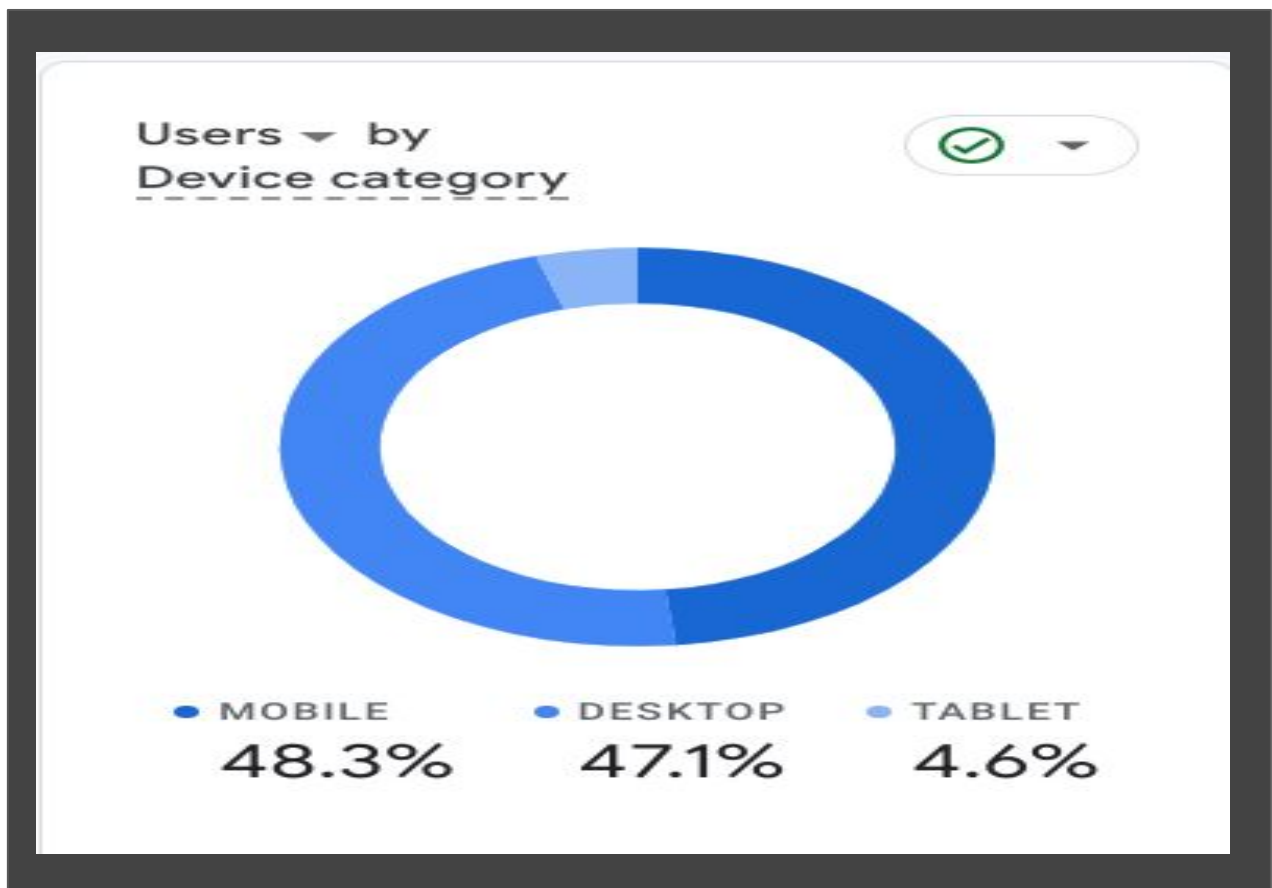
User Tech

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





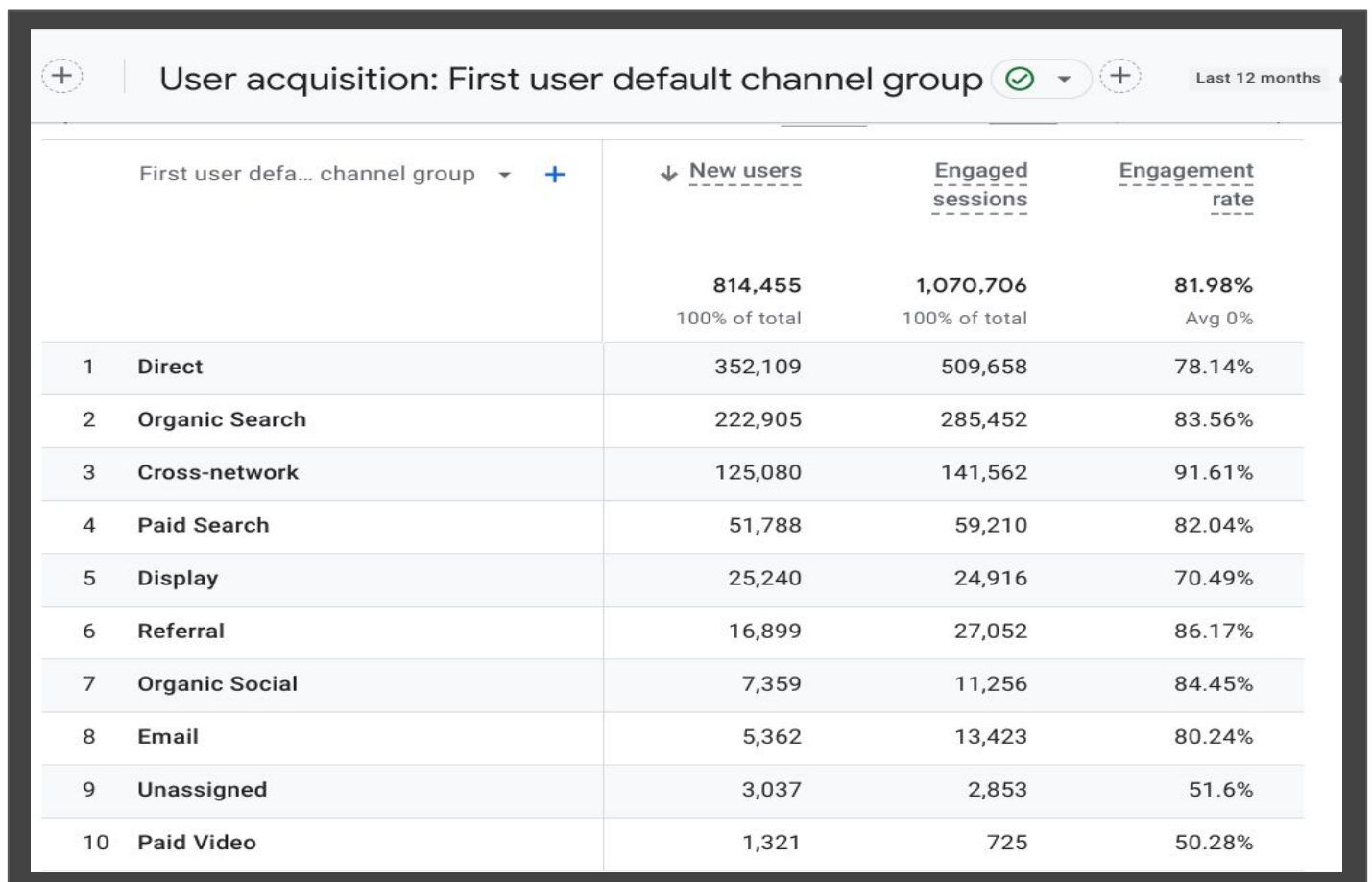
User Acquisition

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



The screenshot displays the Google Analytics 'User acquisition' report for the 'First user default channel group'. The report shows data for the last 12 months. The table lists 10 channel groups, ranked by new users. Each row includes the channel group name, the number of new users (with a percentage of the total), the number of engaged sessions (with a percentage of the total), and the engagement rate. The engagement rate for the total group is 81.98%, with an average of 0%.

