

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 *Increase Online Sales Revenue*

- I. ***Specific:** Achieve a 20% increase in monthly online sales revenue compared to the previous year.*
- II. ***Measurable:** Track and measure monthly online sales revenue using Google Analytics or other e-commerce analytics tools.*
- III. ***Achievable:** Implement targeted marketing campaigns, optimize the website for conversions, and introduce promotions to drive sales growth.*
- IV. ***Relevant:** Increasing revenue is directly aligned with the business model and profitability goals.*
- V. ***Time-Bound:** Achieve this goal within the next fiscal year.*

2 *Expand Brand Awareness and Market Reach*

- I. ***Specific:** Achieve a 30% increase in social media engagement rates and a 25% growth in website traffic within the next quarter.*
- II. ***Measurable:** Track social media engagement metrics (likes, shares, comments) and website traffic using analytics tools.*
- III. ***Achievable:** Create engaging content, increase social media advertising, and optimize SEO to drive organic traffic.*
- IV. ***Relevant:** Expanding brand awareness and reach is essential for attracting new customers.*
- V. ***Time-Bound:** Achieve these goals within the next quarter*

Identify Key Business Objectives



3 Improve Website Conversion Rate

- I. **Specific:** Increase the website conversion rate by 10% within the next three months.
- II. **Measurable:** Track website conversions (e.g., purchases, sign-ups) using analytics tools.
- III. **Achievable:** Conduct A/B testing to optimize the website's user experience, enhance product descriptions, and simplify the checkout process.
- IV. **Relevant:** Higher conversion rates lead to increased revenue and better utilization of website traffic.
- V. **Time-Bound:** Achieve this goal within the next three months.

4 Enhance Customer Loyalty and Retention

- I. **Specific:** Increase customer retention by 15% within the next six months.
- II. **Measurable:** Monitor customer retention rates and repeat purchase behaviour through CRM data.
- III. **Achievable:** Implement a tiered loyalty program, offer personalized recommendations, and improve customer service.
- IV. **Relevant:** Building long-term customer relationships is crucial for sustainable growth.
- V. **Time-Bound:** Achieve this goal within the next six months.

5 Reduce Operational Costs and Increase Efficiency

- I. **Specific:** Reduce operational costs by 10% while increasing operational efficiency by streamlining processes within the next quarter.
- II. **Measurable:** Track operational expenses and monitor process efficiency improvements.
- III. **Achievable:** Identify and eliminate inefficiencies, automate repetitive tasks, and renegotiate vendor contracts to lower costs.
- IV. **Relevant:** Lowering operational costs and improving efficiency directly impacts profitability and resource allocation.
- V. **Time-Bound:** Achieve this goal within the next quarter.



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 *KPI 1: Monthly Online Sales Revenue Growth Rate (%)*

- ❖ *Metric:* Percentage change in monthly online sales revenue compared to the same month in the previous year.
- ❖ *Rationale:* This KPI directly measures the progress toward the objective of increasing online sales revenue by 20% and provides a clear indication of growth.

2 *KPI 2a: Social Media Engagement Rate (%)*

- ❖ *Metric:* Percentage increase in likes, shares, and comments on social media posts.
- ❖ *Rationale:* This KPI is tied to the objective of achieving a 30% increase in social media engagement and measures engagement levels.

KPI 2b: Website Traffic Growth Rate (%)

- ❖ *Metric:* Percentage change in website traffic compared to the previous quarter.
- ❖ *Rationale:* This KPI relates to the goal of a 25% growth in website traffic and indicates how well the objective is being met.

3 *KPI 3: Website Conversion Rate (%)*

- ❖ *Metric:* Percentage of website visitors who take a desired action, such as making a purchase or signing up.
- ❖ *Rationale:* This KPI directly relates to the objective of increasing the website conversion rate by 10% within the next three months and measures the effectiveness of website optimization efforts.



Identify Key Performance Indicators

4 KPI 4a: Customer Retention Rate (%)

- ❖ **Metric:** Percentage of existing customers who continue to make purchases over a specified period.
- ❖ **Rationale:** This KPI aligns with the goal of increasing customer loyalty and retention by 15% and measures the success of building long-term customer relationships.

KPI 4b: Net Promoter Score (NPS)

- ❖ **Metric:** A customer loyalty metric that measures the willingness of customers to recommend the business to others.
- ❖ **Rationale:** NPS provides insights into customer loyalty and their likelihood to promote the brand, which is crucial for retaining existing customers.

5 KPI 5: Operational Cost-to-Revenue Ratio (%)

Metric: The percentage of revenue spent on operational costs.

Rationale: This KPI relates to the objective of reducing operational costs by 10% while increasing operational efficiency, indicating better cost management and efficiency.



Part Two: A/B Testing Proposal



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

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

KPI: Website Conversion Rate (%)

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

Variable: Call-to-Action (CTA) Design

Metric: Conversion Rate

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

Hypothesis: Optimizing the design and placement of CTAs on the website will result in a higher website conversion rate.



A/B Testing Proposal: Testing Process

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

1. **Define the Objective:** I would start by clearly defining the goal of the A/B test. I'd specify which aspect of my website I want to test and what improvement I aim to achieve. For instance, if I want to improve click-through rates on a CTA button, that would be my objective.
2. **Identify the Variable:** Next, I'd determine the variable I want to test. This could involve changes to the design, text, colour, or placement of a CTA button.
3. **Select the Control and Variant:** I'd create a control version (A) representing the current setup and a variant version (B) with the proposed changes. The control group serves as the baseline for comparison.
4. **Randomly Assign Users:** To ensure unbiased results, I'd randomly assign users to either the control group or the variant group. This random assignment helps create representative groups.
5. **Implement Tracking:** I'd utilize A/B testing software or tools to set up and track user interactions with both versions. The software should evenly distribute traffic between the control and variant groups.
6. **Run the Test:** I'd initiate the A/B test and allow it to run for a predetermined period. During this time, users would encounter either the control or variant version. I'd ensure external factors don't skew the results.
7. **Collect Data:** I'd collect data on key metrics relevant to my objective. For example, for a CTA button test, I'd measure click-through rates and conversion rates.
8. **Statistical Analysis:** I'd perform statistical analysis to determine if the differences in performance between the control and variant versions are statistically significant.



