

# Google Analytics



## Project 05: Advanced Displays, Segmentation & Filtering

Author: Nélio Macombo



# Part One: Primary Views & Filters

---

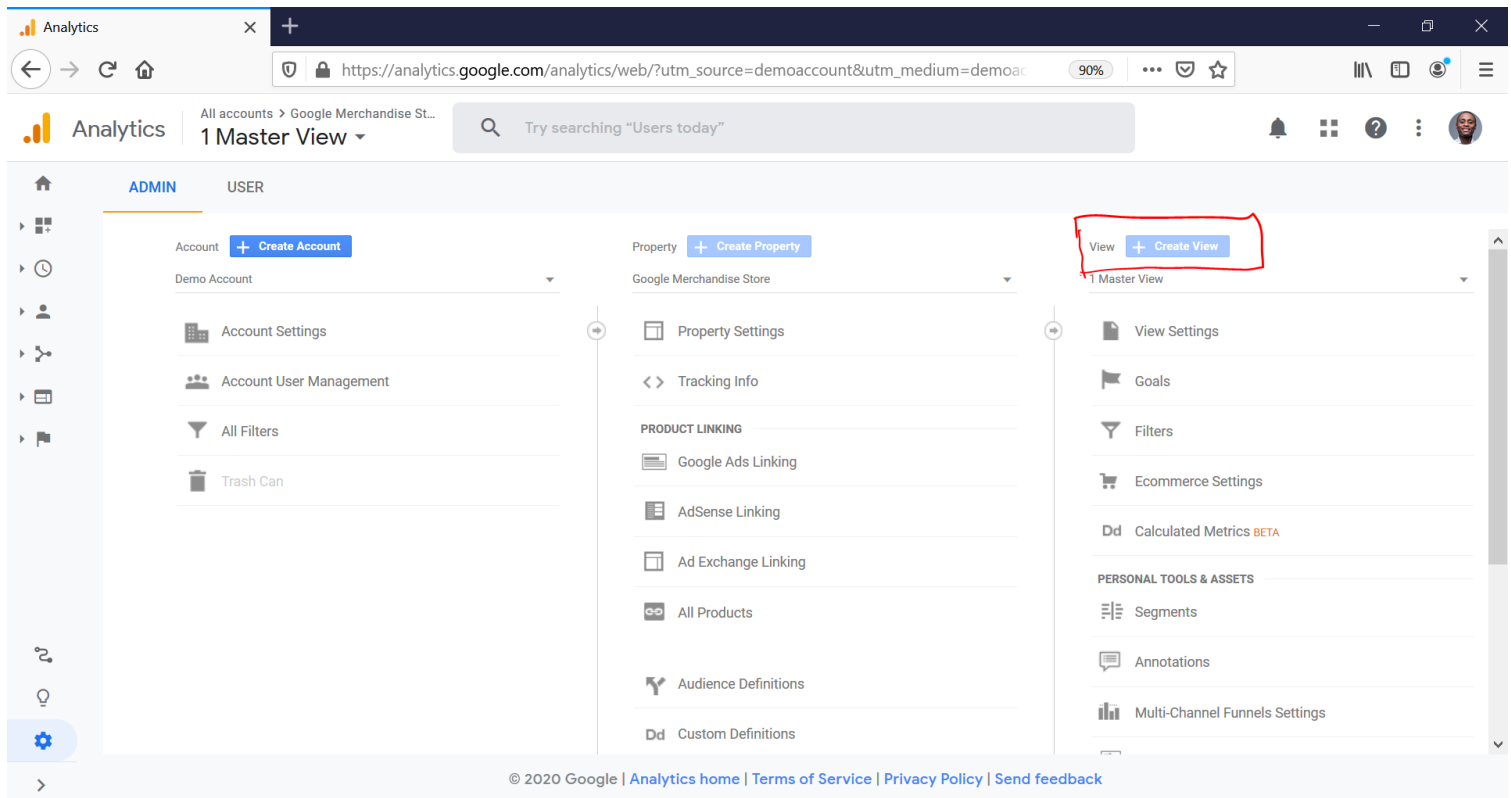
# 1. Best Practice Check:

## Three Primary Views

I used the [Google Merchandise Store Demo](#) account to execute this Project, however, using this environment I don't have accesses or permissions to create the views, but the steps to create the views consists on the following steps:

1. Go to Admin
2. Click the [+ Create View] button next to View - see screen shot below, notice the button is greyed out here because I can't create view in the demo account.

Find below the steps to create views on Google Analytics that confirms the statement above:



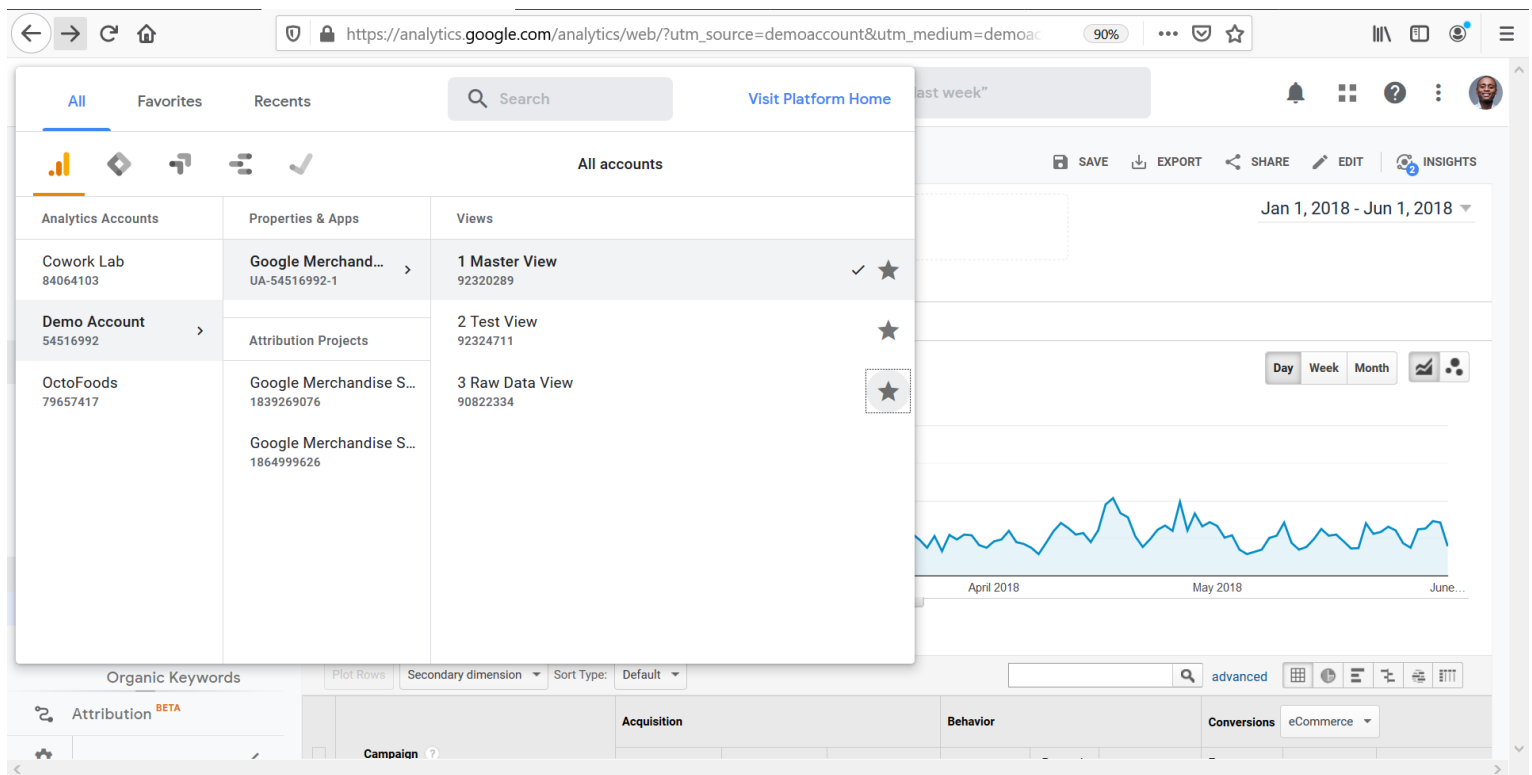
# 1. Best Practice Check:

## Three Primary Views

Note:

The Industry best practice recommends to have three Primary views per property with three fundamental functionalities:

- 1. Raw Data View** – this is the base line view with no filter applied;
- 2. Master View** – this is the live production view and has filters applied;
- 3. Test View** – this is the test view prior work is rolled out to Master View.



