Google Analytics

e-nor

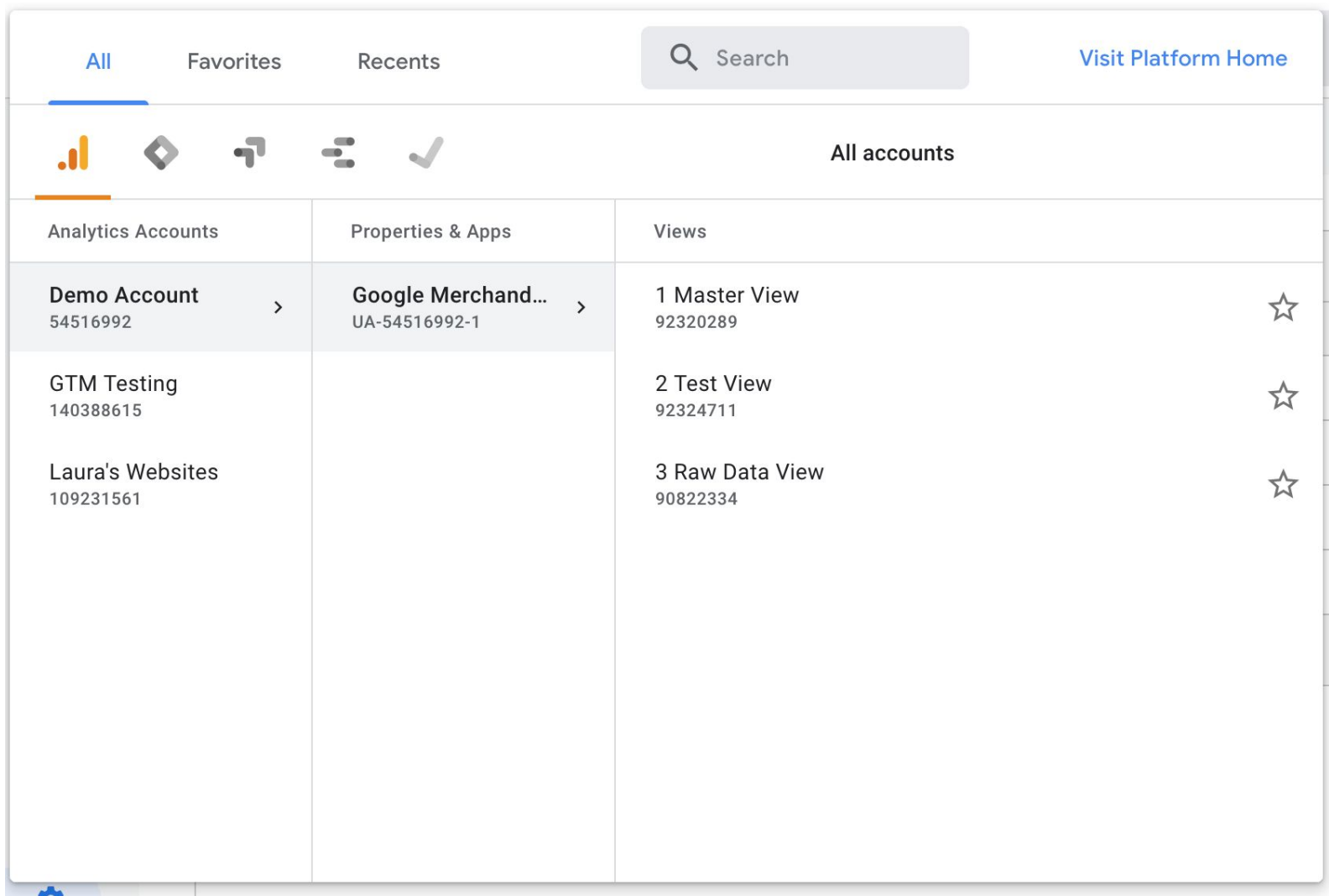# Project: Navigating, Reports, & Dashboards

Part One:
Primary Views & Filters

1. Best Practice Check:
Three Primary Views

For this project, I am using the Google Merchandise Store Demo Account. The three views are as follows:

1 Master View - Production

2 Test View - Test

3 Raw Data View - Unfiltered

All	Favorites	Recents	Q Search	Visit Platform Home

					All accounts

Analytics Accounts	Properties & Apps	Views	
Demo Account 54516992 >	**Google Merchand...** UA-54516992-1 >	1 Master View 92320289	☆
GTM Testing 140388615		2 Test View 92324711	☆
Laura's Websites 109231561		3 Raw Data View 90822334	☆

Since I am using the Google Merchandise Store Demo Account, I do not have authorization to filter internal traffic, so I am including a screenschot of where I would create this filter.

On the next page, I will include a filter from a website I manage that has removed internal traffic and hostname spam to properly demonstrate my knowledge.

We navigate to Admin Panel → Filters → Add Filter (option is removed for demo account)

2. Best Practice Check:
Filtering Internal Traffic (2 of 2)

Please see below for successfully filtered Home IP Address Traffic.

Data Exploration

From the Audience Overview Report, select a three month time period you would like to explore. Which week had the most visitors, and which week had the fewest visitors to your site?

Here is an overview of the Jan 1, 2019 – Mar 31, 2019 period broken down by week. The following pages show close ups of the weeks with most and least visitors. The first and last segments have been eliminated because they are not full weeks.

From the Audience Overview Report, select a three month time period you would like to explore. Which week had the most visitors, and which week had the fewest visitors to your site?

Close-up of most visitors screenshot. The week with the most visitors from Jan 1, 2019 – Mar 31, 2019 was Mar 17 – Mar 23 with 13,663 visitors. The weeks before and after were a close second and third.

SAVE	EXPORT	SHARE	INSIGHTS

+ Add Segment

Jan 1, 2019 - Mar 31, 2019 ▾

| Hourly | Day | **Week** | Month |

Mar 17, 2019 - Mar 23, 2019
■ Users: **13,663**

/ 2019   March 2019

■ New Visitor   ■ Returning Visitor

ssions
91,032

19.5%

From the Audience Overview Report, select a three month time period you would like to explore. Which week had the most visitors, and which week had the fewest visitors to your site?

Close-up of fewest visitors screenshot. The week with the fewest visitors from Jan 1, 2019 – Mar 31, 2019 was Jan 20 – Jan 26 with 10,774 visitors.

Audience Overview ✅

⭕ **All Users** 100.00% Users	⭕ + Add Segment

Overview

Users ▾   **VS.**   Select a metric

● Users

15,000

10,000

Jan 20, 2019 - Jan 26, 2019
  ■ Users: **10,744**

5,000

...   February 2019   March 2019
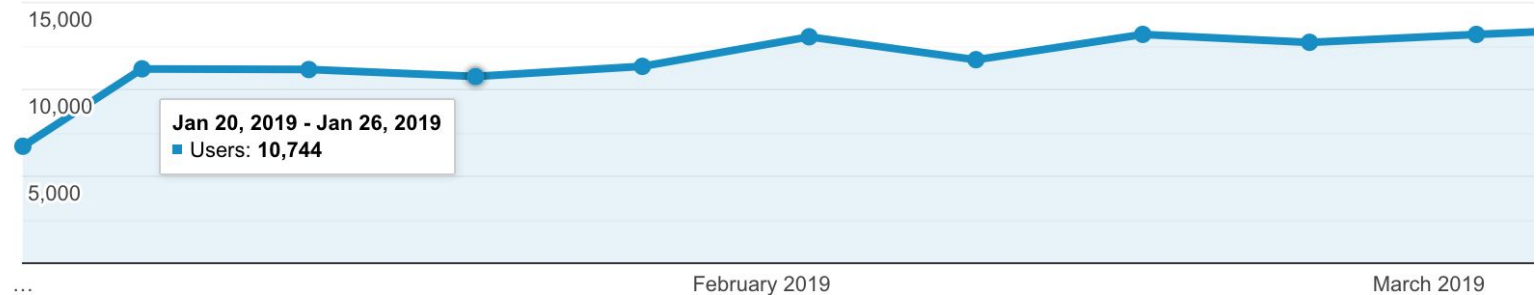
Users	New Users	Sessions
139,333	131,010	191,032

Number of Sessions per User	Pageviews	Pages / Session

Standard Display - Audience

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

Retail sales are traditionally slower in late January, so a drop in revenue is to be expected. By resegmenting the data according to month instead of week, we can see a slight monthly increase from January to February and from February to March for 2019.