A/B Testing Proposal: Testing Process

9. **Evaluate Results:** I'd assess the results of the A/B test. If the variant version outperforms the control version with statistical significance, it would suggest that the proposed changes are effective.
10. **Draw Conclusions:** Based on the data and statistical analysis, I'd draw conclusions about whether the changes should be implemented permanently or if further iterations are necessary.
11. **Implement Findings:** If the variant version proves to be more successful, I'd proceed to implement the changes on my website. I'd ensure that the changes are made consistently and accurately.
12. **Document and Share:** I'd document the results, findings, and insights from the A/B test. Sharing these findings with relevant team members or stakeholders would be essential, along with clear communication about the impact of the changes.
13. **Iterate and Optimize:** I understand that A/B testing is an iterative process. I'd use the insights gained from this test to inform future tests and optimizations, continuously refining and improving my website based on user data and feedback.

In this case:

- ❖ **What is Being Tested:** The design and placement of call-to-action (CTA) buttons on the website.
- ❖ **Group Split:** Website visitors will be divided into two groups:
 - Group A: Users who see the current CTA design (control group).
 - Group B: Users who see the new, optimized CTA design (variant group).
- ❖ **Data Collection:** Track website conversion rates, including the percentage of visitors who complete desired actions.
- ❖ **Test Duration:** Run the test for three months to allow sufficient time to gather data and observe changes in conversion rates.



A/B Testing Proposal: Testing Process

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

- 1. Data Collection:** I would use website analytics tools such as Google analytics to collect data on user interactions for both Group A (the control group with the current CTA design) and Group B (the variant group with the optimized CTA design). Specifically, I would gather data on the number of visitors and the number of conversions for each group.*
- 2. Calculation of Conversion Rate:** I would calculate the Website Conversion Rate (%) for each group by dividing the number of conversions by the total number of visitors for that group. This calculation would give me the conversion rate for both Group A and Group B.*
- 3. Comparison of Conversion Rates:** I would compare the Website Conversion Rate (%) between Group A and Group B. My focus would be on identifying a higher conversion rate in Group B (the variant group) compared to Group A (the control group). This comparison would indicate whether the optimized CTA design had a positive impact on website conversions.*
- 4. Statistical Analysis:** I would perform statistical analysis using R software to determine if the difference in conversion rates between the two groups is statistically significant.*
- 5. Interpretation:** If the conversion rate in Group B is significantly higher than that in Group A, it would suggest that the optimized CTA design has positively influenced website conversions. Conversely, if there's no statistically significant difference or if Group A performs better, it may indicate that the new design didn't have the desired impact.*
- 6. Documentation:** I would document the results, including the conversion rates for both groups, any statistical findings, and insights gained from the analysis. This documentation is important for reference and communication.*



A/B Testing Proposal: Testing Process

7. **Communication:** *I would share the results and insights with relevant stakeholders, such as marketing teams and decision-makers. My goal would be to clearly communicate the impact of the CTA design changes on website conversions.*
8. **Implementation:** *If the results show a statistically significant and positive impact on conversion rates in Group B (the variant group), I would consider implementing the optimized CTA design as the new standard on our website.*
9. **Continuous Monitoring:** *I would emphasize continuous monitoring of the performance of the new CTA design after implementation to ensure that the positive impact on conversion rates is sustained over time.*