## 2. Best Practice Check:

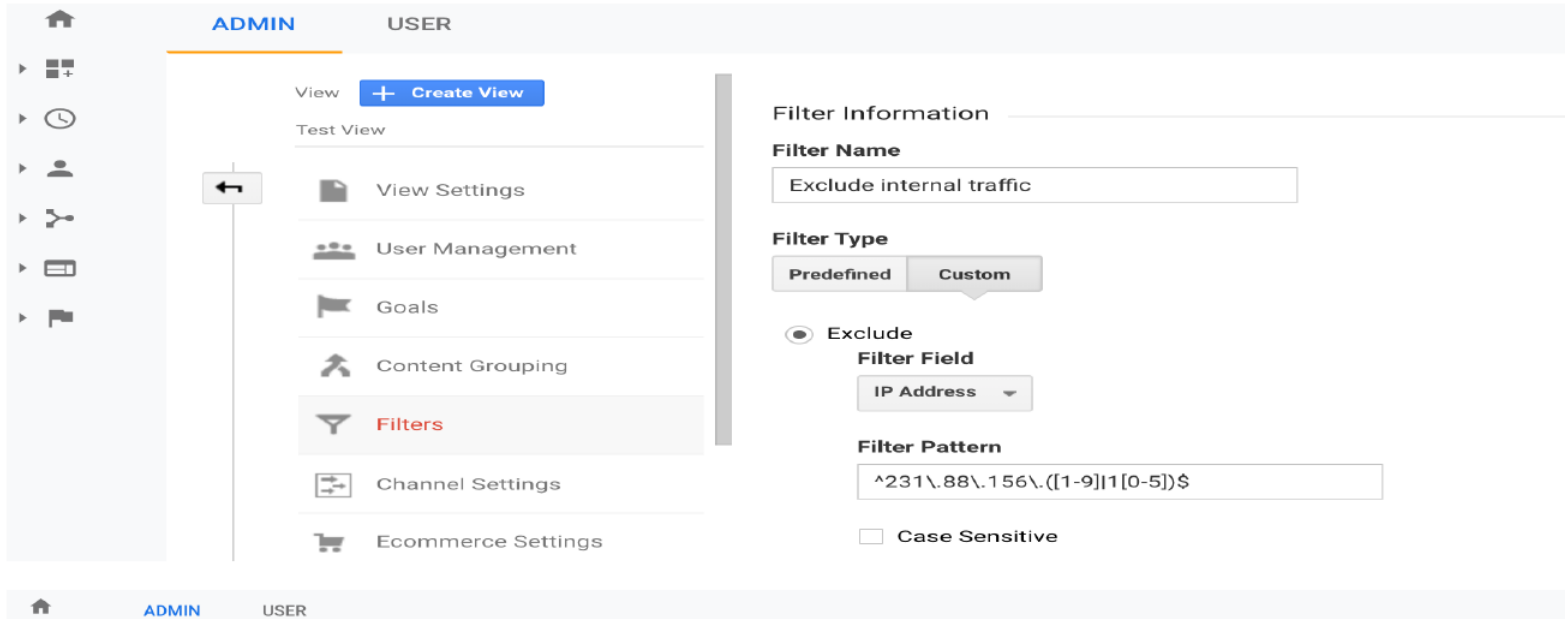
### Filtering Internal Traffic

The Google Merchandise Store Demo Account does not already have this filter created, and I don't have access to create this filter, however the steps to create it when we have access are described below with images that are illustrative :

On Admin pane, under View, Select Test View.

- Click on [Filter], then [Add Filter] red button
- In the Add Filter to View form, select "Create new Filter"
- Enter a filter name such as " Exclude internal traffic"
- Click [Custom] Under Filter Type
- In the Filter Field under the [Exclude] radio button, click [Select field] to search for IP address and select it
- In the Filter Pattern field, enter the internal IP address. If there are a range of IP addresses, enter an regular expression like `^231\.88\.156\.([1-9]| 1[0-5])$` which will filter out IP range from [231.88.156.1] thru [231.88.156.15]
- Click [Save] Button
- Leave this filter in Test View (like 7-10 days) to ensure it is working as expected, before copy it to Master View.

## 2. Best Practice Check: Filtering Internal Traffic



**ADMIN** **USER**

View [+ Create View](#)

Test View

- View Settings
- User Management
- Goals
- Content Grouping
- Filters**
- Channel Settings
- Ecommerce Settings

**Filter Information**

**Filter Name**  
Exclude internal traffic

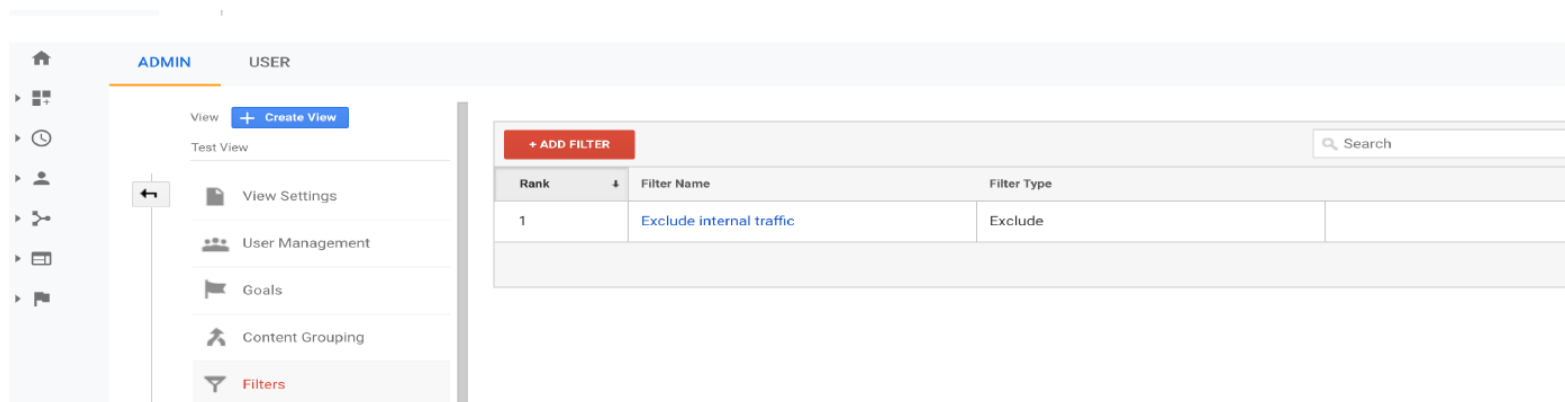
**Filter Type**  
☐ Predefined ☒ Custom

☒ Exclude

**Filter Field**  
IP Address

**Filter Pattern**  
^231\.88\.156\.([1-9])1[0-5])\$

☐ Case Sensitive



**ADMIN** **USER**

View [+ Create View](#)