If we wanted to further confirm this trend, we could look at data from additional years from this three month time period (Jan 1 - Mar 31).
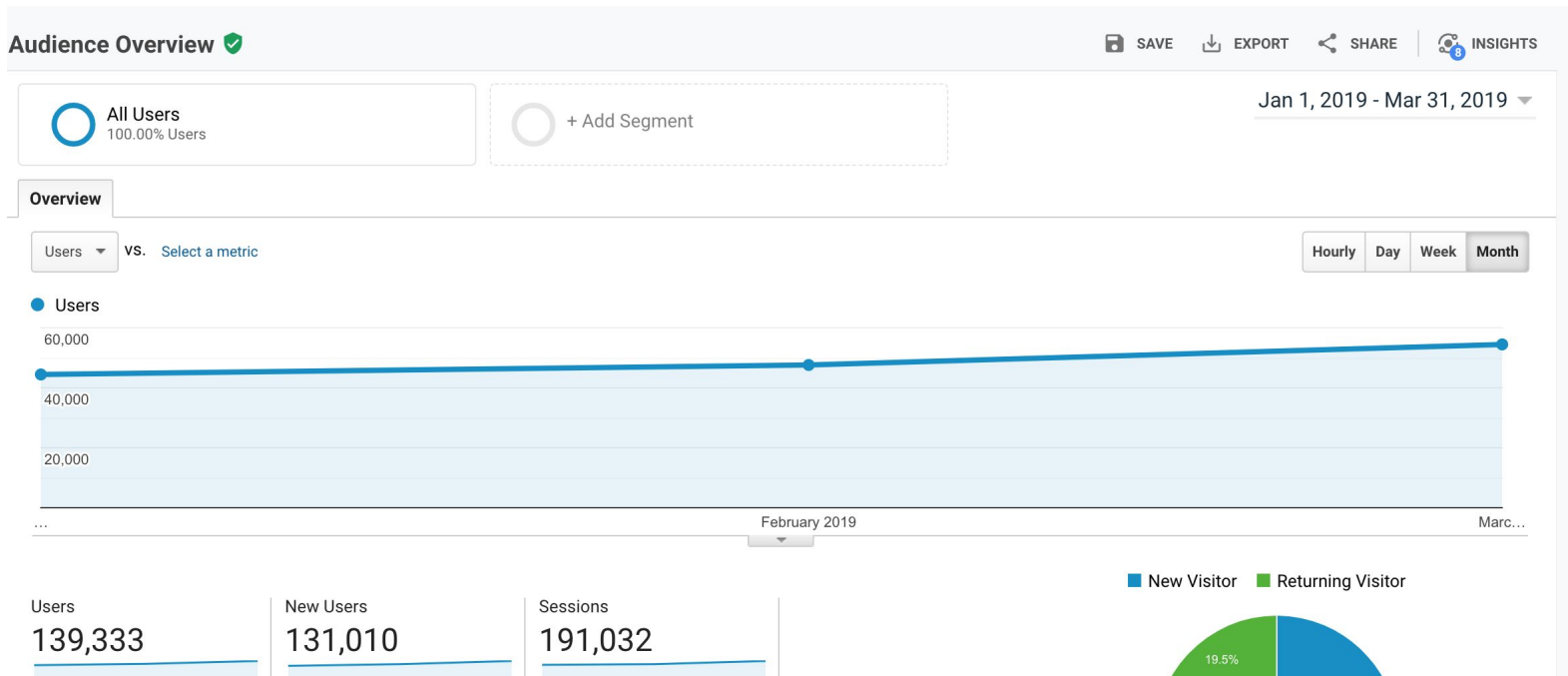
Audience Overview ✔

SAVE   EXPORT   SHARE   INSIGHTS

All Users
100.00% Users

+ Add Segment

Jan 1, 2019 - Mar 31, 2019

Overview

Users vs. Select a metric

Hourly | Day | Week | **Month**

● Users

60,000

40,000

20,000

...   February 2019   Marc...

■ New Visitor   ■ Returning Visitor

Users	New Users	Sessions
139,333	131,010	191,032

19.5%

Standard Display: Acquisition (1 of 3)

BOUNCE RATES

	Acquisition			Behavior			Conversions		
	Users	New Users	Sessions	Bounce Rate	Pages / Session	Avg. Session Duration	Ecommerce Conversion Rate	Transactions	Revenue
Remove ...■	115,026	105,458	154,194	42.54%	4.39	00:02:51	0.11%	176	$9,670.36
1 ■ Display	2,916			75.97%			0.00%		
2 ■ Social	7,680			60.45%			0.02%		
3 ■ Affiliates	6,231			52.55%			0.03%		
4 ■ Organic Search	77,618			44.91%			0.15%		
5 ■ Paid Search	5,965			34.68%			0.35%		
6 ■ Referral	19,845			26.52%			<0.01%		
7 ■ (Other)	0			0.00%			0.00%		
8 ■ Direct	0			0.00%			0.00%		

To see all 8 Channels click here.

CONVERSION RATES

	Acquisition			Behavior			Conversions		
	Users	New Users	Sessions	Bounce Rate	Pages / Session	Avg. Session Duration	Ecommerce Conversion Rate	Transactions	Revenue
Remove ...■	115,026	105,458	154,194	42.54%	4.39	00:02:51	0.11%	176	$9,670.36
1 ■ Paid Search	5,965			34.68%			0.35%		
2 ■ Organic Search	77,618			44.91%			0.15%		
3 ■ Affiliates	6,231			52.55%			0.03%		
4 ■ Social	7,680			60.45%			0.02%		
5 ■ Referral	19,845			26.52%			<0.01%		
6 ■ (Other)	0			0.00%			0.00%		
7 ■ Direct	0			0.00%			0.00%		
8 ■ Display	2,916			75.97%			0.00%		

To see all 8 Channels click here.

The previous page shows two reports: the highest to lowest bounce rates and the highest to lowest eCommerce conversion rates from Jan 1 – Mar 31, 2019.

Note about the filter: The most efficient way to filter out Direct and Other traffic seemed to be to create a filter that addressed both of them; otherwise, the report will segment them out separately, which is not what we wanted. I was initially surprised to find that they are still listed in the pie chart but confirmed the traffic was filtered properly because the numbers show 0 with the channels list, and the pie chart does not display them (though the color of Direct is close to Affiliates).

Based on my experience, the results for both bounce rates and eCommerce Conversion Rates are not surprising.

Bounce Rate Analysis

The channel with the highest bounce rate was "Display". Since these ads are not targeted, we expect a fair amount of traffic that isn't from motivated buyers. That said, it is interesting that there is the lowest bounce rate from referral traffic, so we would likely want to investigate which traffic sources are bringing us traffic with engaged users and perhaps consider ways to further build and solidify successful partnerships.

eCommerce Conversion Rate Analysis

The channel with the highest eCommerce Conversion Rate was paid traffic. This is a good thing because it means that our targeted traffic that we are paying for is working more effectively than the other types of traffic.