Part Three: Data Exploration

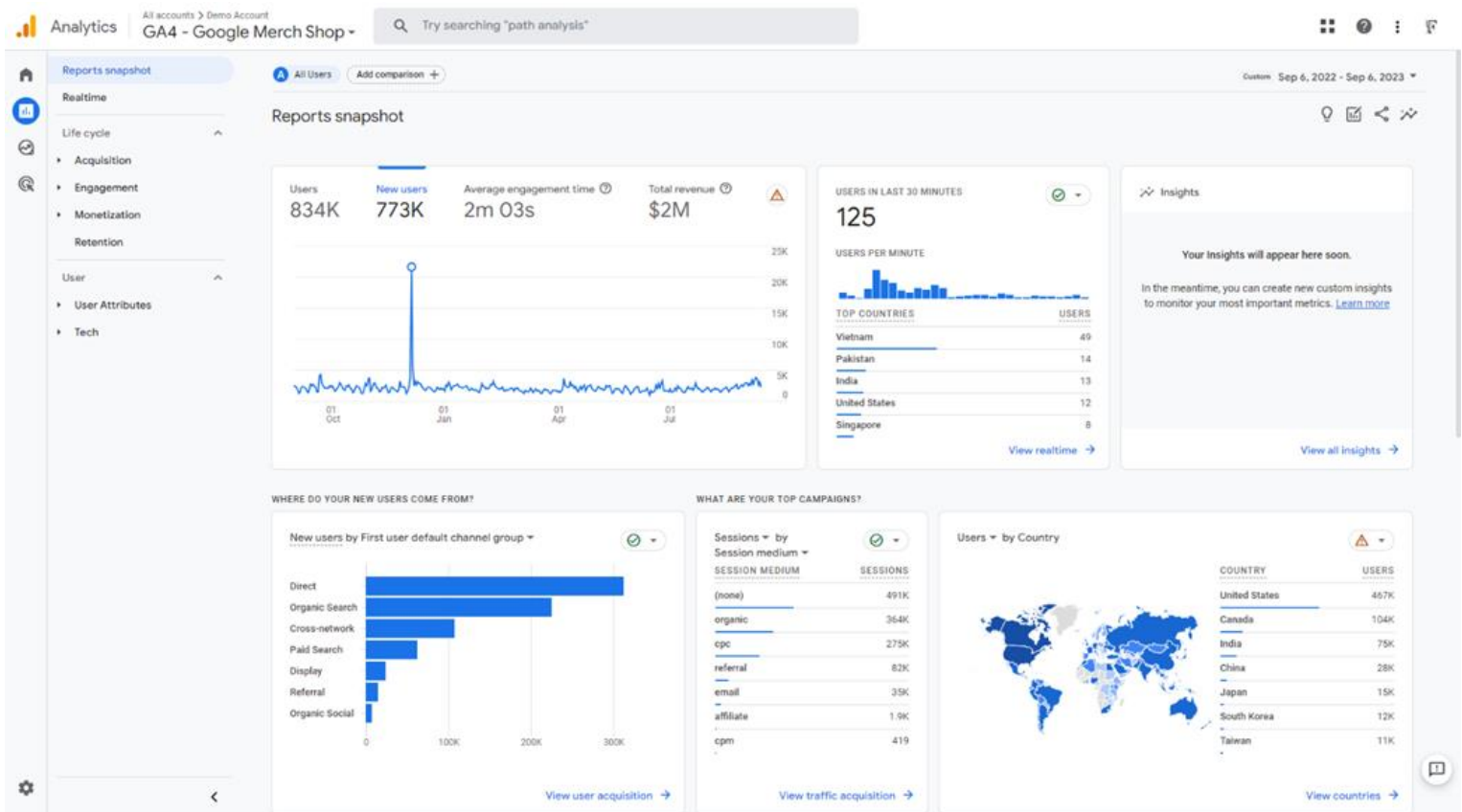


Reports Snapshot

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

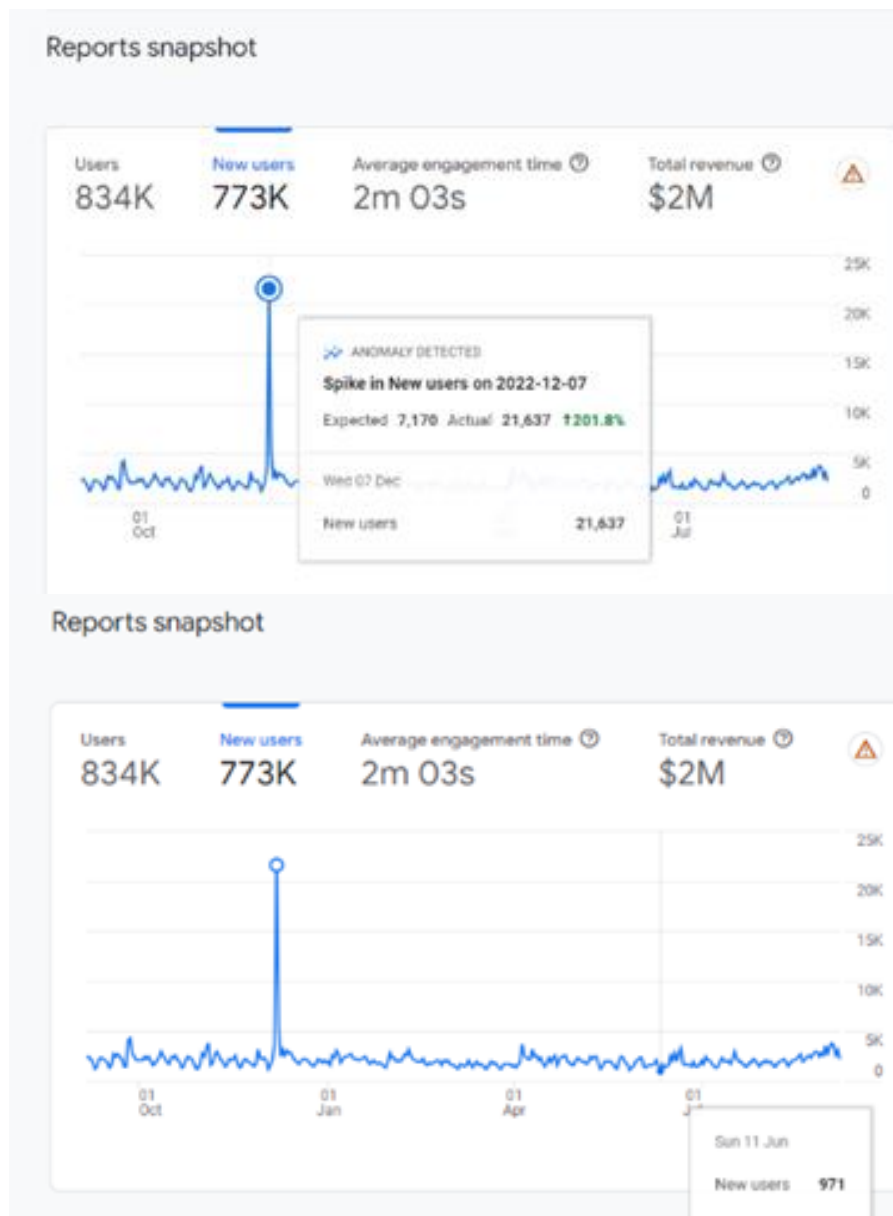




Reports Snapshot

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

On Wednesday, December 7th, 2022, the platform recorded its highest number of new users, totalling 21,637. In contrast, on Sunday, June 11th, 2023, the platform had its lowest number of new users, with just 971.



Reports Snapshot



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

- 1. Holiday Season (December 2022):** December is typically associated with the holiday season in many parts of the world. Businesses often see increased user activity during this time due to holiday shopping, gift-giving, and end-of-year promotions. The high number of new users in December 2022 could be a result of increased consumer spending and online activity during the festive season.
- 2. Promotions and Marketing (December 2022):** Companies often run special promotions and marketing campaigns during the holiday season to attract new customers. It's possible that the platform launched a successful marketing campaign or offered incentives to join in December 2022, which led to a surge in new user sign-ups.
- 3. New Year Resolutions (January Effect):** Some people make New Year's resolutions to try new things or explore new interests, which might lead to increased sign-ups at the end of the year as people prepare for the upcoming year.
- 4. Economic Stability (December 2022):** Economic conditions, such as stability and consumer confidence, can influence user behaviour. If the economy was relatively stable, and people felt confident in their financial situation in December 2022, they may have been more willing to join the platform.
- 5. Summer Months (June 2023):** June falls during the summer season in many regions. During the summer, people often engage in outdoor activities and travel, which might lead to a decrease in online activity and new sign-ups. Additionally, businesses might scale back on marketing efforts during the summer months.
- 6. Post-Holiday Lull (June 2023):** After the holiday season and the start of the new year, there can be a natural lull in user activity and sign-ups. People may have already fulfilled their needs or interests related to the platform in the previous months, leading to a decrease in new sign-ups.
- 7. Seasonal Variation (June 2023):** Some industries experience seasonal fluctuations in demand. If the platform is related to an industry with a seasonal pattern, it could explain the lower number of new users in June.