Test View

- View Settings
- User Management
- Goals
- Content Grouping
- Filters**

[+ ADD FILTER](#)

Rank	Filter Name	Filter Type
1	<a href="#">Exclude internal traffic</a>	Exclude



# Part Two: Data Exploration

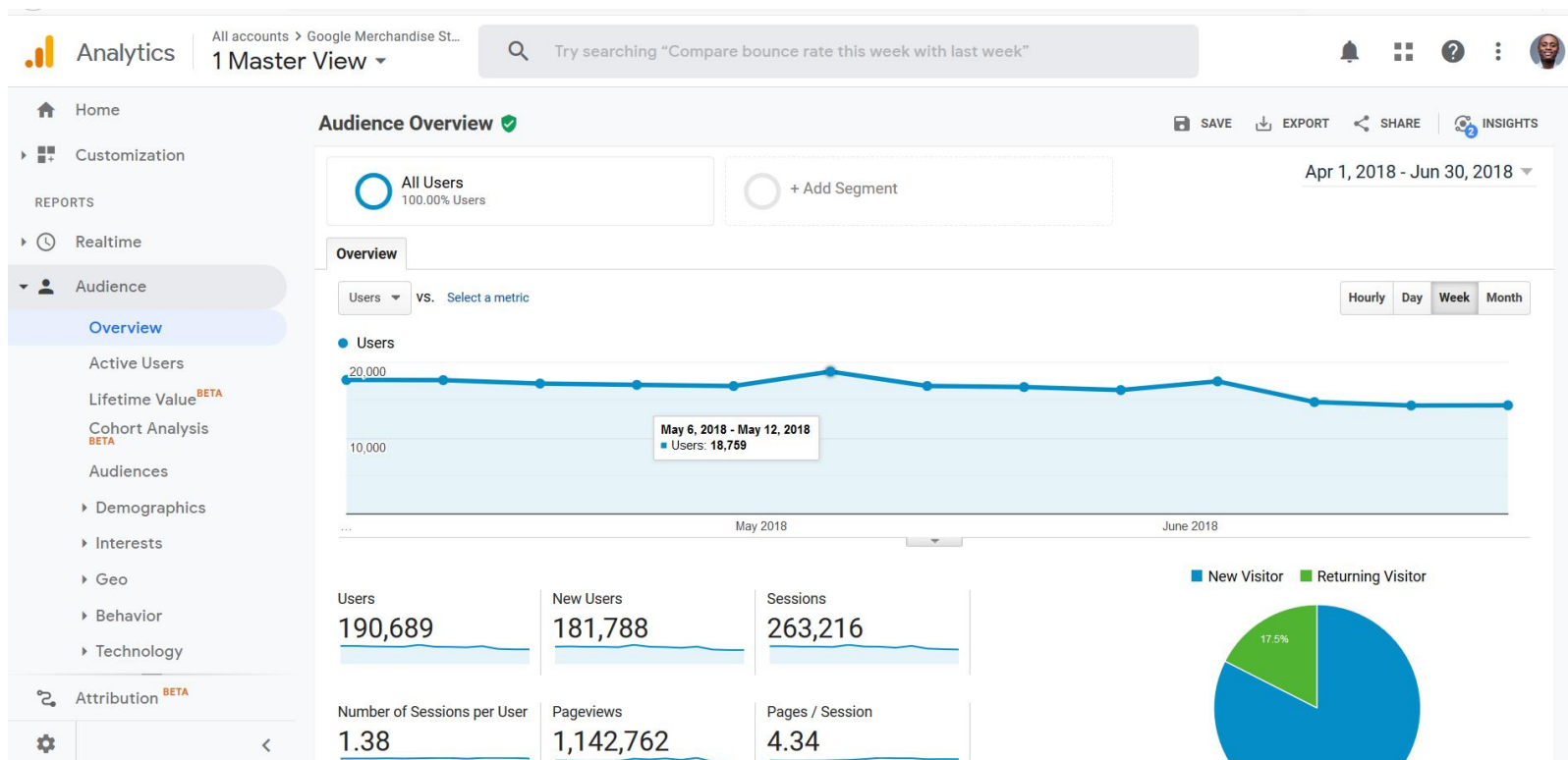
---

# Standard Display - Audience

From the Audience Overview Report, I selected the following time period of three month: from 01<sup>st</sup> April until 30<sup>th</sup> June - 2018 to explore the following points.

## 2.1. Which week had the most visitors ?

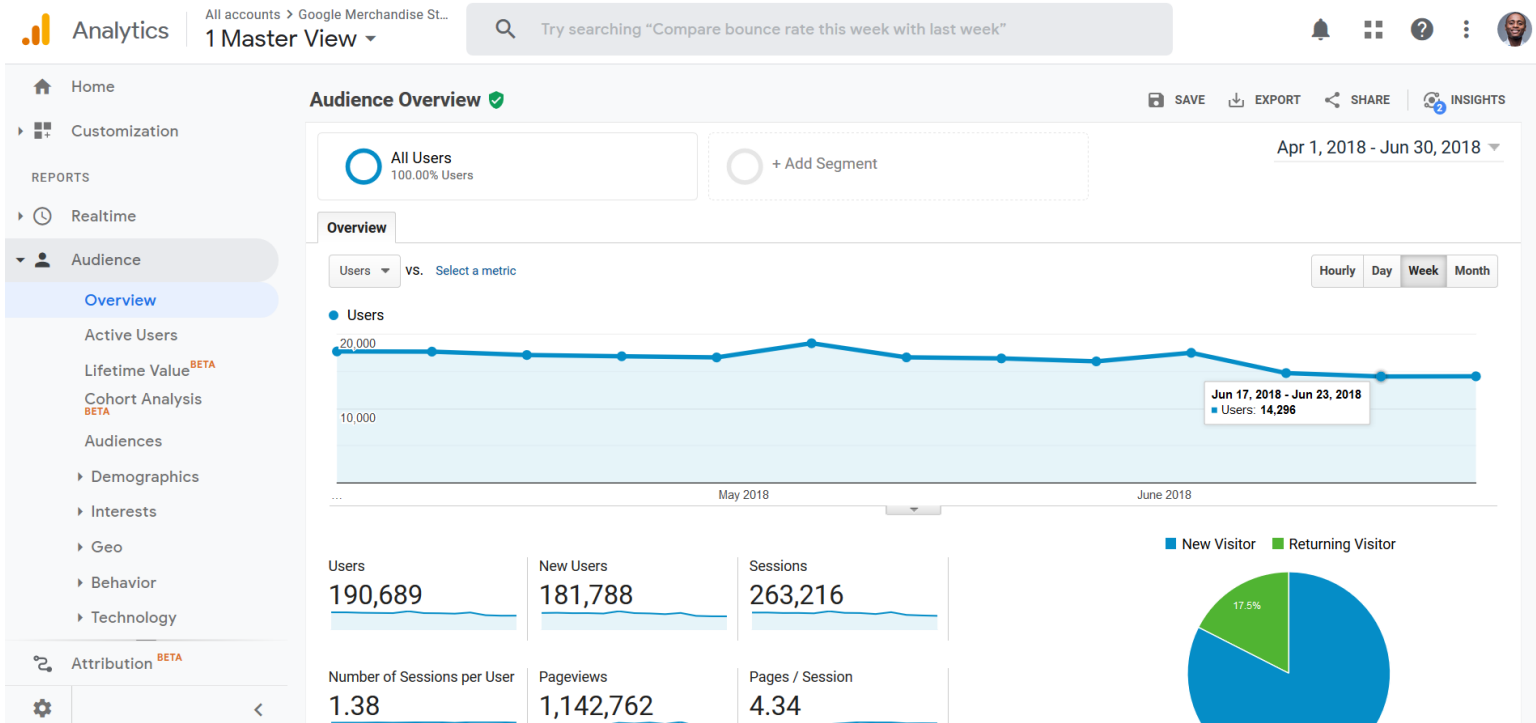
The week that had most visitors was the week of May, from 06<sup>th</sup> – 12<sup>th</sup> with 18.759 visitors.