First user default channel group	New users	Engaged sessions	Engagement rate
	814,455 100% of total	1,070,706 100% of total	81.98% Avg 0%
1 Direct	352,109	509,658	78.14%
2 Organic Search	222,905	285,452	83.56%
3 Cross-network	125,080	141,562	91.61%
4 Paid Search	51,788	59,210	82.04%
5 Display	25,240	24,916	70.49%
6 Referral	16,899	27,052	86.17%
7 Organic Social	7,359	11,256	84.45%
8 Email	5,362	13,423	80.24%
9 Unassigned	3,037	2,853	51.6%
10 Paid Video	1,321	725	50.28%



11-15 channel group

User acquisition: First user default channel group

Last 12 months6 Oct 2022 - 6 Oct 2023

Affiliates

Organic Video

Organic Shopping

Paid Shopping

Paid Other

Search...

Rows per page:10

Go to:11

<11-1

First user defa... channel group	<div>↓</div> <div>New users</div>	<div>Engaged sessions</div>	<div>Engagement rate</div>	<div>Engaged sessions per user</div>	<div>Average engagement time</div>
	814,455 100% of total	1,070,706 100% of total	81.98% Avg 0%	1.24 Avg 0%	2m 05s Avg 0%
11 Affiliates	1,232	1,518	83.32%	1.22	0m 46s
12 Organic Video	1,217	1,209	76.62%	0.98	1m 22s
13 Organic Shopping	816	901	81.1%	1.10	2m 15s
14 Paid Shopping	80	32	36.78%	0.57	0m 09s
15 Paid Other	10	10	76.92%	1.00	0m 17s



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?

Highest Engagement rate: **Cross-network (91.61%)**

Lowest Engagement rate: **Paid shopping (36.78%)**

Highest Total revenue: **Direct channel group(\$1478,303.64)**

Lowest Total revenue: **Display, Paid video, Affiliates, Paid shopping and paid other (\$0.00)**

What do these metrics mean, based on your experience?

*This shows that out of **\$2.1M** total revenue, direct sales convert more, i.e there was increase in direct sales which bring more revenue to our business*