User Tech

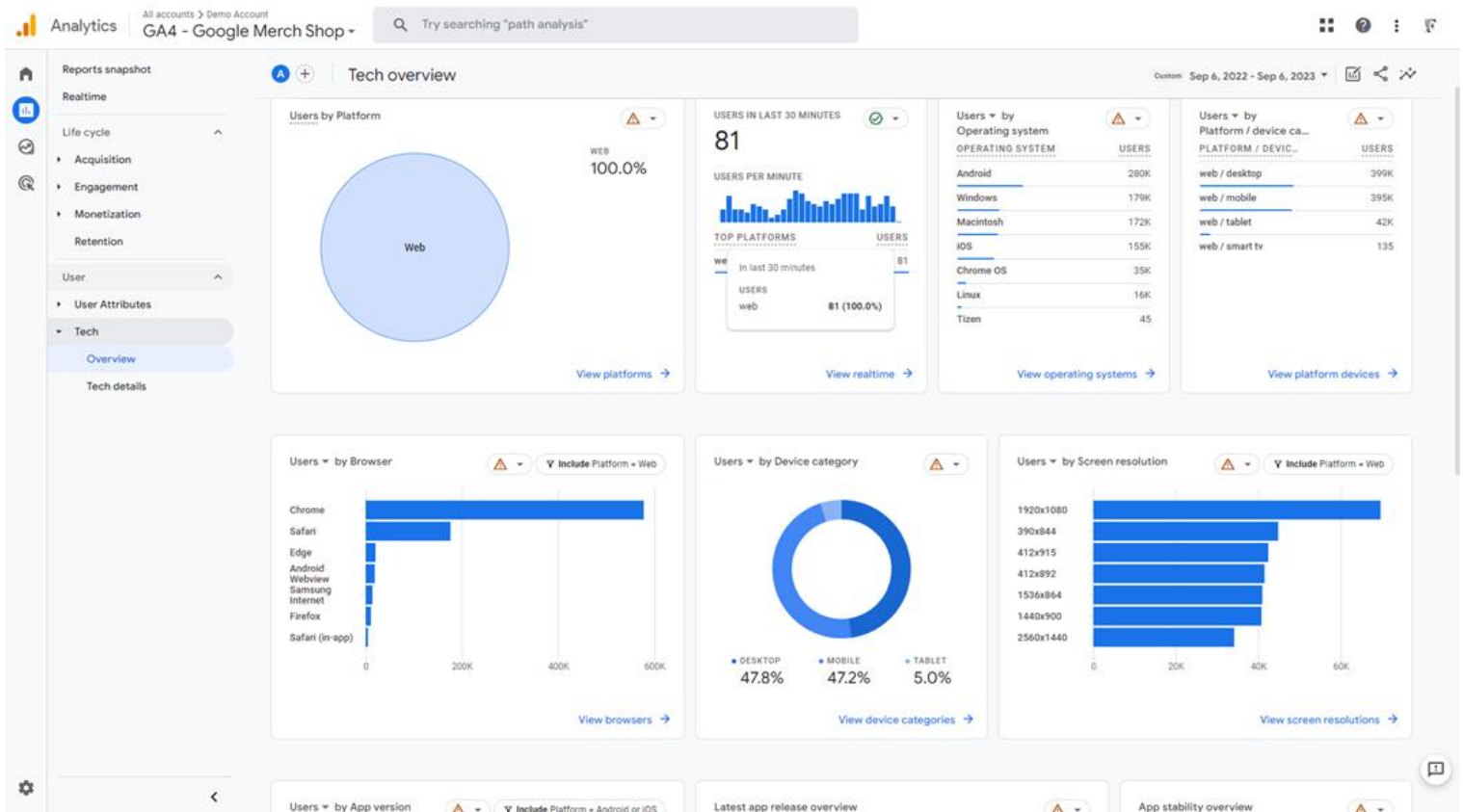
Please go into the User → Tech → Tech overview report for the following:

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 Acquisition



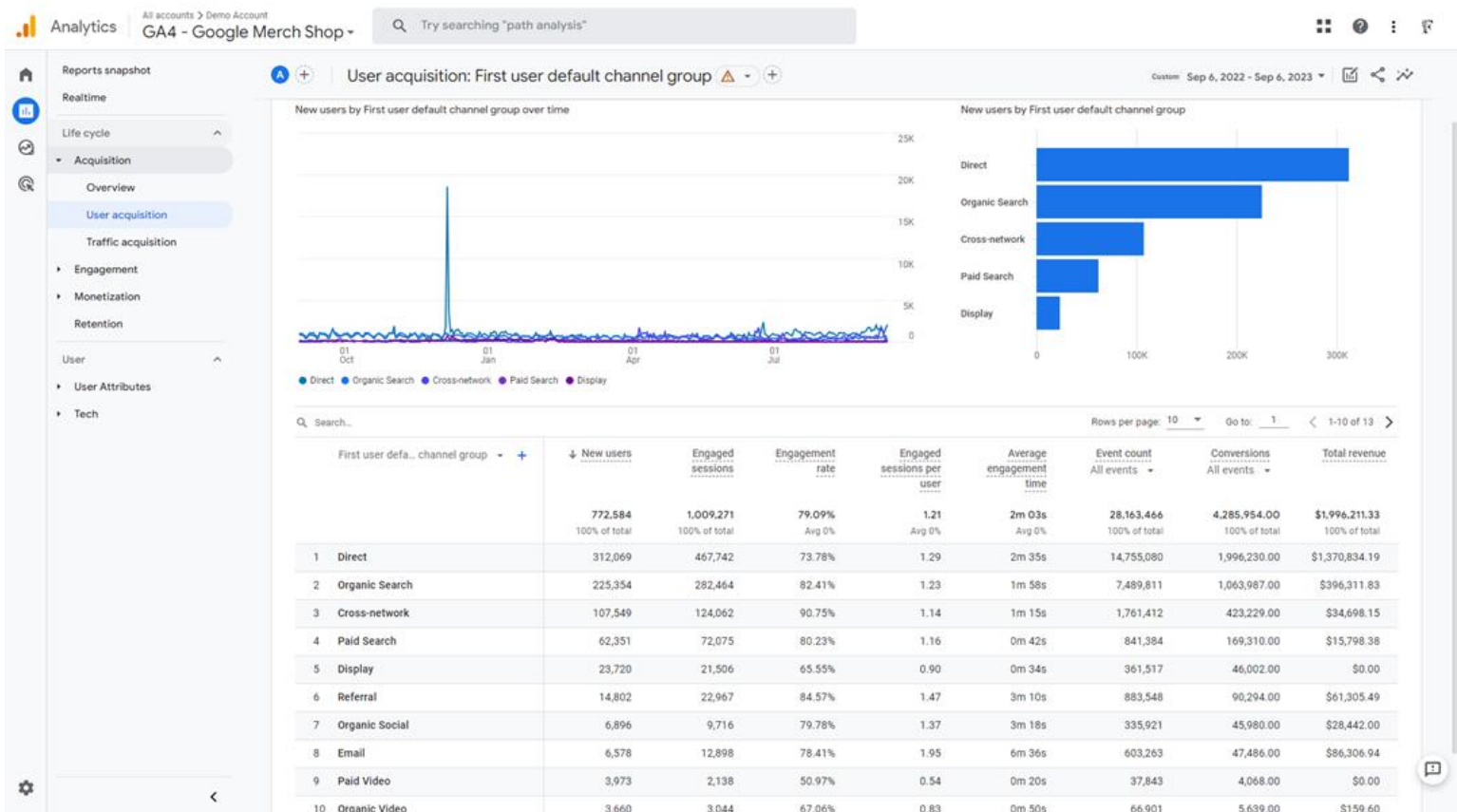
For this section, if you are using your own business's Google Analytics data but do not have eCommerce capabilities established, please use the Google Analytics demo data provided from the Google Merchandise store.