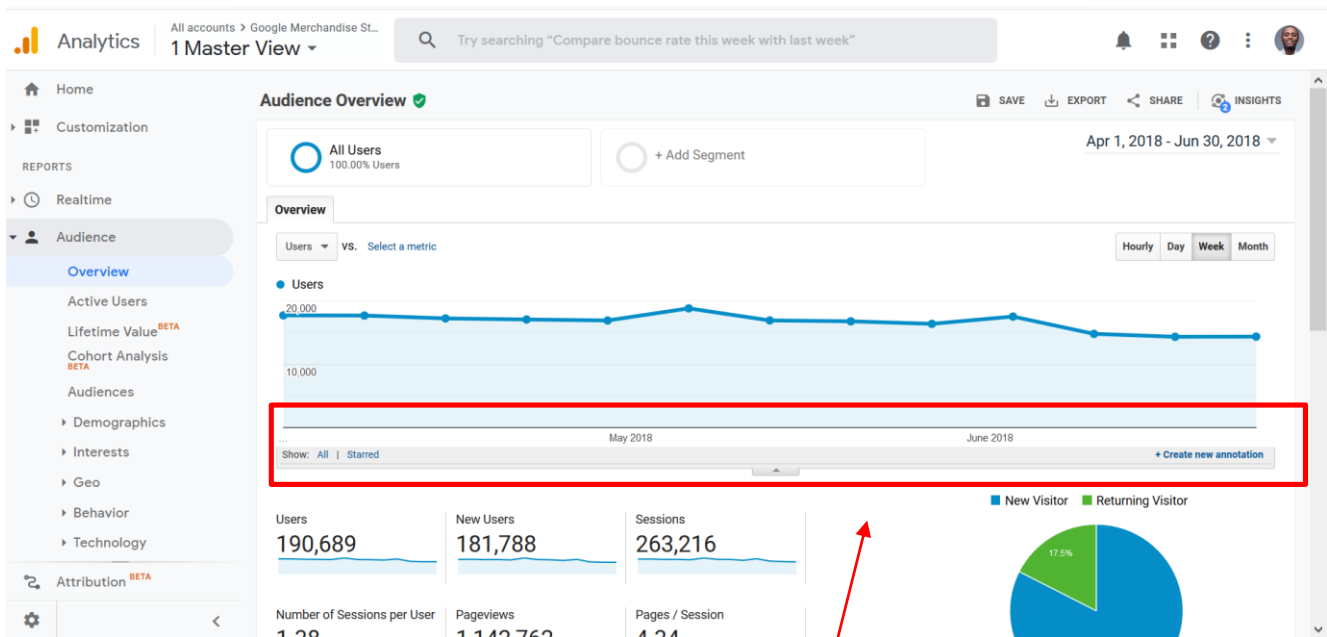
# Standard Display - Audience

**2.2. Which week had the fewest visitors to your site?**  
The week that had fewest visitors was the week of June, from 17<sup>th</sup> – 23<sup>rd</sup> with 14,296 visitors.



# Standard Display - Audience

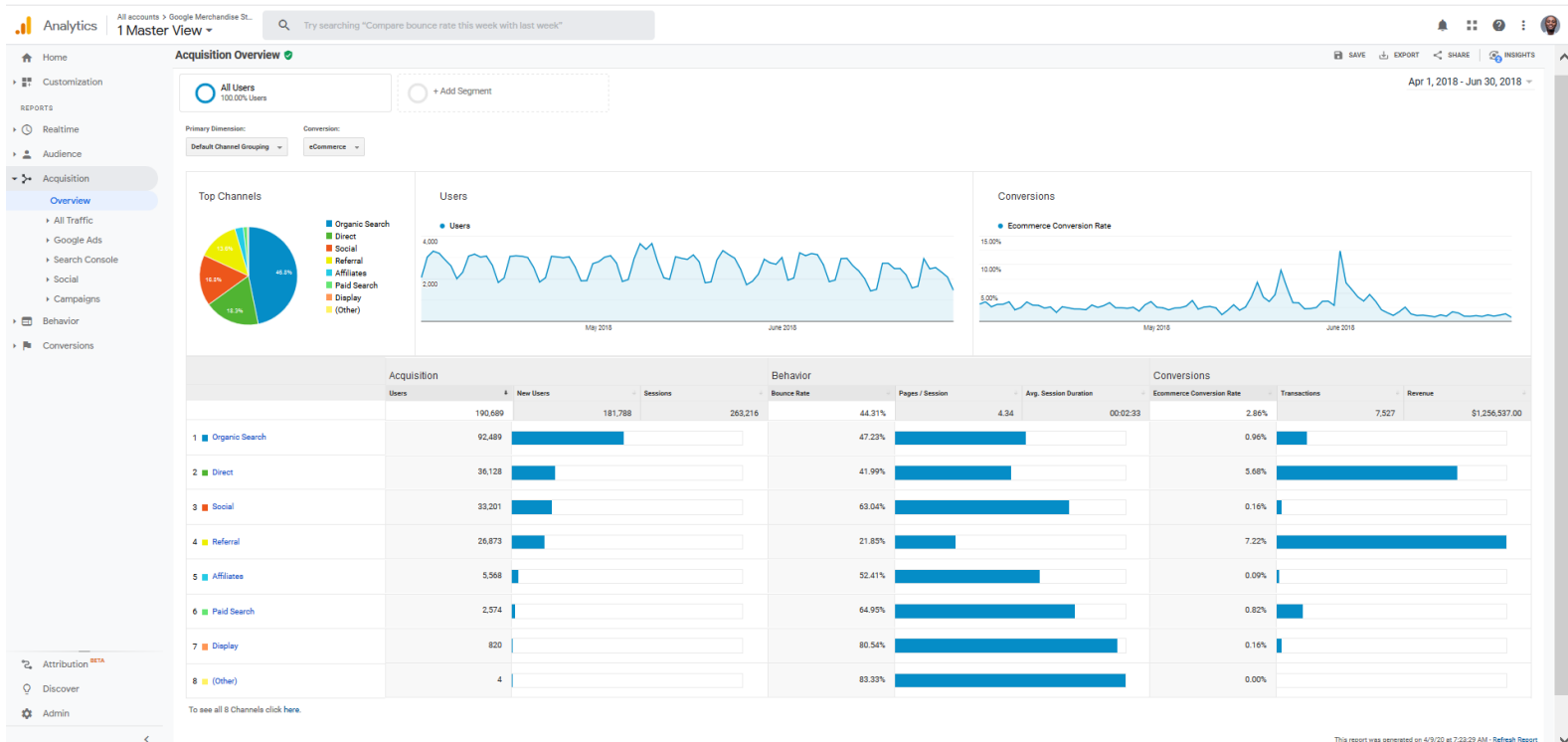
2.3. Do you have any ideas why certain trends are associated with these specific weeks?