We would have to drill down further to find out which ads are performing best. Once we can isolate that information, we can perform an additional analyses to see if there is a cost benefit in a larger spend for the top performing paid traffic sources.

Percentage Display: Conversion

During the three month period you've selected, which Product Category contributed the highest number of unique purchases for New Users and which Product Category was responsible for the largest percentage of revenue for New Users? (Screenshot(s) only; no elaboration required.)
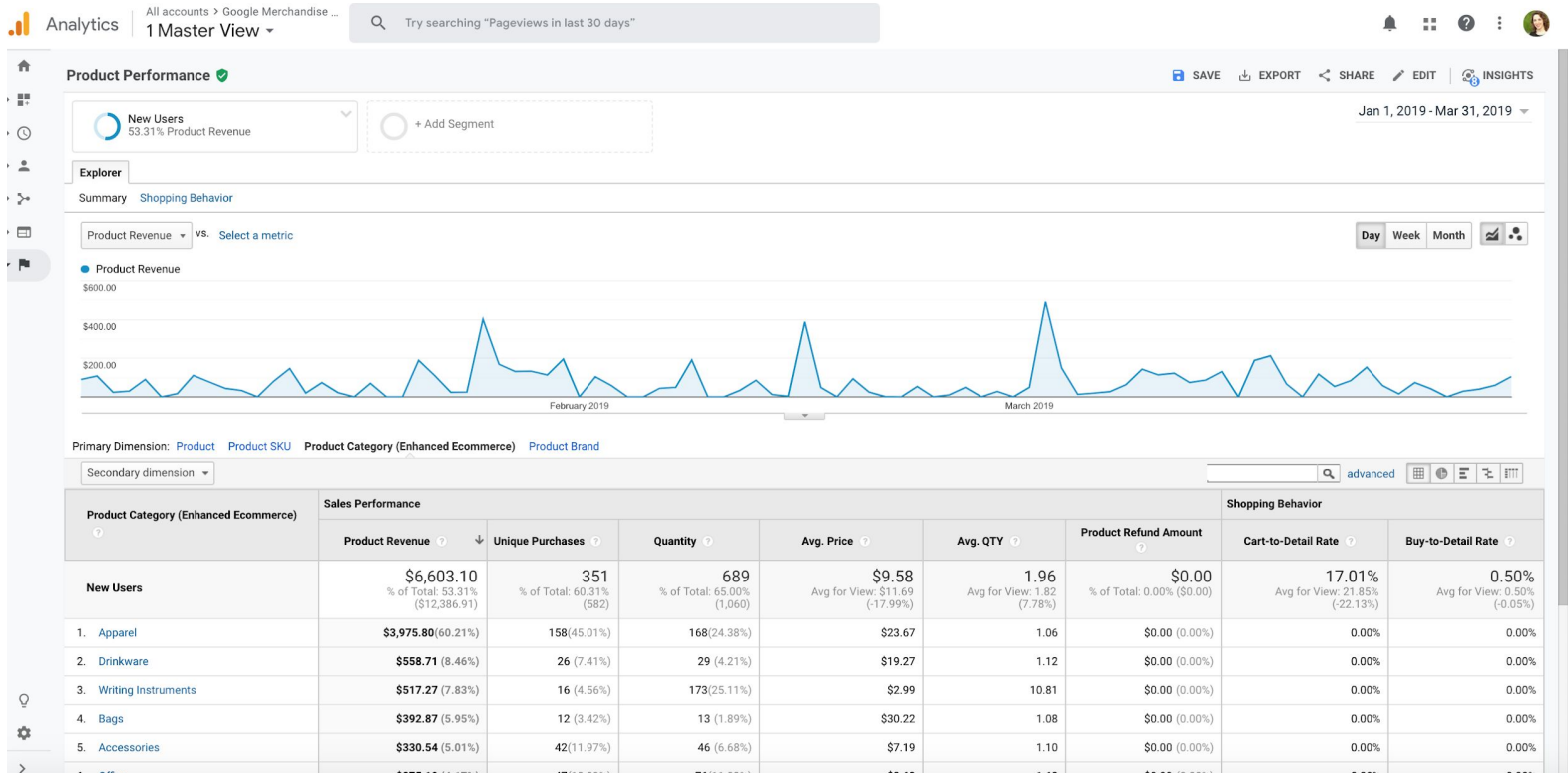
For traffic from All Users between the start and end of your three month period, please provide a comparison report showing Site Speed Page timings for our top ten pages (based on pageviews) and identify any potential troublespots.
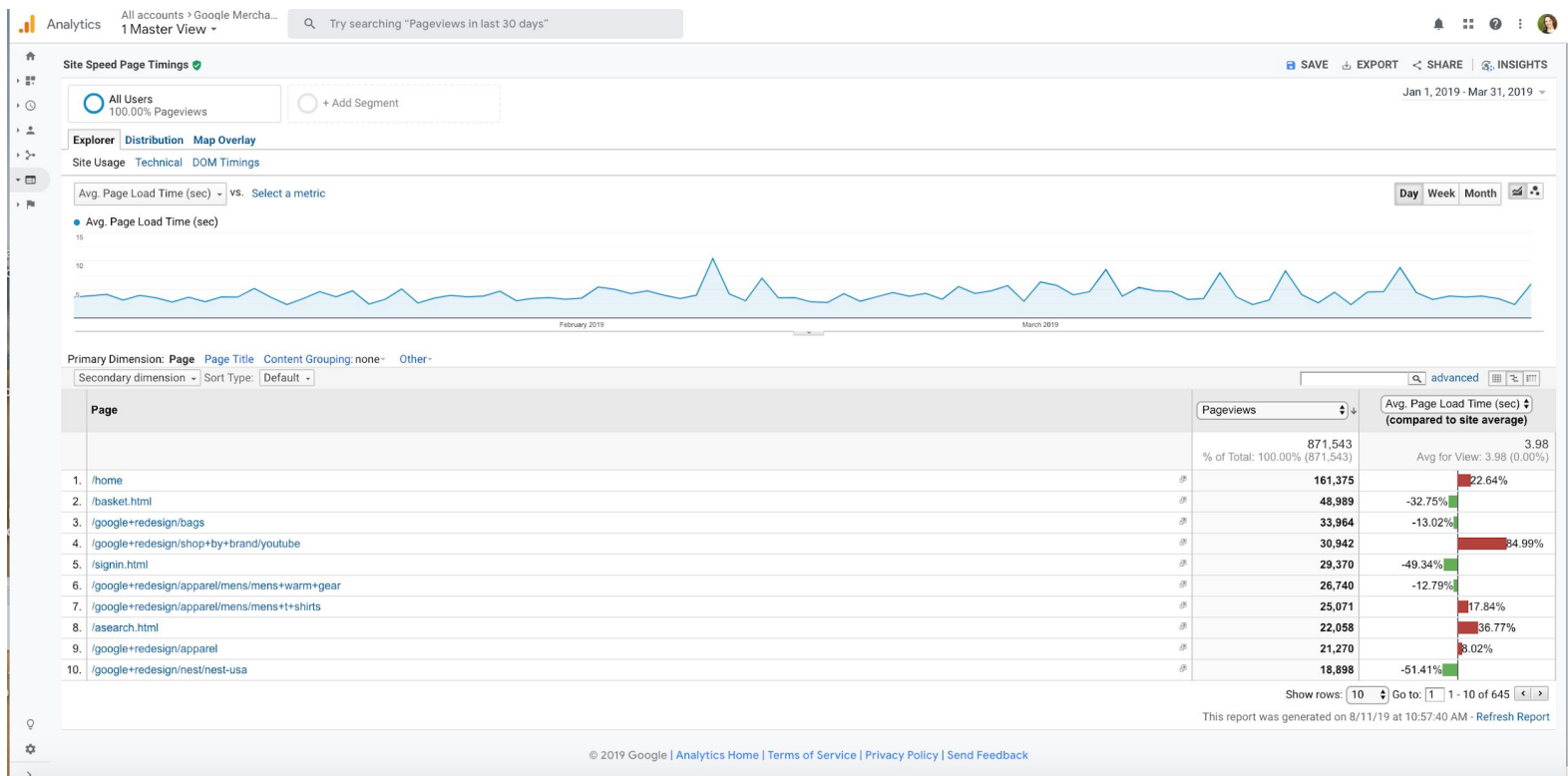
This comparison display report highlights a few potential problem areas. The most immediate one we need to deal with is the fact that our home page loads 23% more slowly than the average for our website. In addition, there are three re-designed pages that load more slowly than the site average and a slower than average load time for the asearch page.