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

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 cross-network channel group achieved the highest engagement rate, standing at an impressive 90.75%, while the paid video channel group recorded the lowest engagement rate at 50.97%. In terms of total revenue, the Direct channel group outperformed all others, amassing a substantial \$1,370,834.19, whereas the paid video and display channel groups generated the lowest total revenue, both amounting to \$0.00.

What do these metrics mean, based on your experience?

- ❖ **Engagement Rate:** *It measures how well a channel group is captivating its audience. A high rate, like 90.75%, indicates strong engagement for the cross-network group, while a lower rate, such as 50.97%, suggests less effective engagement for the paid video group.*
- ❖ **Total Revenue:** *This represents the overall earnings from each channel group. The Direct group generated the highest revenue at \$1,370,834.19, demonstrating successful sales or conversions. In contrast, the paid video and display groups yielded no revenue, implying limited financial impact during the period.*

Monetization

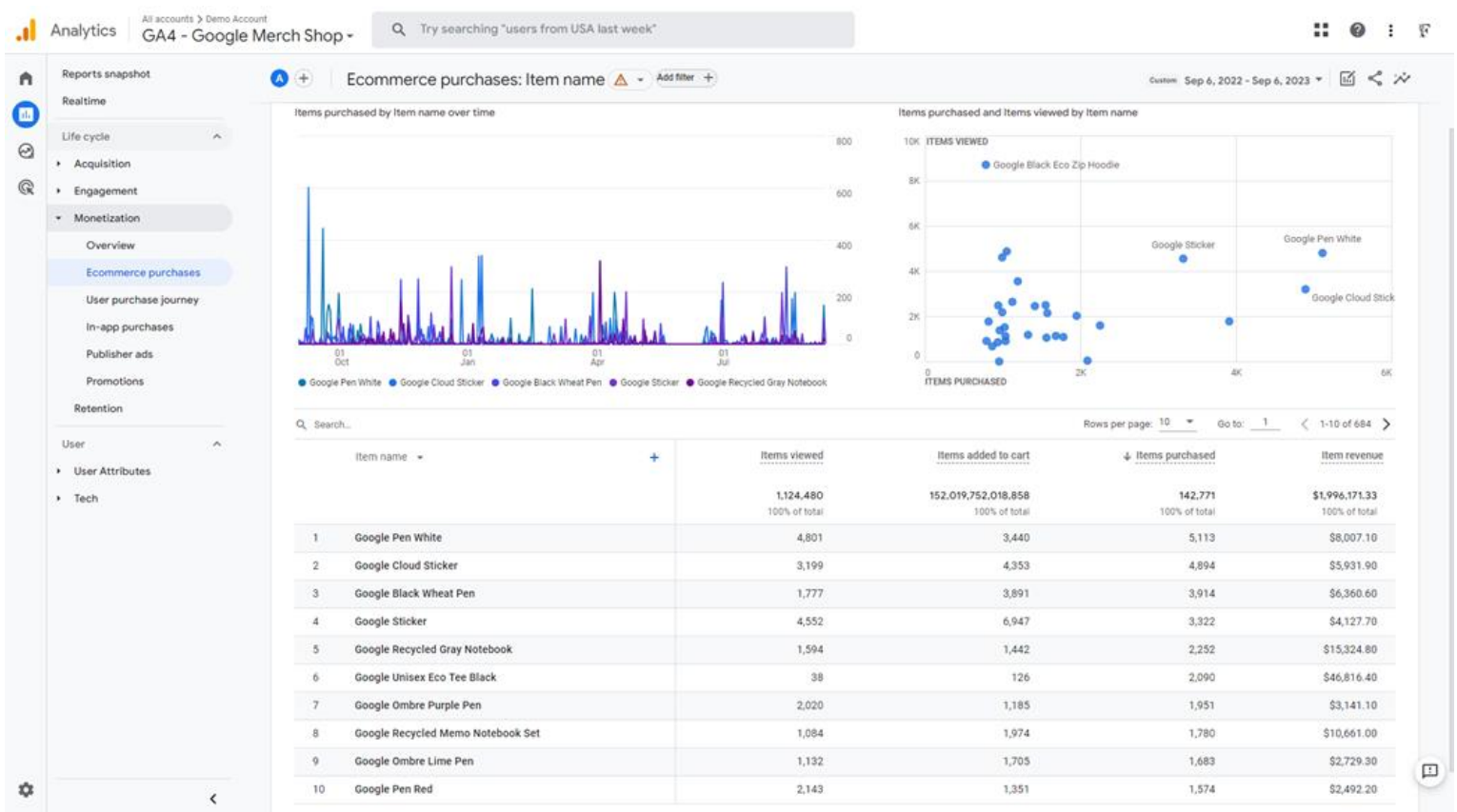


For this section, if you are using your own business's Google Analytics data but do not have eCommerce capabilities established, please use the Google Analytics demo data provided from the Google Merchandise store.