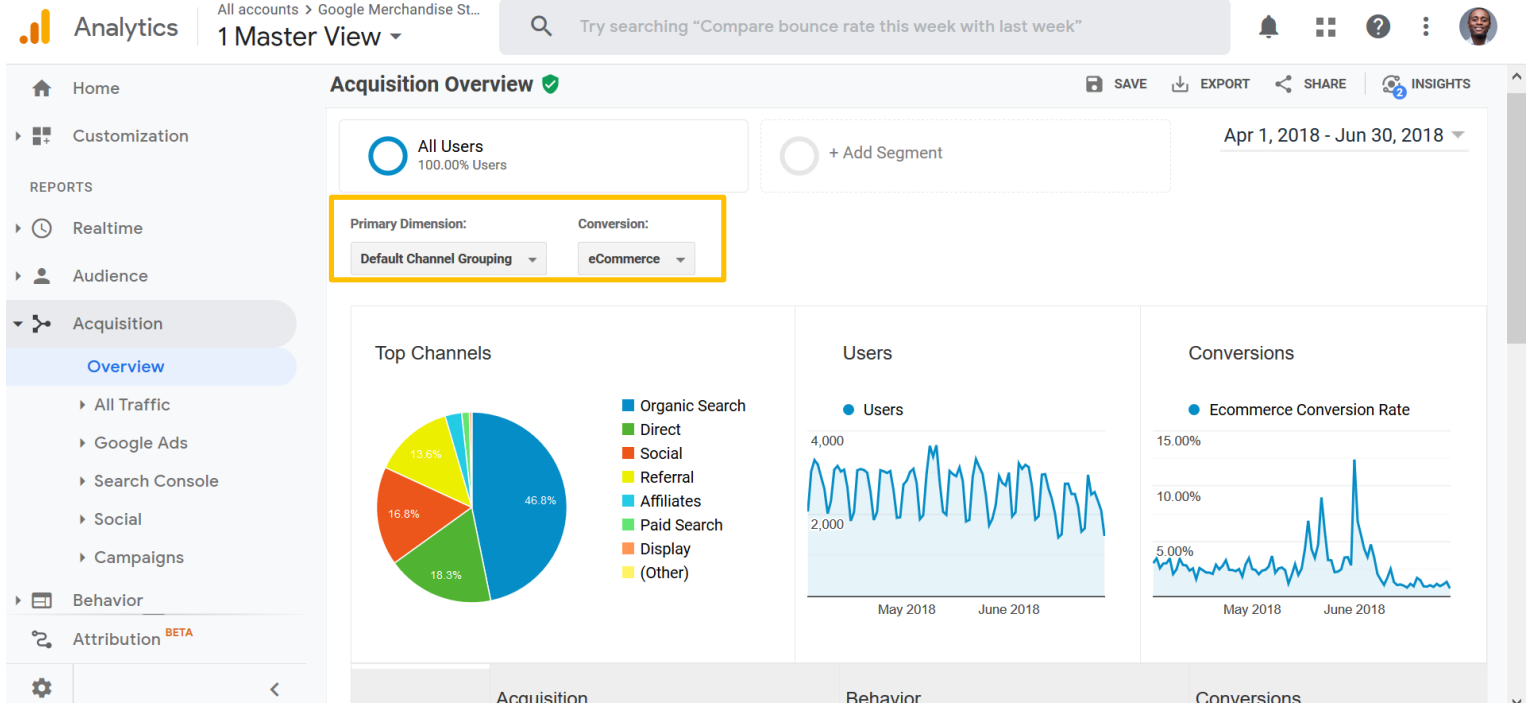
When analyzing the data I am not be certain why the number of visitors peaked in the week of May from 06<sup>th</sup> – 12<sup>th</sup>, and then dropped to the lowest number of visitors in the week of 17<sup>th</sup> – 23<sup>rd</sup> June by just looking at this Audience Overview report, also I don't see any comment or annotation that can help us have a clear visibility about what caused these events.

# Standard Display: Acquisition

During the three month period that I you've selected, excluding *Direct* and (*Other*), which channels had the highest and lowest bounce rates and the highest and lowest eCommerce conversion rates? What do these metrics mean, based on your experience?



# Standard Display: Acquisition



Analytics | All accounts > Google Merchandise St... | 1 Master View

Try searching "Compare bounce rate this week with last week"

	Acquisition			Behavior			Conversions		
	Users	New Users	Sessions	Bounce Rate	Pages / Session	Avg. Session Duration	Ecommerce Conversion Rate	Transactions	Revenue
	190,689	181,788	263,216	44.31%	4.34	00:02:33	2.86%	7,527	\$1,256,53
1 Organic Search	92,489			47.23%			0.96%		
2 Direct	26,128			41.99%			5.68%		
3 Social	33,201			63.04%			0.16%		
4 Referral	26,873			21.85%			7.22%		
5 Affiliates	5,568			52.41%			0.09%		
6 Paid Search	2,574			64.95%			0.82%		
7 Display	820			80.54%			0.16%		
8 (Other)	4			83.33%			0.00%		

# Standard Display: Acquisition

During the three month period that I selected, excluding Direct and (Other), to analyze which channels had the highest and lowest bounce rates and the highest and lowest eCommerce conversion rates, I used the Acquisition Overview Report with Primary Dimension set to Default Channel Grouping and Conversion set to eCommerce (marked by the orange frame and “All Users” segment) . Analyzing the data we can find the answers quickly from the bar charts under Behaviors and Conversions as shown in the screenshot in the previous slide.

Bounce Rate represents the percentage of single-page sessions with no interaction with the page and a 0 second duration. So the lowest bounce rate is the best output, and highest is the low output. The report shows that

- Display channel had the highest Bounce Rate at 80.54%
- Referral channel had the lowest Bounce Rate at 21.85%

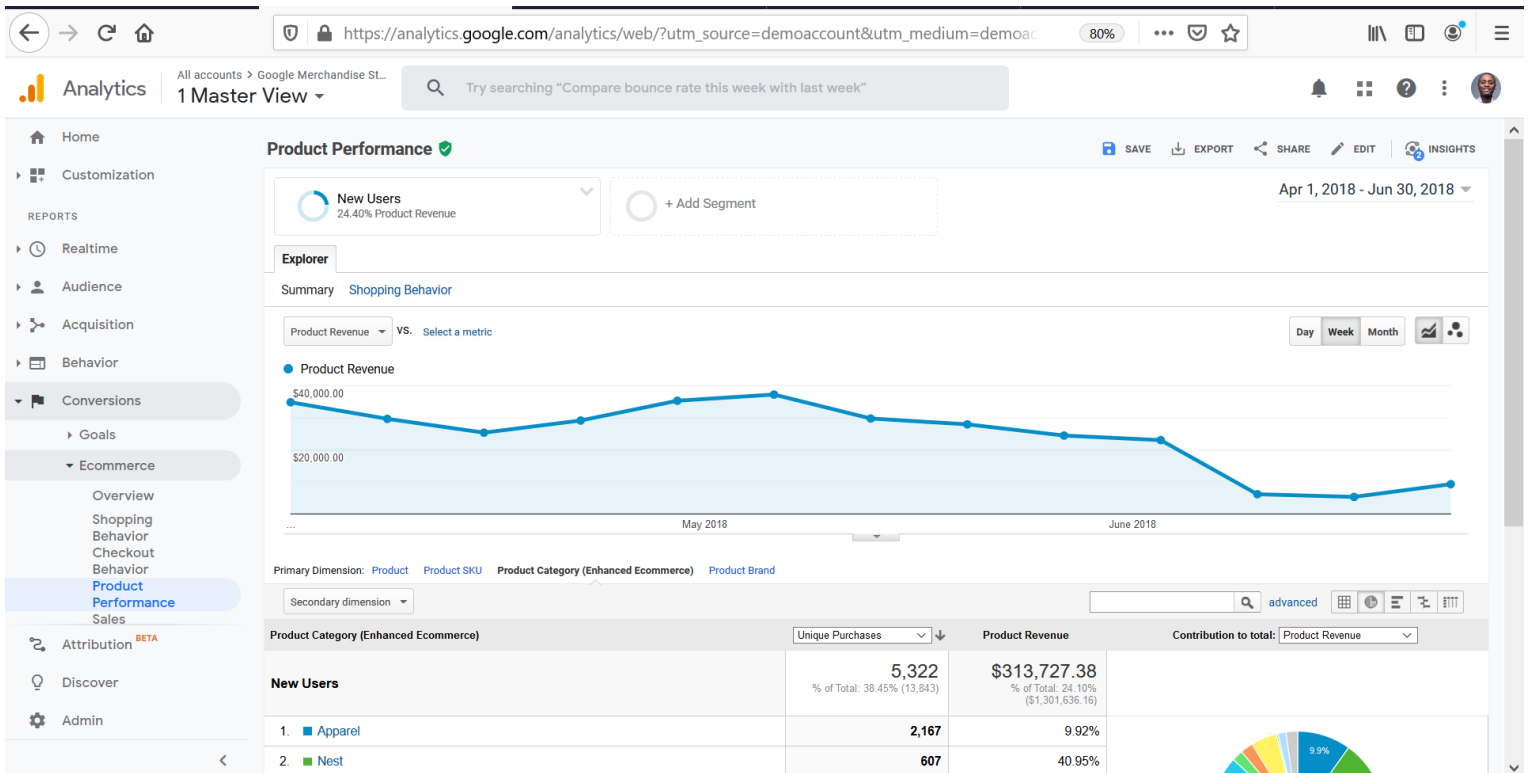
On the other hand, eCommerce Conversion Rate is the percentage of sessions that resulted in an ecommerce transaction. So the higher the rate, the more completed transactions, and vice versa. The report shows that:

- The Referral channel had the highest eCommerce Conversion Rate at 7.22%;
- The Display and Affiliates channels had the lowest eCommerce Conversion Rate at 0.09%;

# Percentage Display: Conversion

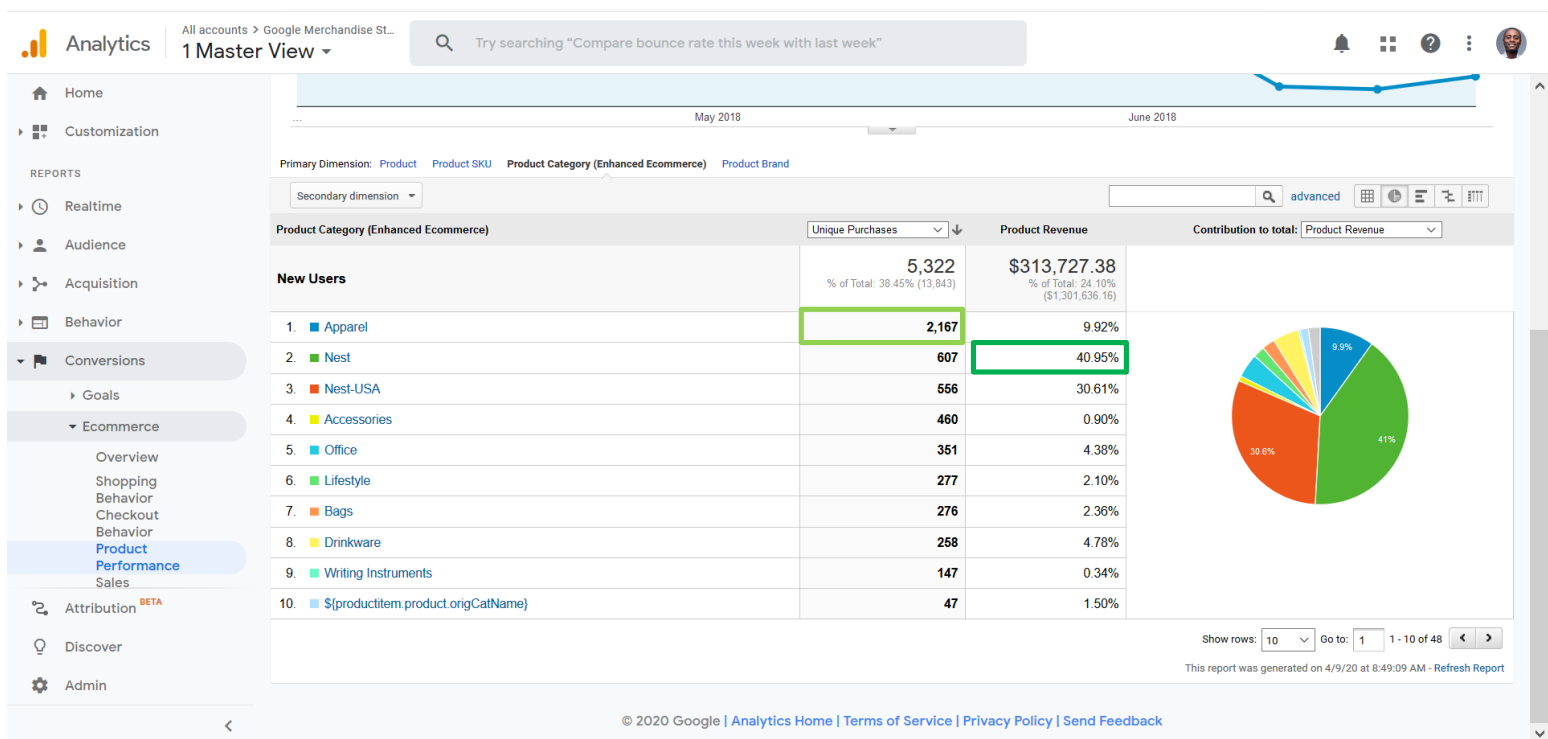
During the three month period you've selected, which Product Category contributed the highest number of unique purchases for New Users and which Product Category was responsible for the largest percentage of revenue for New Users? (Screenshot(s) only; no elaboration required.)