I was, in particular, I thought the two most immediate areas where we need to focus our attention were the Home page and the Shop By Brand page with a YouTube video that was redesigned.

While not required for this exercise, I was genuinely curious, so I broke the pageviews down according to device category and discovered a couple of important finds.

| Page		Device Category	Pageviews	Avg. Page Load Time (sec) (compared to site average)
			870,919 % of Total: 99.93% (871,543)	3.98 Avg for View: 3.98 (0.00%)
1.	/home	desktop	113,747	31.89%
2.	/home	mobile	42,406	0.26%
3.	/basket.html	desktop	40,192	-39.42%
4.	/google+redesign/bags	desktop	26,768	-21.69%
5.	/signin.html	desktop	24,499	-50.81%
6.	/google+redesign/apparel/mens/mens+warm+gear	desktop	19,915	-38.43%
7.	/google+redesign/nest/nest-usa	desktop	18,719	-52.48%
8.	/google+redesign/apparel/mens/mens+t+shirts	desktop	18,474	-0.65%
9.	/google+redesign/shop+by+brand/youtube	desktop	17,136	51.76%
10.	/google+redesign/new	desktop	15,273	-34.22%
11.	/google+redesign/bags/quickview	desktop	13,422	-39.83%
12.	/asearch.html	desktop	12,717	20.51%
13.	/google+redesign/accessories/electronic+accessories	desktop	12,586	-19.38%
14.	/google+redesign/nest/nest-usa/quickview	desktop	12,342	-57.71%
15.	/google+redesign/shop+by+brand/youtube	mobile	12,271	133.05%
16.	/google+redesign/accessories/fun	desktop	10,440	-9.61%
17.	/google+redesign/apparel	mobile	10,284	-0.73%
18.	/google+redesign/apparel	desktop	9,745	25.92%

As the screenshot on the previous page shows, there are a couple of issues that should be addressed. The most immediate ones I see are as follows:

- The desktop version of the homepage loads more slowly than on mobile. This leads to more questions, such as, Is there is one browser that are skewing our results? In order to discover the issue, further analysis would be required to make this determination. A possible next step would be to see if there is an issue with one of the major browsers like Safari or Firefox. (It's likely not Chrome, though we could be surprised.)
- The redesigned Shop By Brand page is underperforming significantly on both mobile and desktop, so we will want to look into this more deeply since it's one of our top ten webpages. There is a YouTube connection to this page, so perhaps the video is slowing down load times or there might be another issue with the re-design. Further discovery is needed.

Please go into the Audience → Overview → Mobile report and provide a screenshot or screenshots that show the following: Between the start and end of the three month period you've chosen, please provide percentage charts (pie charts) that show what percentage of All Users came from mobile, desktop, and tablet devices and what percentage of Paid Traffic Users came from mobile, desktop, and tablet devices.

Top half of report
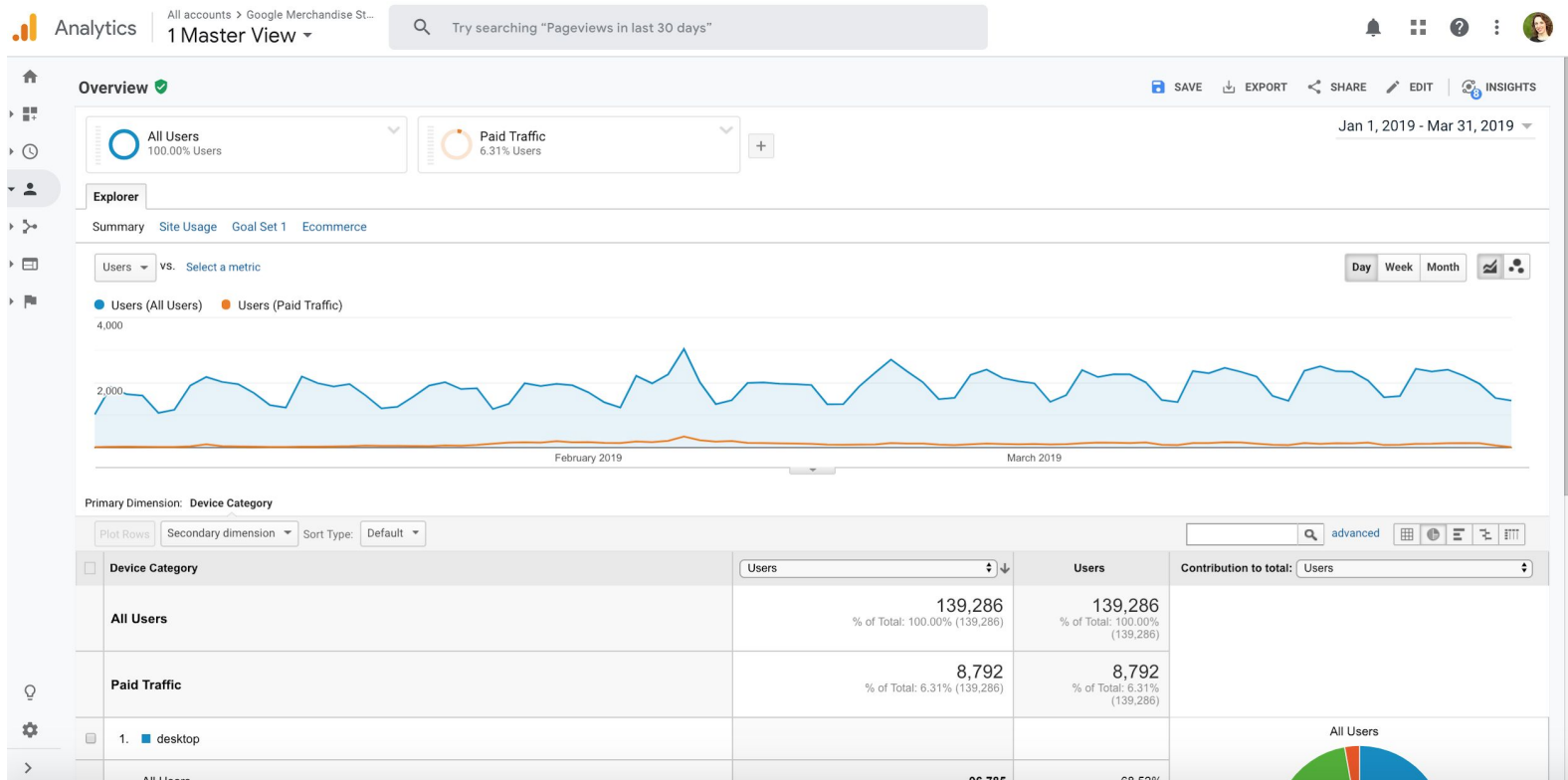
Percentage Display: Audience (2 of 2)