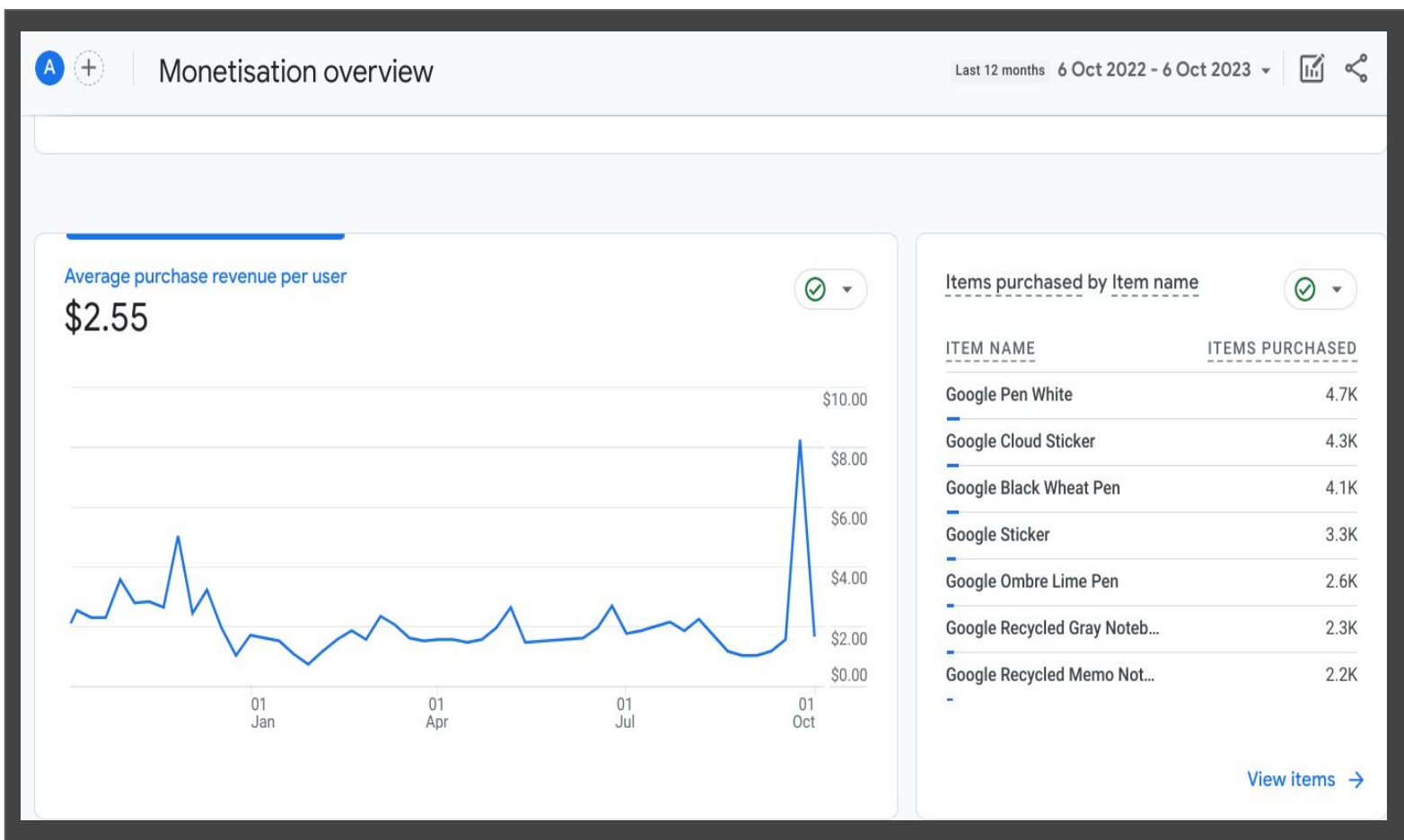


Monetization

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





