Final Research Project

Insights from Google Merchandise Store Data

The Google Merchandise Store is an ecommerce site that sells Google-branded merchandise.

The United States has a well-developed e-commerce infrastructure and a population that has a long history of online buying, which may lead to increased traffic to the **Google Merch Shop**.

Evaluating its traffic statistics to better understand its consumer base and customize its marketing strategy accordingly is important to gather more insights. This can assist in improving the user experience and, with targeted efforts, perhaps expand the shop's reach to additional regions. The **last 30 days** of data are being evaluated here.

1. Cohort exploration

Time period: **Last 30 days (Sept 8th- Oct 7th) 2023**

Direct traffic and Paid traffic for active users are categories I've chosen for segment comparisons across the world.

- **Direct traffic** is often made up of engaged and returning consumers who are more inclined to buy. They are already acquainted with the website and its offerings, which may result in increased conversion rates.
- **Paid advertising** efforts, such as Google advertisements or social network advertisements, generate sponsored traffic. It entails using customized marketing to lure consumers to the website**. Paid traffic** may be very successful at bringing new users who might not have noticed the Google Merch Shop otherwise. Sponsored advertisements can attract

potential buyers interested in Google-related items by targeting certain demographics or interests.

Let's look at the benchmark based on last month's data according to the devices. **Every week, the number of different device users declines.**

	WEEK 0	WEEK 1	WEEK 2	WEEK 3	WEEK 4
Direct traffic Active users	48,059	3,026	1,054	349	60
Sep 8 - Sep 9, 2023 3,641 users	3,641	250	73	112	44
Sep 10 - Sep 16, 2023 12,631 users	12,631	682	624	222	16
Sep 17 - Sep 23, 2023 10,144 users	10,144	868	291	15	
Sep 24 - Sep 30, 2023 15,231 users	15,231	1,127	66		
Oct 1 - Oct 7, 2023 7,048 users	7,048	99			
Paid traffic Active users	11,529	337	186	85	37
Sep 8 - Sep 9, 2023 976 users	976	42	31	14	18
Sep 10 - Sep 16, 2023 3,430 users	3,430	119	77	54	19
Sep 17 - Sep 23, 2023 2,645 users	2,645	75	73	17	
Sep 24 - Sep 30, 2023 2,322 users	2,322	73	5		
Oct 1 - Oct 7, 2023 2,135 users	2,135	28			

From the above data, we can get the following insights.

- **Direct and paid traffic have a significant influence on active users across all the weeks within a month time frame.**
- For this period, direct traffic has gained more active users than sponsored traffic across all devices.
- An upsurge in both direct traffic and paid traffic between Sept 10th – Sept 16th can be seen. But a large upsurge for direct traffic between Sept 24th – Sept 30th in comparison to surrounding dates might be seen as unusual. This might be the result of a technical problem, a marketing effort, or some external source.

For further analysis, all the active users' segment comparisons have been broken down to device categories. Devices include smartphones, desktop computers, smart televisions, and more. Let us see the data for the time month wise.

	MONTH 0	MONTH 1
Direct traffic Active users	48,059	1,735
Sep 8 - Sep 30, 2023 41,133 users	41,133	1,735
smart tv 5 users	5	0
tablet 1,066 users	1,066	37
desktop 18,020 users	18,017	1,256
mobile 22,576 users	22,576	442
Oct 1 - Oct 7, 2023 7,048 users	7,048	0
smart tv 1 user	1	
tablet 335 users	335	
desktop 3,183 users	3,183	
mobile 3,600 users	3,600	

	MONTH 0	MONTH 1
Paid traffic Active users	11,529	256
Sep 8 - Sep 30, 2023 9,413 users	9,413	256
smart tv 1 user	1	0
tablet 237 users	237	1
desktop 1,942 users	1,942	56
mobile 7,207 users	7,207	199
Oct 1 - Oct 7, 2023 2,135 users	2,135	0
smart tv No users	0	
tablet 33 users	33	
desktop 566 users	566	
mobile 1,536 users	1,536	

- Aside from traffic, mobile users are more likely than other users to make purchases during both months, considering that phones are convenient to carry everywhere and provide a more comfortable browsing experience.
- In September and October, direct traffic accounted for 48,059 users (four times that of sponsored traffic), while paid traffic accounted for 11,529 users.
- This suggests that a larger portion of your website's traffic comes from direct sources (e.g., users typing in the website's URL directly or clicking on bookmarks), while paid traffic (e.g., from online advertising) is relatively lower.
- Tablet users and smart tv are less prevalent in both traffics.

In conclusion, from the above exploration, direct traffic is greater in significance than sponsored traffic in recruiting and maintaining active users on the Google Merch Shop. According to my study, there is a better association between direct traffic and mobile traffic. Because mobile customers are more likely to visit the Google Merch Shop directly, responsive design and user experience improvements are essential.

In other words, better outcomes and conversion rates may be achieved by concentrating on enhancing the user experience for both desktop and mobile users, as well as preserving and enhancing merch direct traffic sources. Additionally, keeping an eye on these patterns over time and doing more research may offer consistent direction for Google merch marketing and website optimization initiatives.

2. Path exploration

Given that direct traffic and mobile are more mutually exclusive, let's examine the data using path exploration for the mobile device category for the same period only in USA (Since, there is more traffic in the US from the first world graph). I've included **gender** in our analysis this time.