Bottom half of report
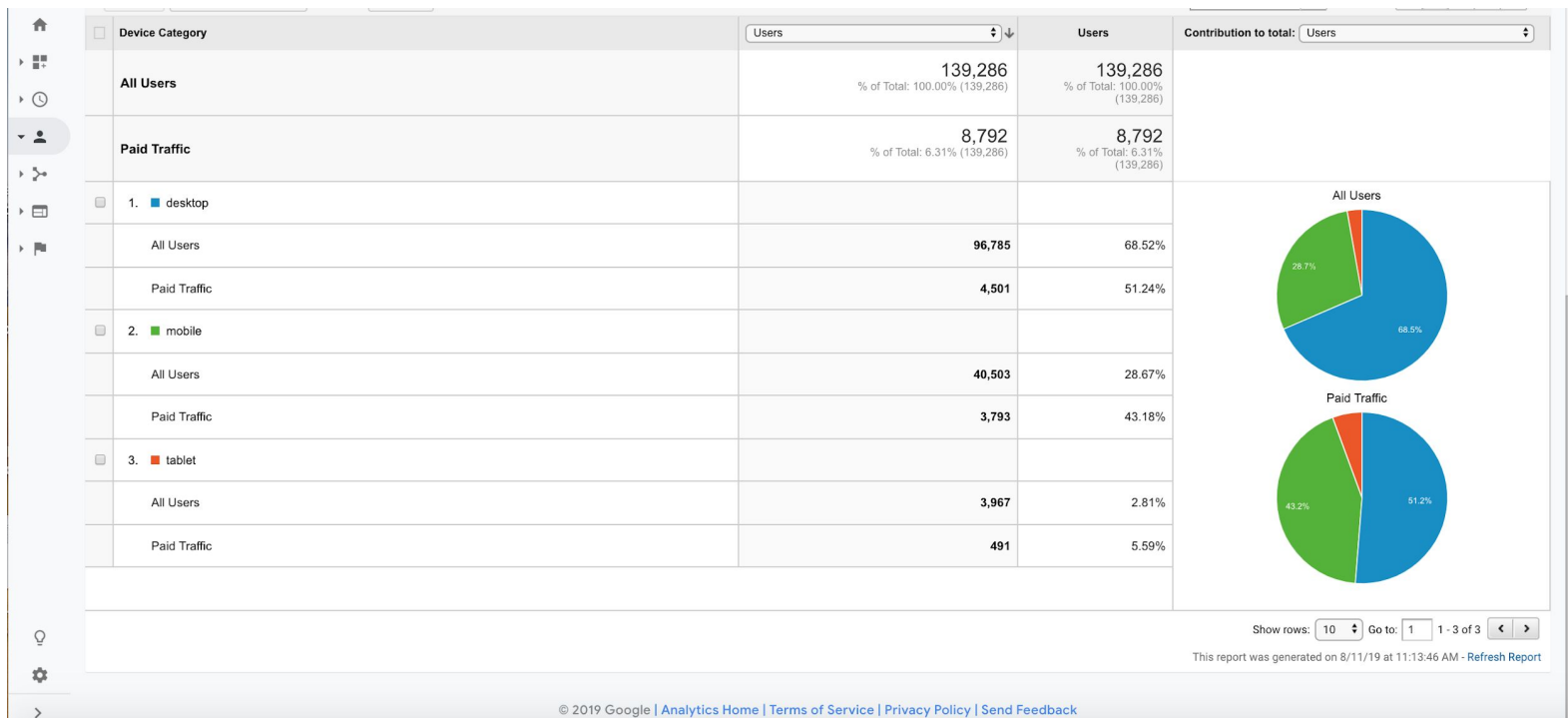
While paid traffic is only 6.3% of our total, it is worth noting that the percentages of paid traffic from mobile and tablet make up a greater percentage of paid traffic (more than half) compared to that of non-paid traffic.

While the pie charts are interesting, a comparison display would probably also accurately showcase these findings.

Segmentation

Segmentation

For this section of the project, I decided to analyze the three different audience segments in relation to purchase behavior. All three reports have one unifying feature: they all examine an audience segment in the context of users who made a purchase, which is pre-defined in the demo account as Purchase Completed (Goal 1). Since we are analyzing a merchandise store, I thought it would be helpful to focus this section on revenue.

The following pages include audience segments for technology (desktop vs. mobile), geography (US customers vs. international customers), and user behaviors (number of sessions it took a user to make a purchase).

Audience Segment: Characteristic (Technology)
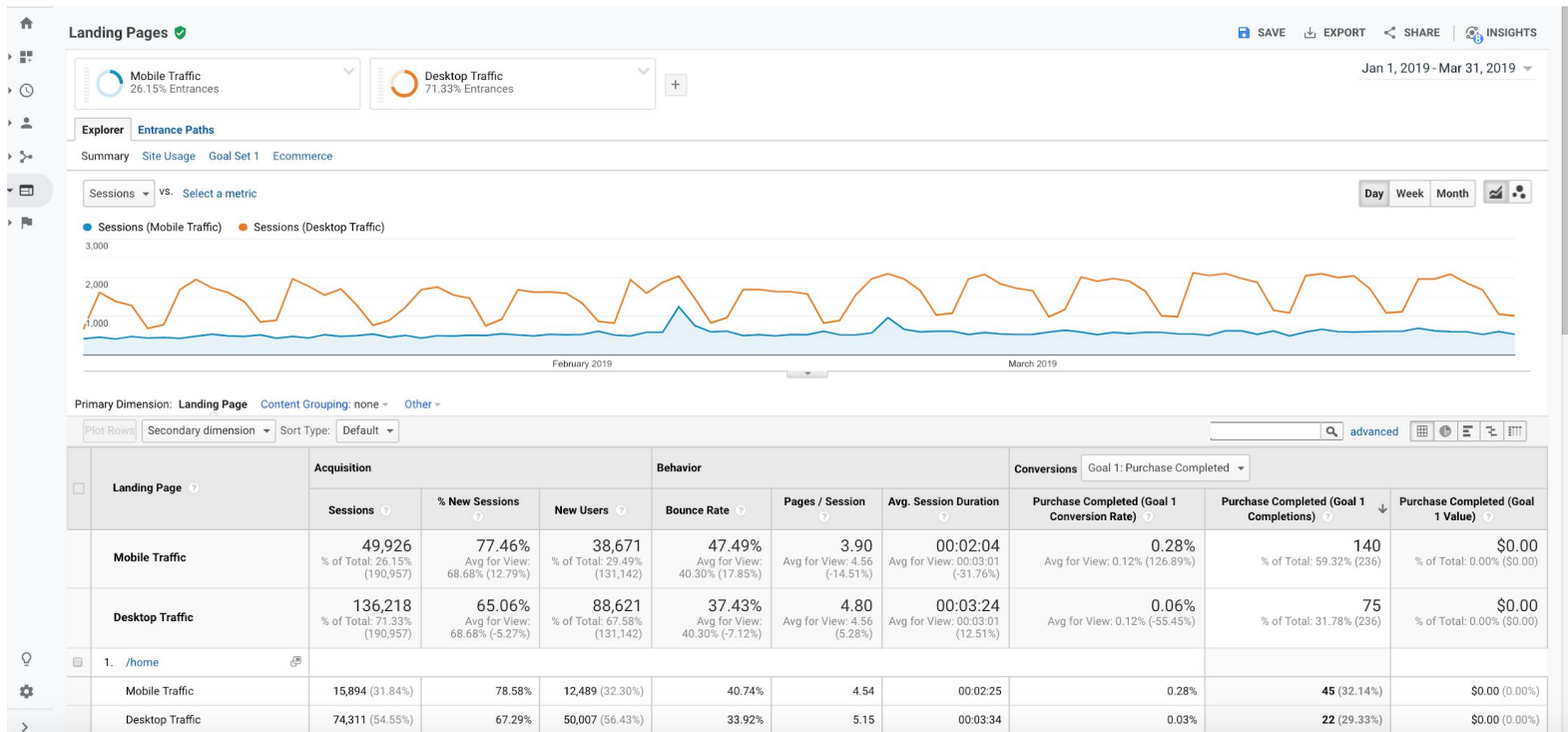
This report for the audience segment of technology shows the different audience segments for desktop and mobile users. A segment for desktop traffic and a segment for mobile traffic were applied so that we can compare the two.