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

Based on the screenshot from the previous slide;

The item "Google Pen White" contributed the highest number of unique purchases, with a total of 5,113 purchases. As for revenue, the item "Google Unisex Eco Tee Black" was responsible for the largest percentage, generating \$46,816.40.



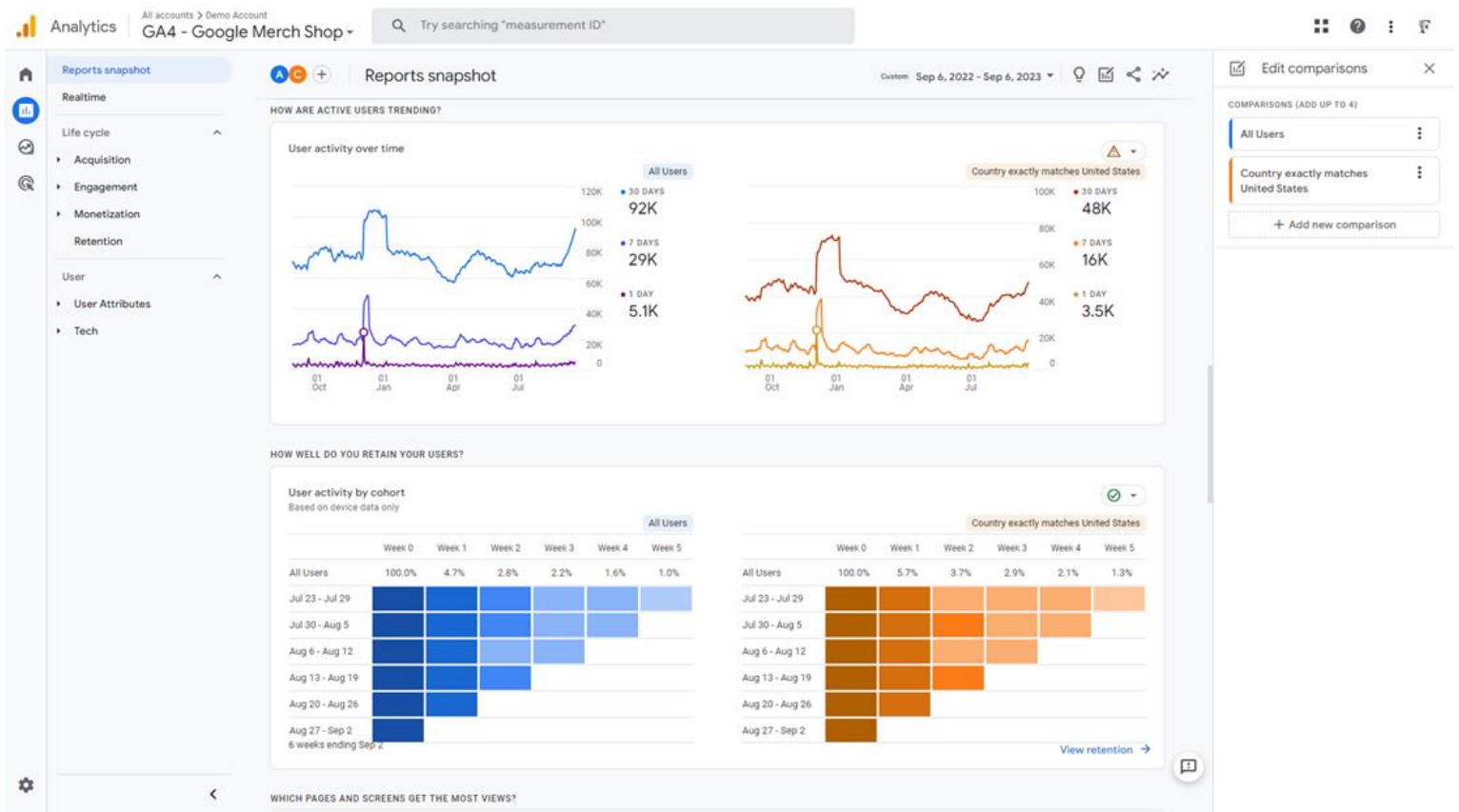
Part Four: Segmentation



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

A screenshot of the values used to create the segment.

← Build comparison ×

CONDITIONS (BUILD UP TO 5)

Dimension

Country

Match Type ?