Although it's only one component of a user's identity and interests, gender can be a valuable segmentation criterion. To get a more thorough picture of clients and their behavior, we may think about merging it with other data pieces, such age, location, and purchase history. An improved overall shopping experience and more successful marketing are possible outcomes of an all-encompassing approach to consumer study.
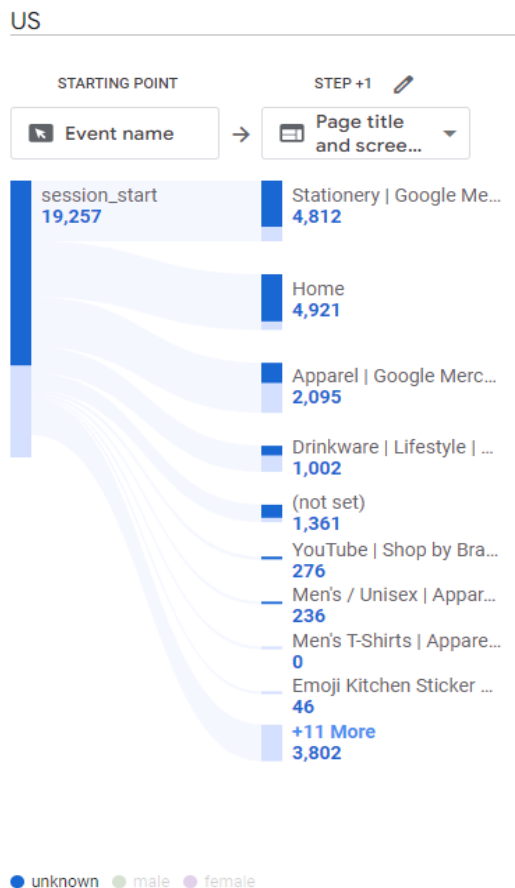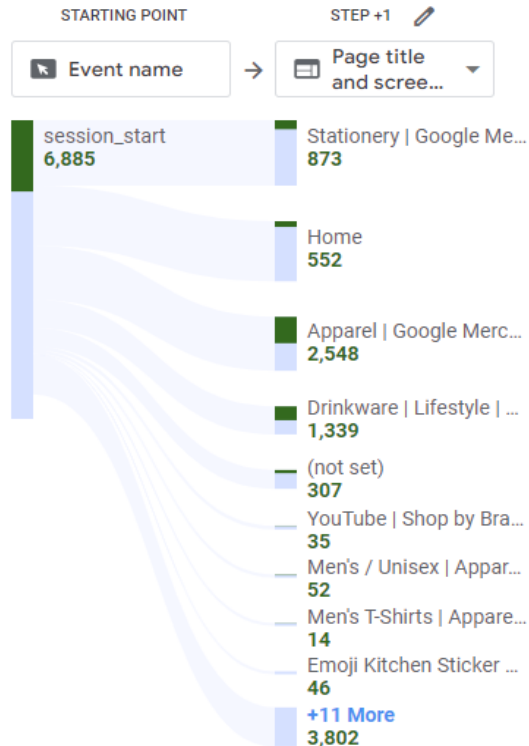

Path exploration in Google Analytics refers to the process of analyzing and visualizing the paths that users take through your website.

- Unknown gender has started 19257 sessions between these times, and they appear to use the home page and stationery the most often. **This data reveals that a sizable portion of people who use the Merch shop website do not disclose their gender when they are online.**

- The merch website tallied about 29,000 events in a single month from unknown gender. A wide range of user interactions, including button clicks, form submissions, downloads, video views, and other user engagements that we can measure, may be categorized as events in web analytics. These events offer insightful information about user involvement and activity on the website.

- There were 19,257 start sessions that same month. Beginning with a user's first visit to the website, these start sessions signify user interactions with the website. Start sessions, which serve as the starting points of user journeys, are essential for comprehending how consumers interact with the Google Merchandise Store website.

- Website's user sessions take users to a variety of areas and pages, including the shopping cart, apparel, drinkware, lifestyle, YouTube, men's/unisex t-shirts, kitchen stickers, and lifestyle.

- The **diversity** in user behavior suggests that users explore various areas of the website, maybe indicating interest in a broad range of products or updates.

Let's see how male and female users differ now.

US		
STARTING POINT		**STEP +1** ✏
▸ Event name	→	🖼 Page title and scree... ▾
session_start **6,885**		Stationery | Google Me... **873**
		Home **552**
		Apparel | Google Merc... **2,548**
		Drinkware | Lifestyle | ... **1,339**
		(not set) **307**
		YouTube | Shop by Bra... **35**
		Men's / Unisex | Appar... **52**
		Men's T-Shirts | Appare... **14**
		Emoji Kitchen Sticker ... **46**
		+11 More 3,802

US		
STARTING POINT		**STEP +1** ✏
▸ Event name	→	🖼 Page title and scree... ▾
session_start **2,705**		Stationery | Google Me... **635**
		Home **329**
		Apparel | Google Merc... **566**
		Drinkware | Lifestyle | ... **371**
		(not set) **149**
		YouTube | Shop by Bra... **31**
		Men's / Unisex | Appar... **0**
		Men's T-Shirts | Appare... **10**
		Emoji Kitchen Sticker ... **46**
		+11 More 3,802

● unknown ● male ● female   ● unknown ● male ● female

- Male and female customers are drawn to the merchandise store, which is indicative of a diverse and welcoming clientele.
- 2,705 sessions were initiated by female users, compared to 6,885 sessions initiated by male users. The gender distribution of the sessions that began within last month is highlighted by this data.
- Men tend to shop on the site more frequently than women do, especially when buying apparel and drinkware. This implies that certain product categories could be more appealing to male consumers.

On the website for the merch store, we can think about putting in user surveys or feedback forms to learn more about consumer preferences and wants. This can offer insightful qualitative data on user behavior.

After only one month of analysis, we have several visualizations and analyses to compare with past or future months' data for further insights which tell us more about long term trends, correlations etc.