The findings are actually quite surprising. While desktop traffic accounts for more than 70% of the overall traffic, compared to mobile, far fewer desktop users made a purchase. This report shows that mobile accounts for 59% of the overall purchases for this time period while desktop accounts for roughly 32%. The other 9% is not accounted for, so additional analysis could include adding a filter for tablet. We should also consider additional paid ads that target mobile traffic and see if there is a problem with the checkout process for desktop users.

# Audience Segment: Geography (US vs International Traffic)
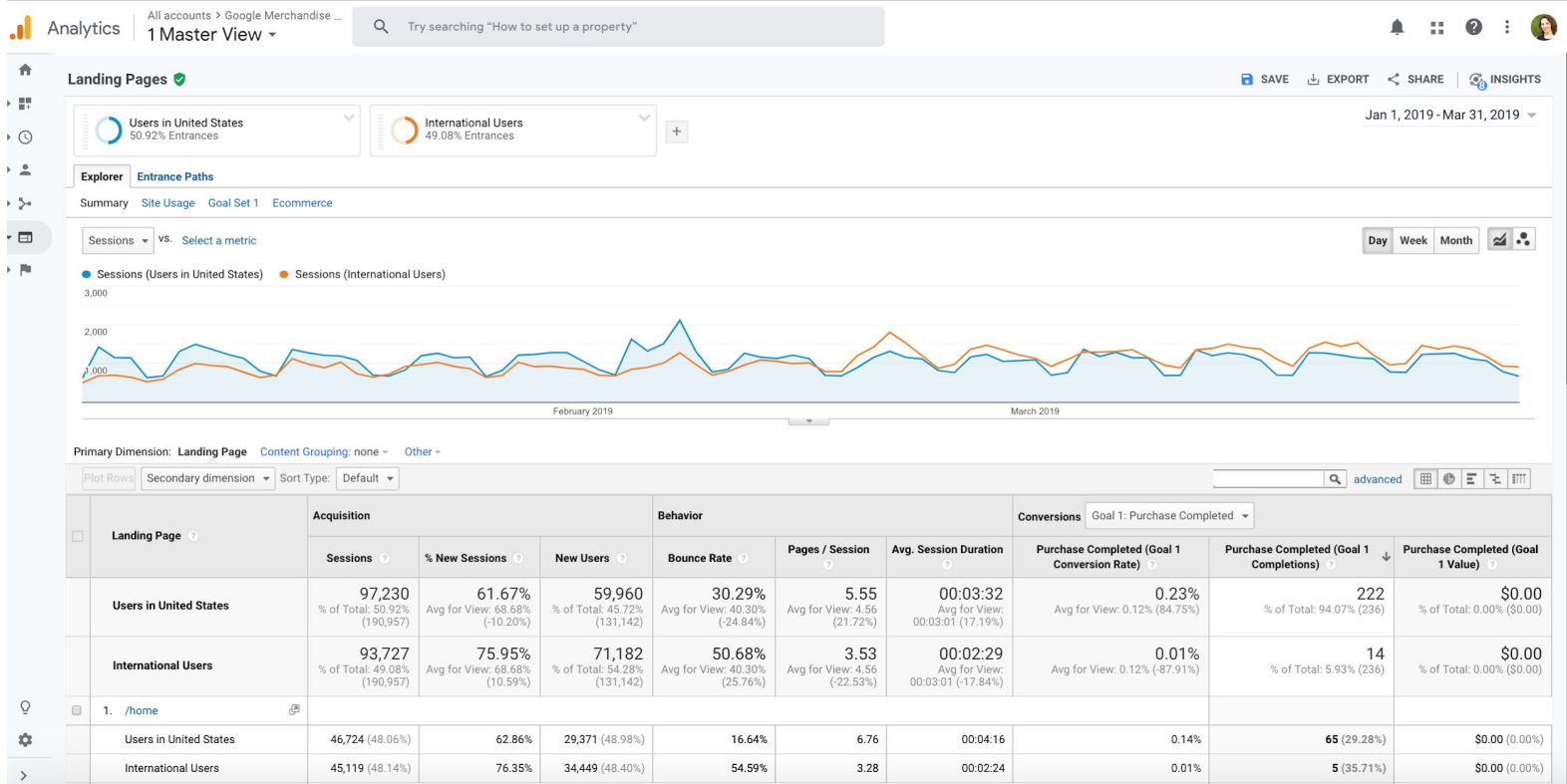
This report segments users in the US versus users outside the US.

Once the data is segmented, we can see that 94% of purchases in the Google Merchandise store come from US users, even though international traffic exceeds US traffic towards the end of this time period.

Since we are receiving a fair amount of international traffic, it might be worthwhile to research if the checkout process is problematic for users in countries outside of the US.

Audience Segment: User Behavior (Number of Sessions When Purchase is Made)
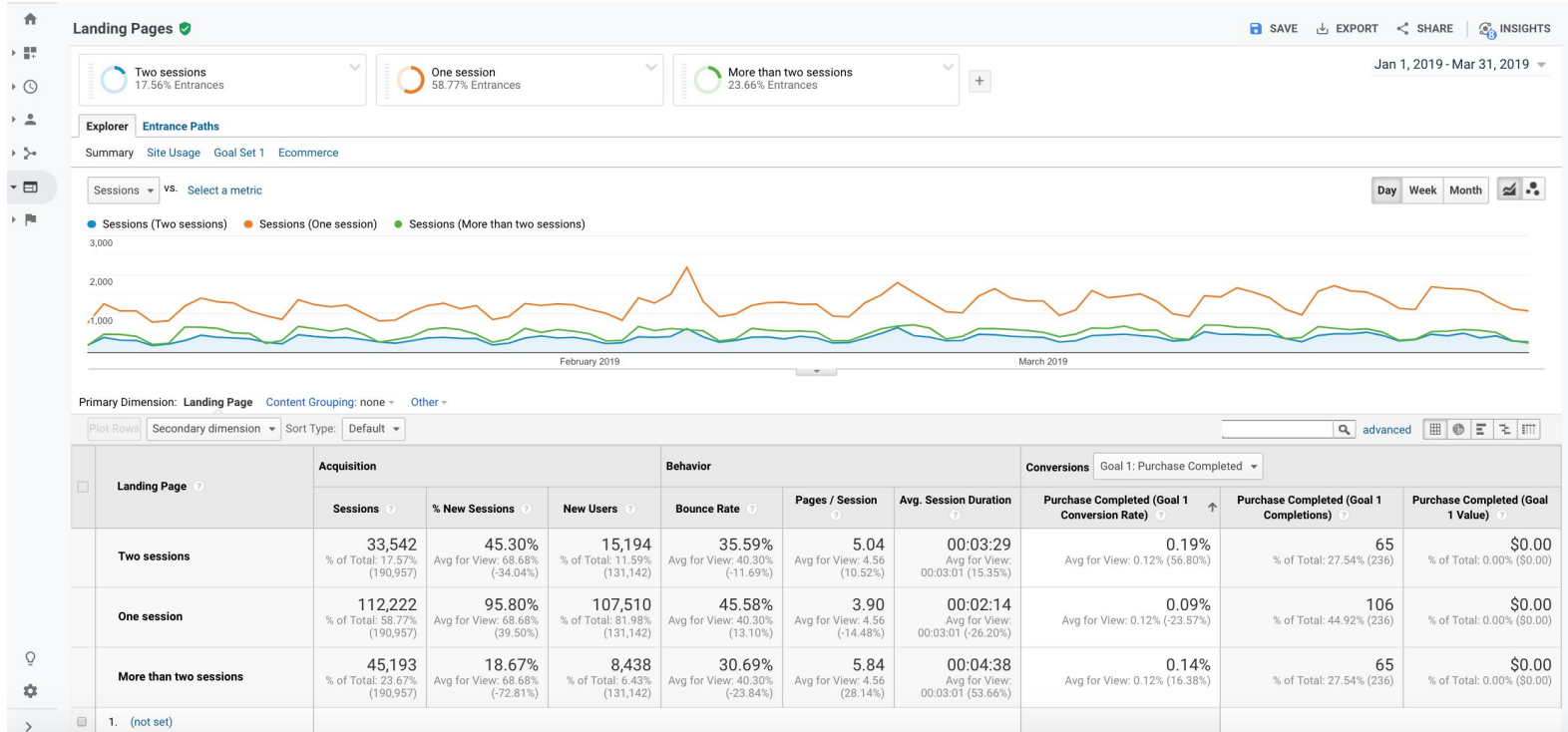
This report segments users by the number of sessions so that we can see how many sessions it takes for a user to make a purchase. This can be helpful to see if we need to do additional retargeting, so the segments include one session, two sessions, and more than two sessions.