exactly matches

Value

United States

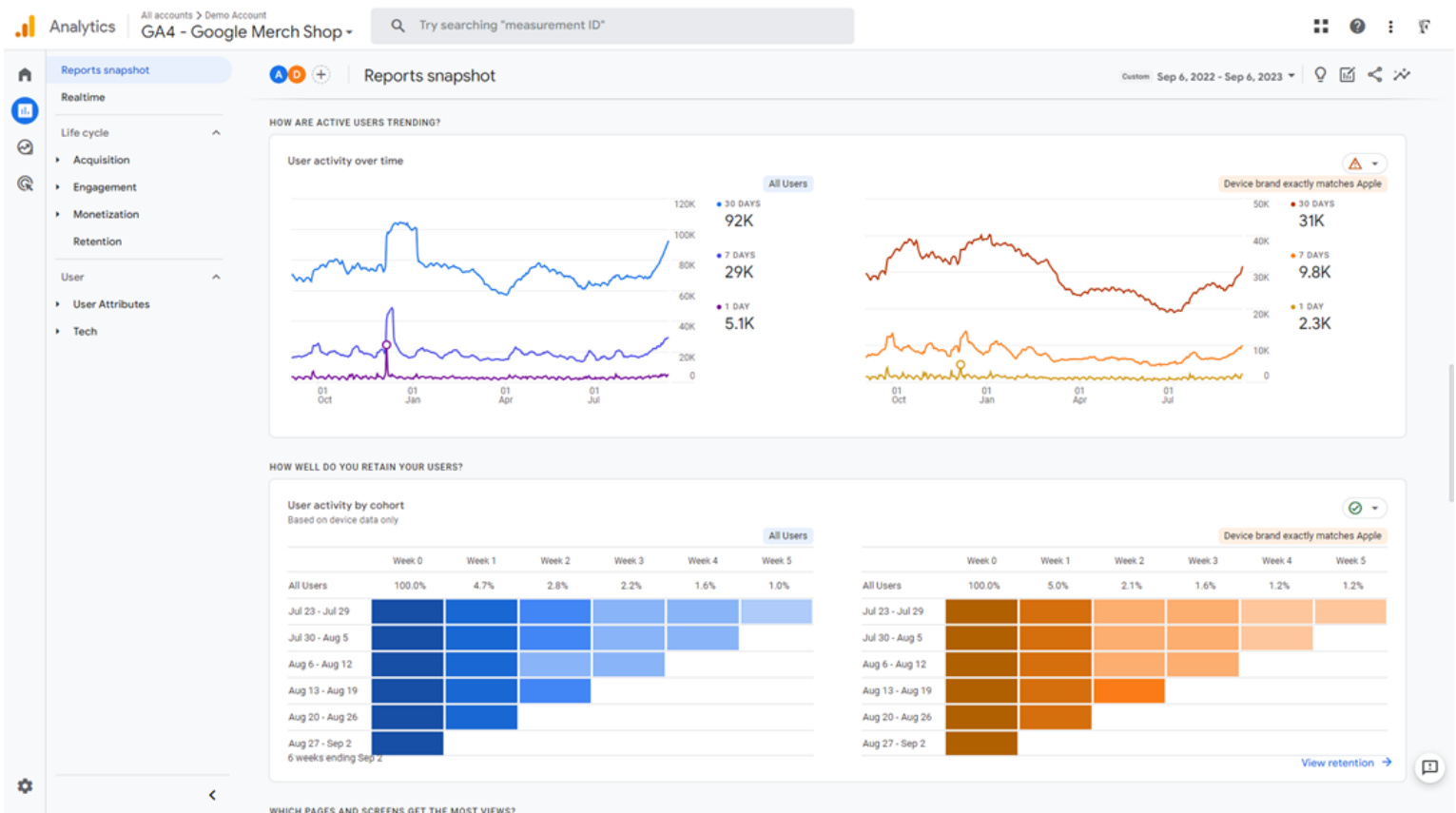
+ Add new condition



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

A screenshot of the values used to create the segment.

← Build comparison ×

CONDITIONS (BUILD UP TO 5)

Dimension

Device brand

Match Type ?

exactly matches

Value

Apple

+ Add new condition



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.

Quarterly Marketing Plan for Revenue Growth (Assuming Data Consistency):

Objective: Achieve a 20% YOY sales growth by optimizing existing campaigns and implementing strategic improvements.

Month 1: Campaign Assessment and Optimization

- ❖ *Campaign Review: Start by conducting a comprehensive review of all existing campaigns, focusing on metrics such as ROAS, revenue, and conversion rates.*
- ❖ *High-Performing Campaigns: Allocate more budget and resources to high-performing campaigns in terms of ROAS and revenue generation while keeping other campaigns active. Specifically, the "Solar Leads - In-Stream RT - Conversions" campaign has a ROAS of 6.2, and "Solar Subscribers - Discovery Keywords - CPV" has a ROAS of 4.8. These campaigns are more likely to drive sales growth.*
- ❖ *Campaign Optimization: Identify campaigns with low or no revenue (e.g., "Solar Leads - In-Stream Solar Cheat Code Website" and "Maximize Conv - Solar Sales Calls - Custom Intent"). Revise ad creatives, targeting, and landing pages to improve performance.*

Month 2: Audience Expansion and Keyword Refinement

- ❖ *Audience Expansion: Utilize keyword research data to identify new audience segments within the solar industry. Expand targeting options to reach a broader but still relevant audience.*
- ❖ *A/B Testing: Conduct A/B tests for ad creatives, headlines, and descriptions within top-performing campaigns to optimize click-through rates and conversion rates. Utilize A/B test results to refine ad content.*
- ❖ *Retargeting Strategy: Implement retargeting ads to re-engage users who previously interacted with your ads but didn't convert. Craft personalized ad messages.*

Analysis and Suggestions: Business Sales Growth

Month 3: Landing Page and Customer Retention

- ❖ ***Landing Page Optimization:** Ensure landing pages are highly optimized for conversion. Focus on reducing bounce rates, improving load times, and simplifying the conversion process and make it more user-friendly.*
- ❖ ***Budget Allocation:** Adjust campaign budgets based on performance data. Allocate more resources to campaigns and channels with strong ROI potential.*
- ❖ ***Customer Retention:** Implement strategies to nurture existing customer relationships, encourage repeat business, and upsell additional services.*
- ❖ ***Data-Driven Decisions:** Continue using data analytics tools to gain insights into customer behaviour. Make informed decisions based on data to refine campaigns.*

Quarterly Review:

- ❖ ***Performance Assessment:** At the end of the quarter, conduct a comprehensive review of campaign performance. Analyse metrics such as ROAS, conversion rates, revenue, and budget utilization.*
- ❖ ***Adjustment and Scaling:** Based on the quarterly results, make adjustments to the marketing strategy for the next quarter. Scale successful campaigns further and consider reallocating budgets based on ROI.*

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:

One way to improve the eCommerce UX for the Google Merchandise store is to enhance the product search functionality by implementing predictive search suggestions. Currently, the store uses a basic search bar that requires users to type in their queries fully. To improve this:

- ❖ **Predictive Search Suggestions:** *Implement a predictive search feature that suggests relevant products, categories, or search terms as users type in the search bar. This feature would be powered by an intelligent algorithm that takes into account past search queries and popular products. For instance, if a user starts typing "Pixel," the search bar could suggest "Pixel 6," "Pixel accessories," or "Pixel cases."*
- ❖ **Autocomplete:** *Along with predictive search suggestions, incorporate an autocomplete function that completes the user's query when they click on a suggestion. This reduces typing effort and helps users find what they're looking for more quickly.*
- ❖ **Instant Search Results:** *Display search results dynamically as users type, so they can see product options immediately without having to hit the "search" button. This provides a more interactive and user-friendly search experience.*



Analysis and Suggestions: eCommerce

Other eCommerce change or addition:

To further enhance the eCommerce experience for the Google Merchandise store, I recommend implementing a "Related Products" or "Bundle Deals" section on product pages.