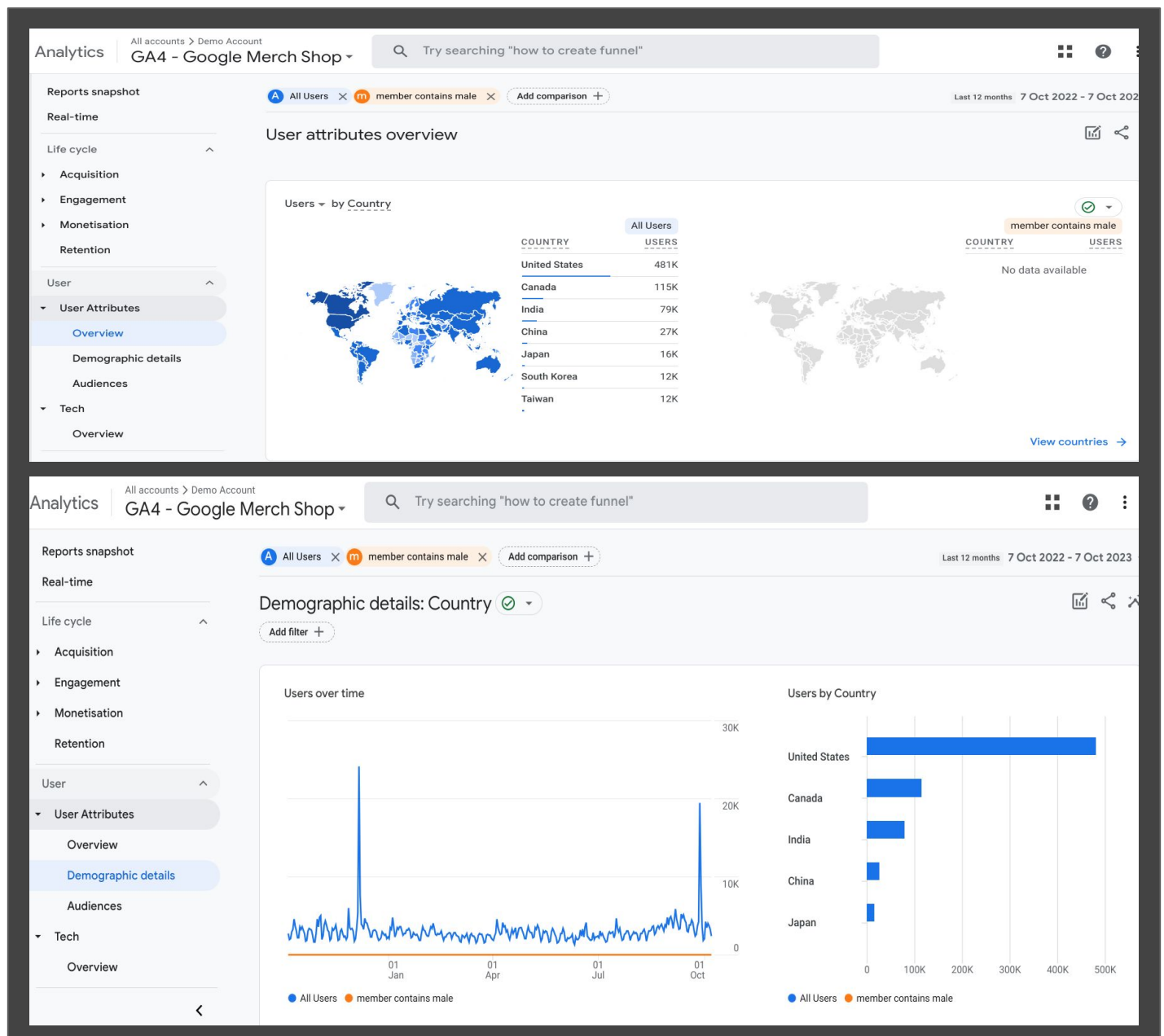
Part Four: Segmentation



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.