The report shows that 45% of purchases come from users of a single session, which means we can consider concentrating our spend on paid mobile advertising since the mobile sector is performing well in terms of purchases for this time period.

Part Two: Connecting a Data Source and Creating a Custom Dashboard

1. Merchandise Store Draft Dashboard: Built on the Master View

2. Merchandise Store Draft Dashboard: Time Series chart

Unique Pageviews, Sessions and Users

Aug 1, 2018 - Sep 5, 2018 ▾

Google Merchandise Store
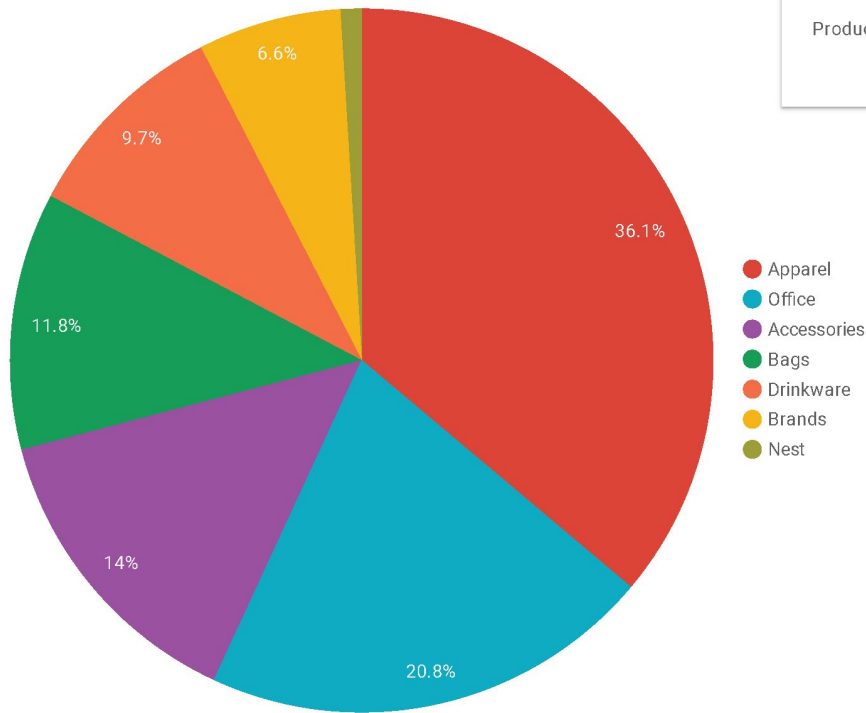1 Master View ▾
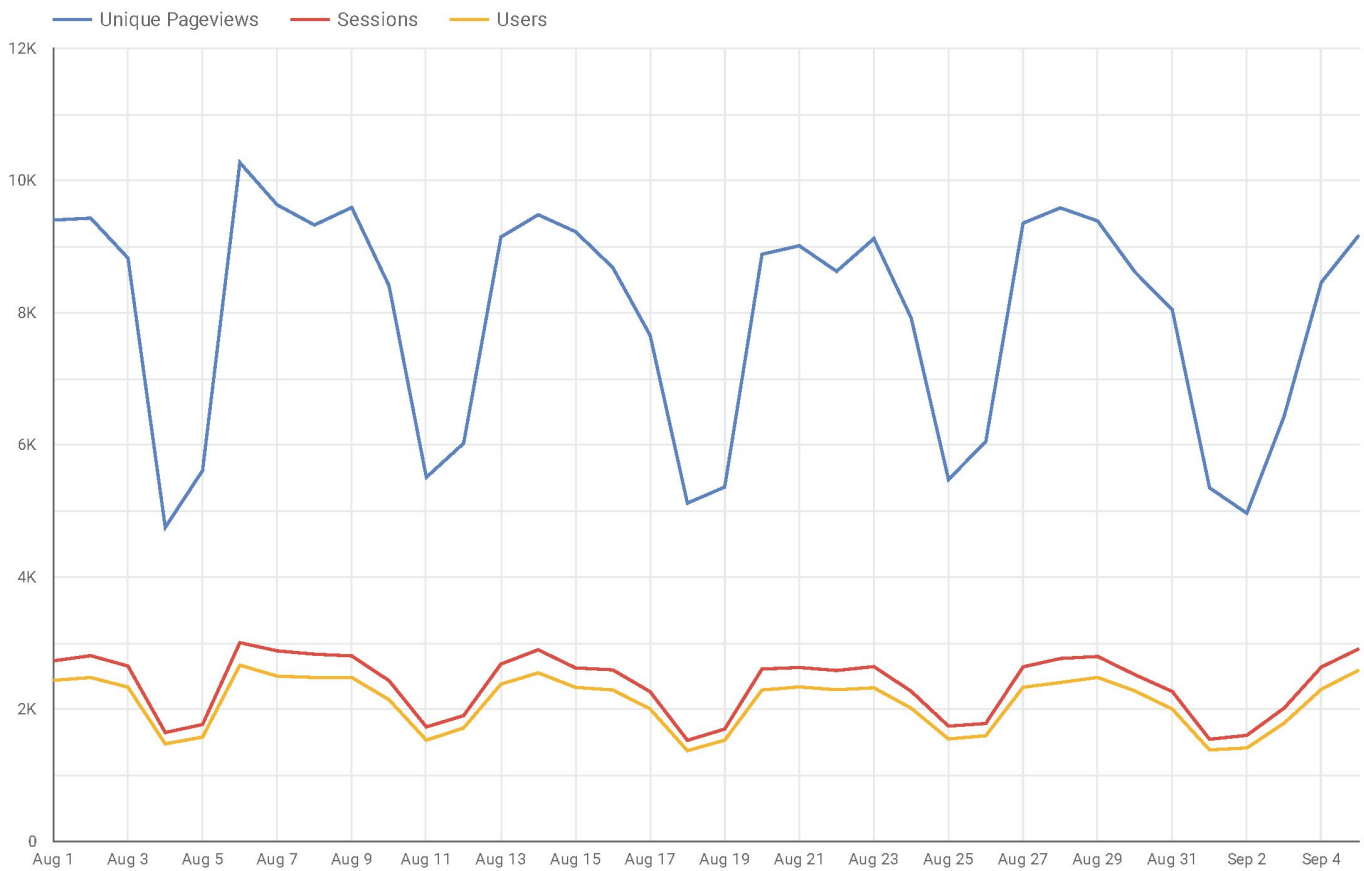
3. Merchandise Store Draft Dashboard: Pie chart, 7 slices