- ❖ ***Related Products/Bundle Deals Section:*** *On each product page, display a section that showcases related products or bundle deals that complement the item the customer is viewing. For example, if a customer is looking at a Google Pixel phone, this section could suggest related accessories like phone cases, screen protectors, or headphones. Alternatively, it could offer bundle deals, such as "Buy a Pixel phone and get 20% off on Pixel Buds."*

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.

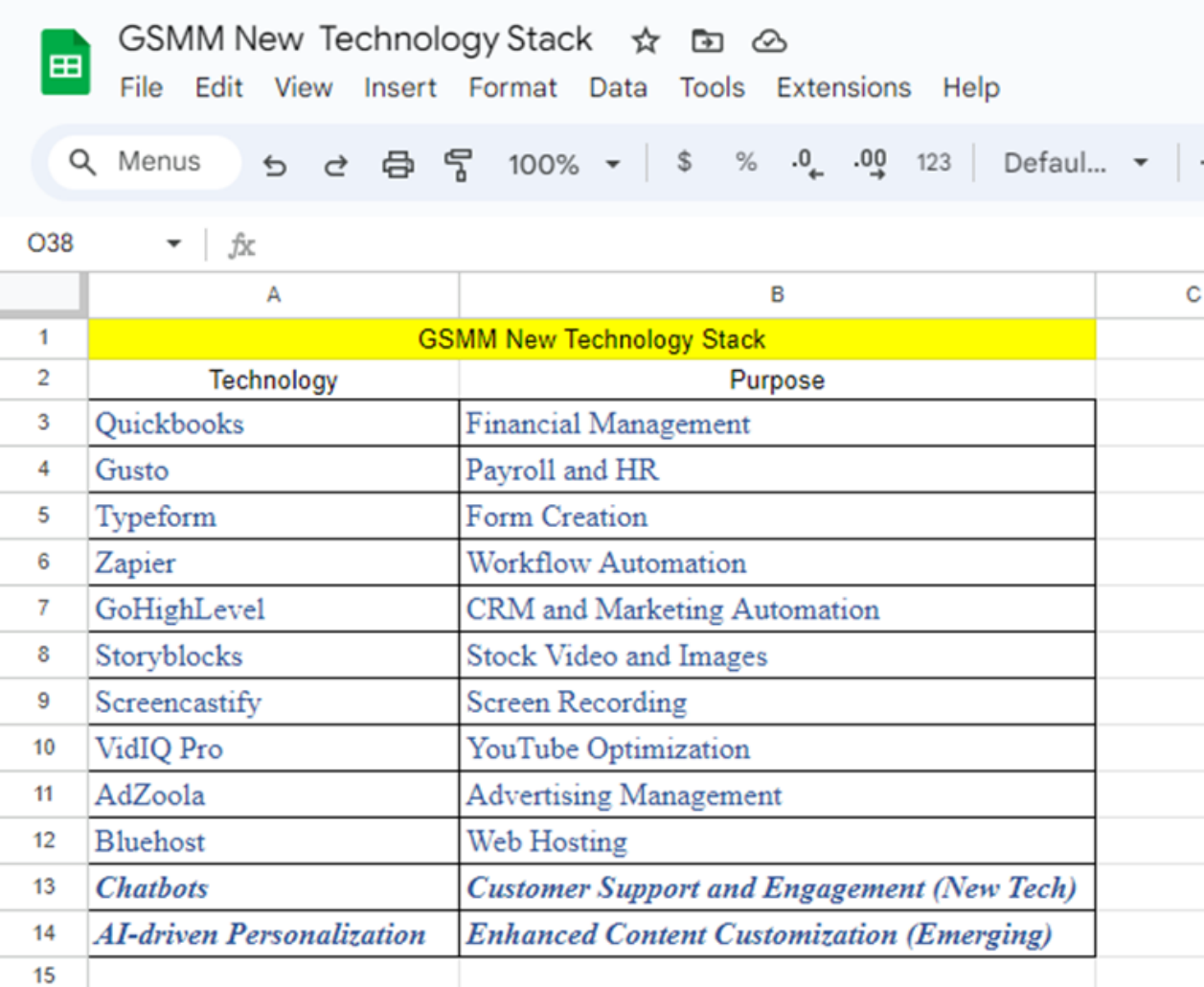
Provide a link to your technology stack or place a screenshot below. Make sure that the screenshot clearly shows a minimum of 2 new additional technologies, one of which is emerging, and a total stack of no less than 10.

- ❖ **Chatbots (New Technology 1):** Chatbots can improve customer support and engagement by providing instant responses to common queries on websites and social media.
- ❖ **AI-driven Personalization (Emerging Technology):** AI-powered personalization tools analyse customer data to deliver highly customized content and product recommendations, enhancing marketing effectiveness.

Check link and screenshot on the next slide



Analysis and Suggestions: Technology



The screenshot shows a Google Sheet titled "GSMM New Technology Stack". The sheet contains a table with two columns: "Technology" and "Purpose". The table lists various technologies and their corresponding purposes, such as Quickbooks for Financial Management, Gusto for Payroll and HR, and AI-driven Personalization for Enhanced Content Customization.

	A	B	C
1	GSMM New Technology Stack		
2	Technology	Purpose	
3	Quickbooks	Financial Management	
4	Gusto	Payroll and HR	
5	Typeform	Form Creation	
6	Zapier	Workflow Automation	
7	GoHighLevel	CRM and Marketing Automation	
8	Storyblocks	Stock Video and Images	
9	Screencastify	Screen Recording	
10	VidIQ Pro	YouTube Optimization	
11	AdZoola	Advertising Management	
12	Bluehost	Web Hosting	
13	<i>Chatbots</i>	<i>Customer Support and Engagement (New Tech)</i>	
14	<i>AI-driven Personalization</i>	<i>Enhanced Content Customization (Emerging)</i>	
15			

<https://docs.google.com/spreadsheets/d/1Cpz4JNm8qZ-9zeID4A2-gfGQU3GD9uUTtarpcBePcNQ/edit?usp=sharing>