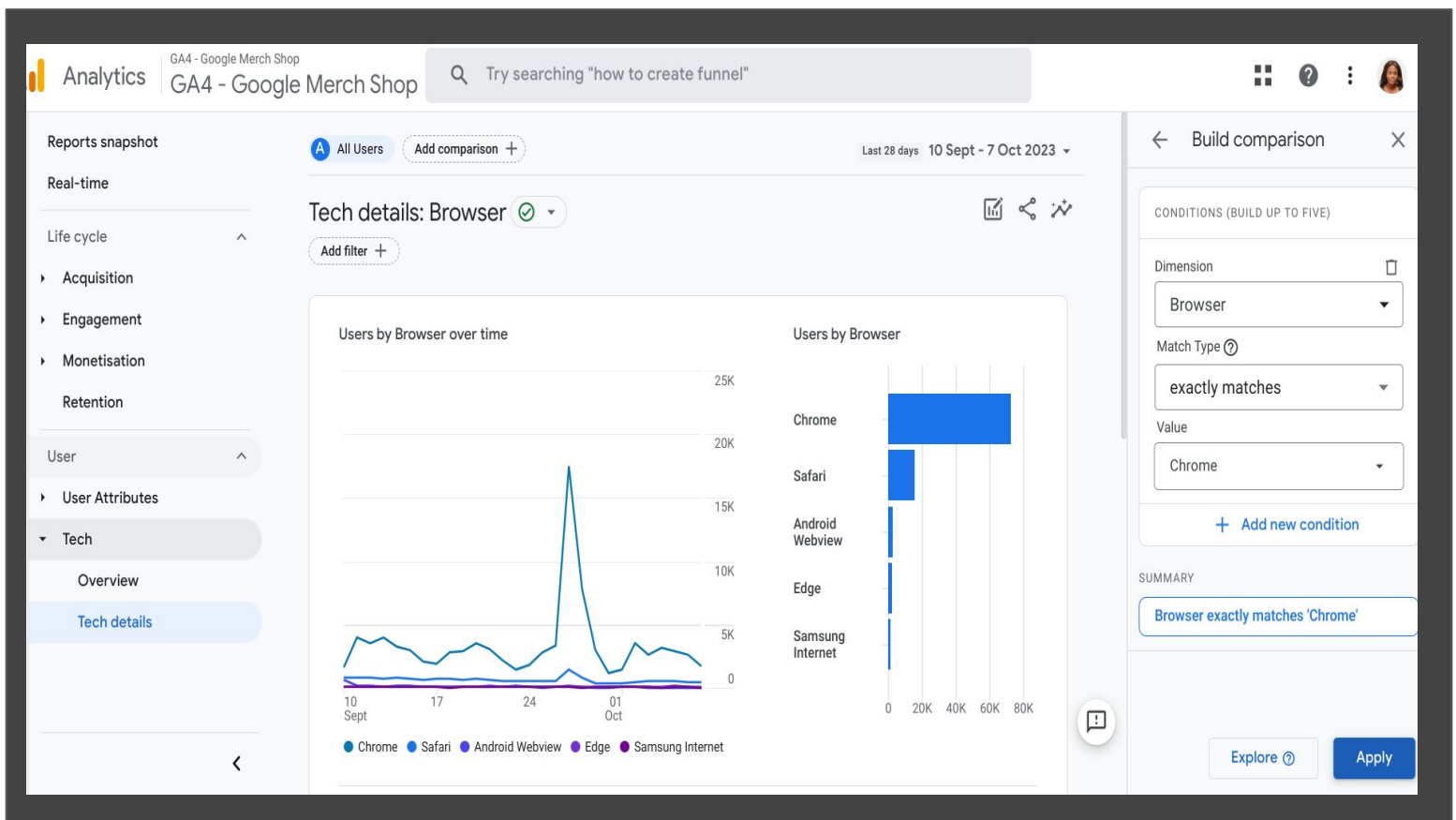


Audience Segment: Technology

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.

Technology used: Audience uses Web for browsing the store and make purchases



Technology segment and All Users



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.

Using the provided GSMM Pitch

GSMM Agency YouTube Ads Sales Funnel Results 2021

March 19, 2021 - December 31, 2021							
2021 Solar YouTube Ads Sales Funnel Campaigns	Bid strategy	Cost	Views	Clicks	Conv.	Revenue	ROAS
Solar Leads - In-Stream Solar Cheat Code Website	Max Conv.	\$270.11	2,002	318	0	0	0
Maximize Conv - Solar Sales Calls - Custom Intent	Max Conv.	\$920.59	3,527	655	6	0	0
Solar Leads - In-Stream RT - Conversions	Max Conv.	\$1,760.23	41,677	9,964	20	\$10,957.48	6.2
Solar Subscribers - Discovery Keywords - CPV	Manual CPV	\$4,344.11	185,217	0	7	\$20,977.68	4.8
Solar Leads - In-Stream Solar Exclusive Website	Max Conv.	\$323.81	2,852	302	0	0	0
Totals		\$7,618.85	235,275	11239	33	\$31,935.16	4.2





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.

Focus on Solar leads, in Stream RT, conversions and Keyword discovery subscribers campaigns to achieve 20% YOY sales growth. This is because they both convert more and the ROAS are > 1. You should run ads to improve other campaigns. Add, subtract and adjust keywords based on performance

March 19, 2021 - December 31, 2021							
2021 Solar YouTube Ads Sales Funnel Campaigns	Bid strategy	Cost	Views	Clicks	Con v.	Revenue	ROAS
Solar Leads - In-Stream RT - Conversions	Max Conv.	\$1,760.23	41,677	9,964	20	\$10,957.48	6.2
Solar Subscribers - Discovery Keywords - CPV	Manual CPV	\$4,344.11	185,217	0	7	\$20,977.68	4.8



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:

- A colourful and interactive E-commerce store could improve views and clicks.
- Basket should be in image form rather than reading it so customers can know the next step to take.
- Search could be centralized and on the top of the website
- Blog about fashion and items sold could be included
- Chatbot could also be included to increase users experience when they have questions
- Frequently asked questions could be part of the website.
- Mobile application development should be build for easy access and use.



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.

Using the [GSMM 2021 Marketing Technology and Channels Spreadsheet](#) to answer this question or as a template to create your own.

Future Recommendation

Content Management System (CMS)

Hyros

Twilio

***Social media engagement:
facebook, instagram, Twitter***

Youtube

Google ads

Google reviews

Google workspace

Google Analytics

Wordpress Website



Github:

[https://github.com/Seedynutri/Udacity-Draw insight from data Project 2/blob/main/Project 2 Draw-insights-from-marketing-data-project-pdf-update-to-ga4.pdf](https://github.com/Seedynutri/Udacity-Draw%20insight%20from%20data%20Project%202/blob/main/Project%202%20Draw-insights-from-marketing-data-project-pdf-update-to-ga4.pdf)