## Conversions Ecommerce/Product Performance Report (01/04/18 – 30/06/18)



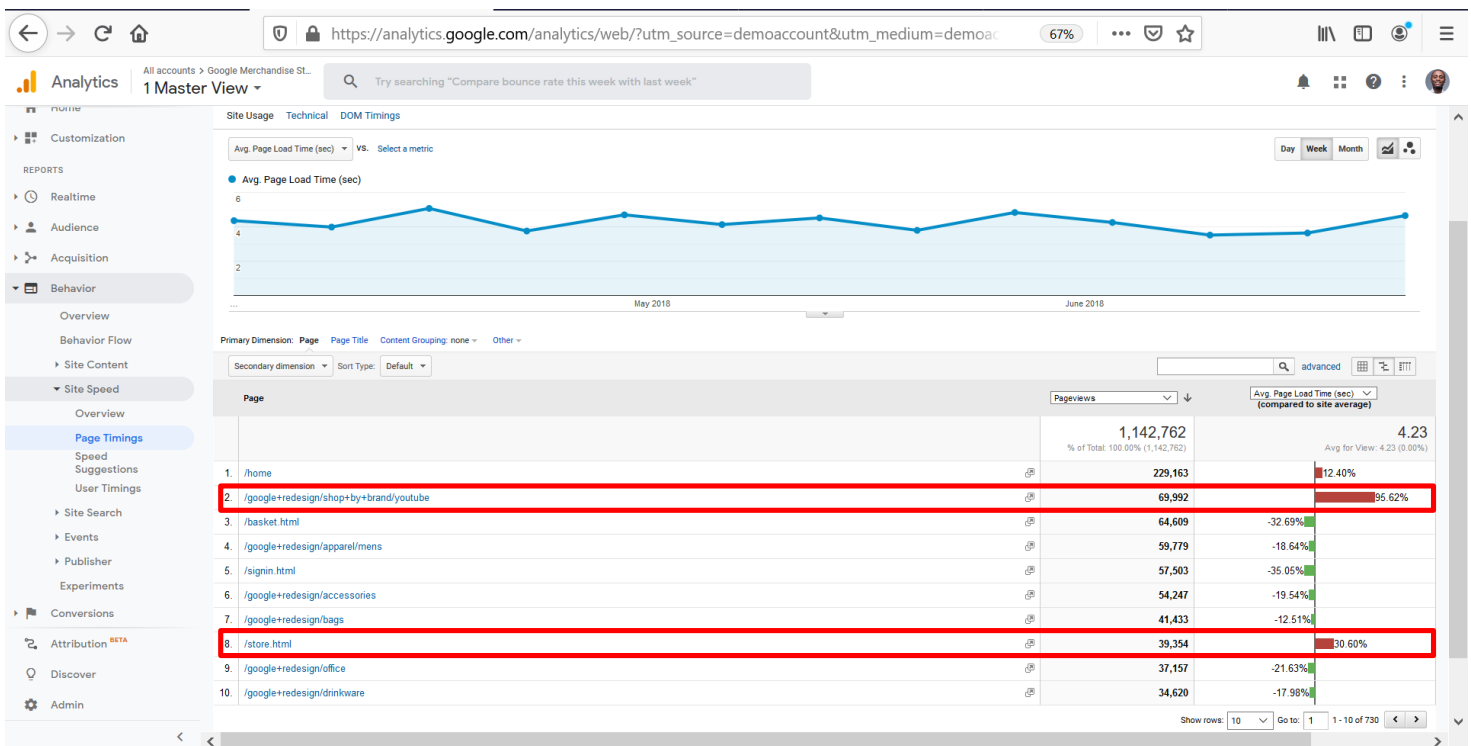
# Percentage Display: Conversion

## Conversions Ecommerce/Product Performance Report (01/04/18 – 30/06/18)



# Comparison Display: Behavior

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.



## Behavior: Site Speed/Page Timings Report (01/04/18 – 30/06/18)

The report shows that

/google+redesign/shop+by+brand/youtube and /store.html performed badly, at 95.62% and 30.60% respectively slower than the site average.

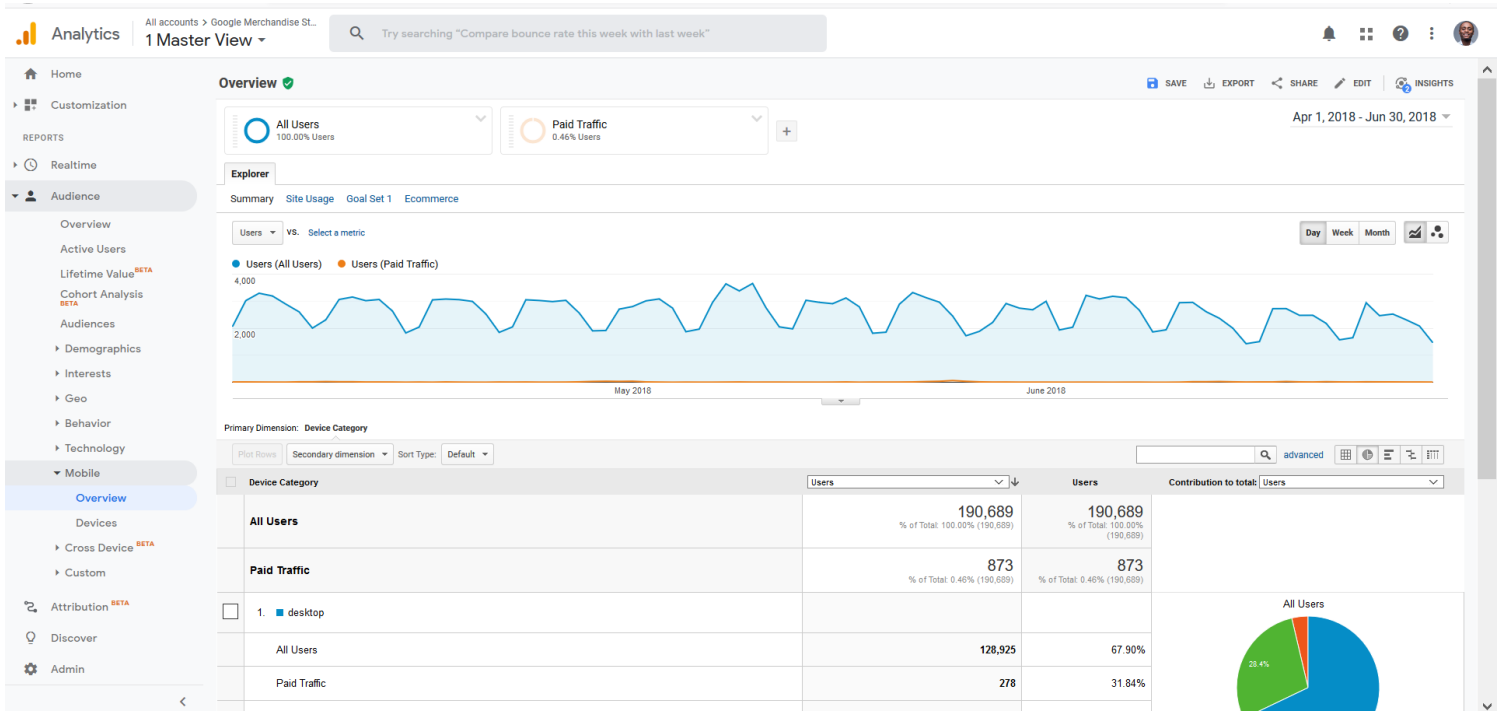
We could look at Speed Suggestions Report for optimization recommendations for these 02 pages.