Revenue by Product Category

Aug 1, 2018 - Sep 5, 2018 ▾

Product Categories (Previous Content Group): … (7) ▾
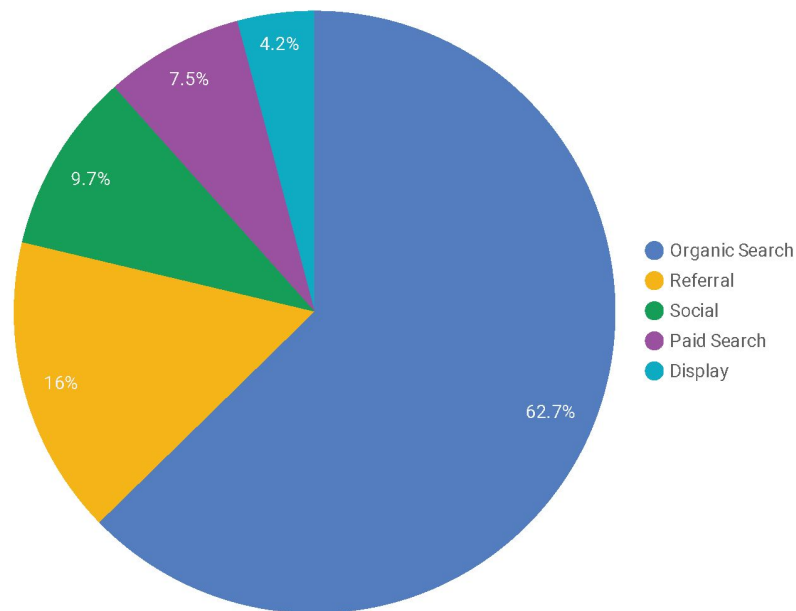
Google Merchandise Store
1 Master View ▾

- 36.1% Apparel
- 20.8% Office
- 14% Accessories
- 11.8% Bags
- 9.7% Drinkware
- 6.6% Brands
- Nest

Revenue
$117,618.58

4. Merchandise Store Draft Dashboard: Pie chart, 5 slices

Sources for New Users

Google Merchandise Store 1 Master View ▾	Default Channel Grouping: ... (5) ▾	Aug 1, 2018 - Sep 5, 2018 ▾

- ● Organic Search
- ● Referral
- ● Social
- ● Paid Search
- ● Display

4.2%
7.5%
9.7%
16%
62.7%

5. Merchandise Store Draft Dashboard: Scorecard

Average Order Value

Google Merchandise Store
1 Master View

Avg. Order Value
$101.32

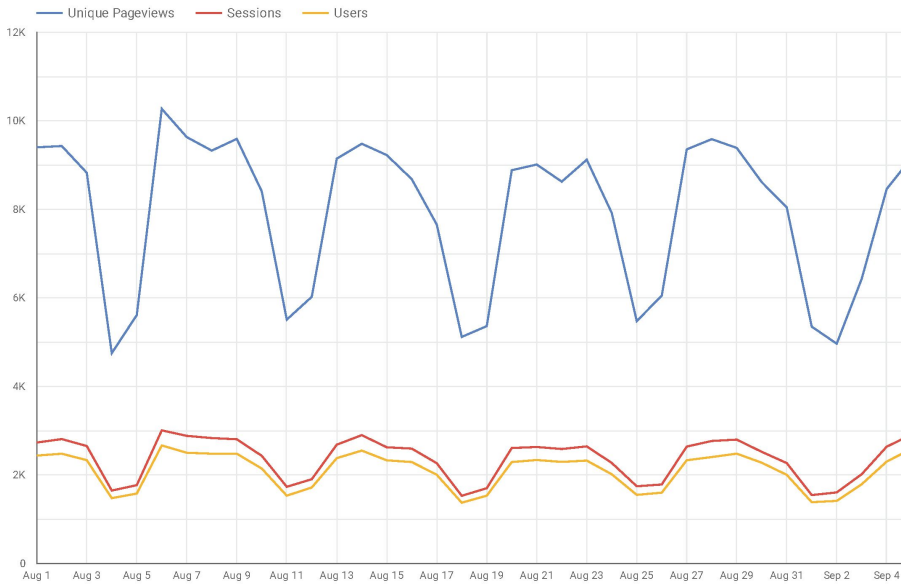Aug 1, 2018 - Sep 5, 2018

Unique Pageviews, Sessions and Users

Aug 1, 2018 - Sep 5, 2018 ▼

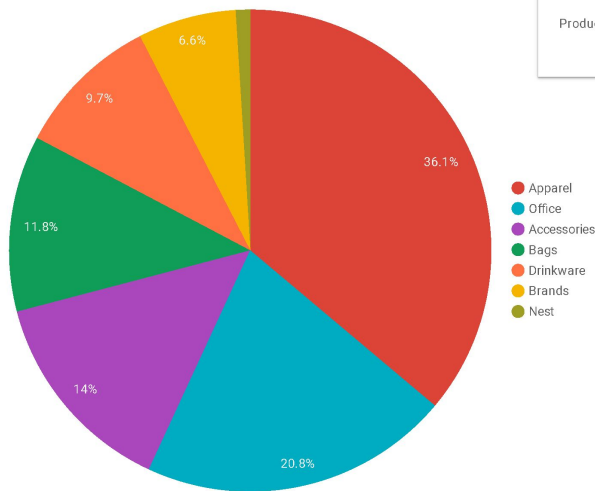Google Merchandise Store
1 Master View

Revenue by Product Category

Aug 1, 2018 - Sep 5, 2018 ▼

Product Categories (Previous Content Group): … (7) ▼
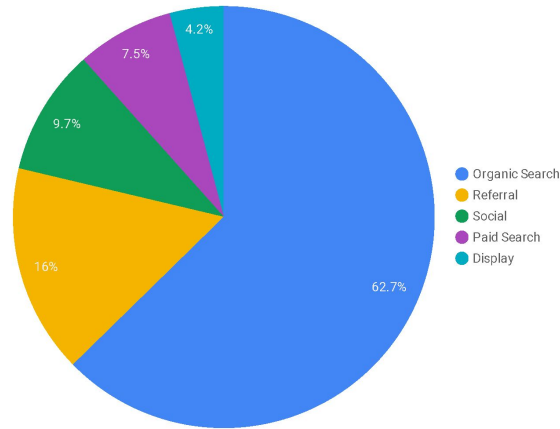
Google Merchandise Store
1 Master View

- Apparel
- Office
- Accessories
- Bags
- Drinkware
- Brands
- Nest

36.1%
20.8%
14%
11.8%
9.7%
6.6%

Revenue
$117,618.58

Sources for New Users

| Google Merchandise Store 1 Master View ▾ | Default Channel Grouping: ... (5) ▾ | Aug 1, 2018 - Sep 5, 2018 ▾ |

- ● Organic Search
- ● Referral
- ● Social
- ● Paid Search
- ● Display

4.2%
7.5%
9.7%
16%
62.7%

Average Order Value

| Default Data Click to select your data ▾ | Avg. Order Value $101.32 | Aug 1, 2018 - Sep 5, 2018 ▾ |

Marketing Analytics Nanodegree Program

Google Analytics