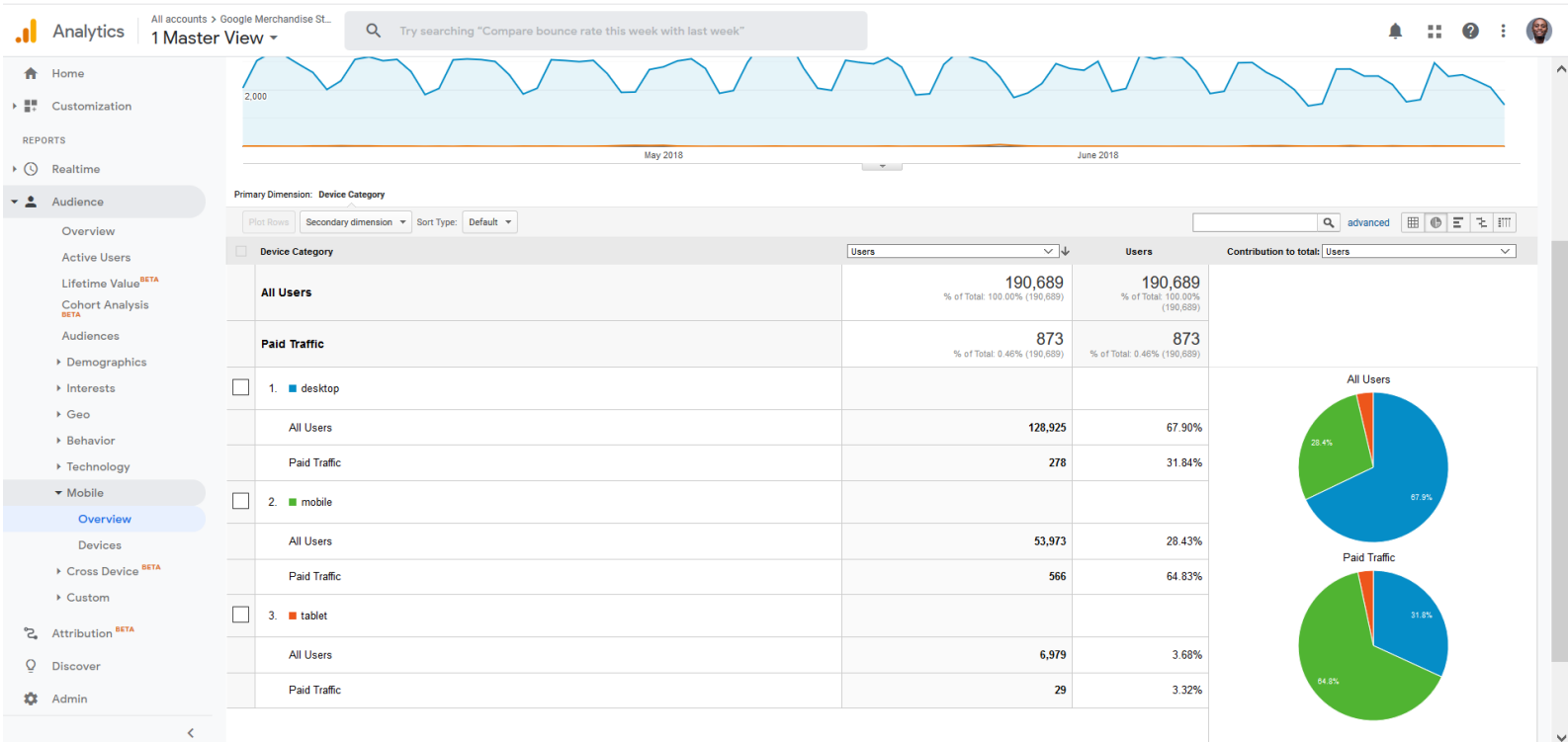
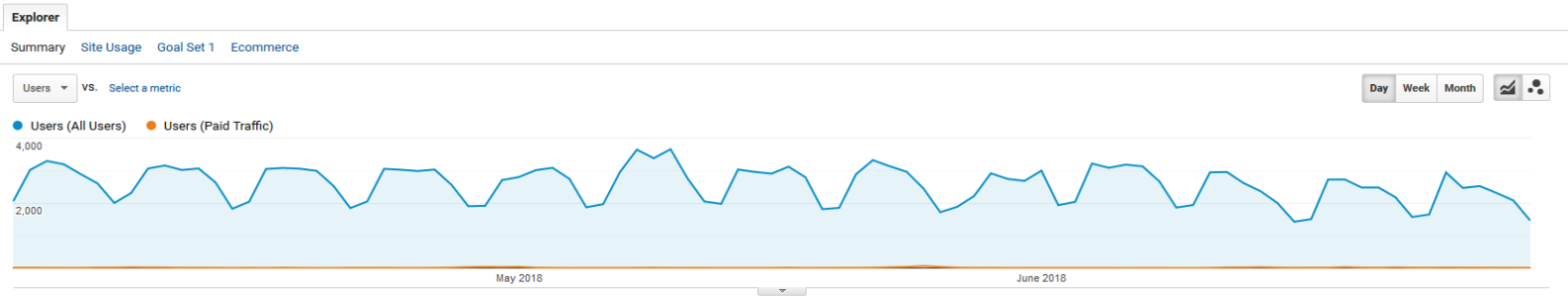
# Percentage Display: Audience

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.

## Audience: Mobile/Overview Report (01/04/18 – 30/06/18)



# Percentage Display: Audience



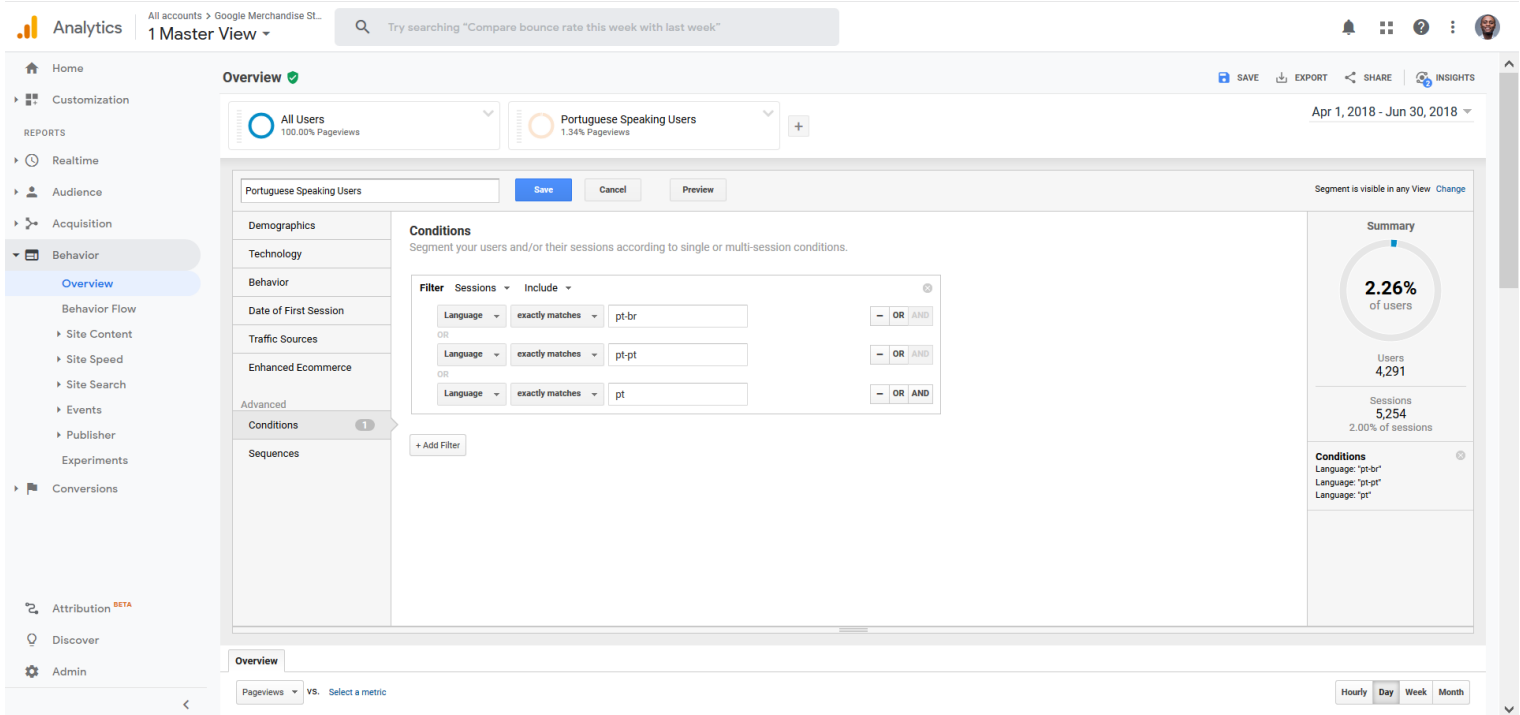


# Part Three: Segmentation

---

# Audience Segment: Characteristic

## Segments: Portuguese Speaker Users



The “Portuguese speaking users” segment was created by me to conduct analysis and the summary described on the image above shows that this segment accounts for 2.26% of all users. I can use the data to answer the following questions:

- How much ecommerce revenues come from this segment?
- What proportion of total eCommerce revenue come from this segment?

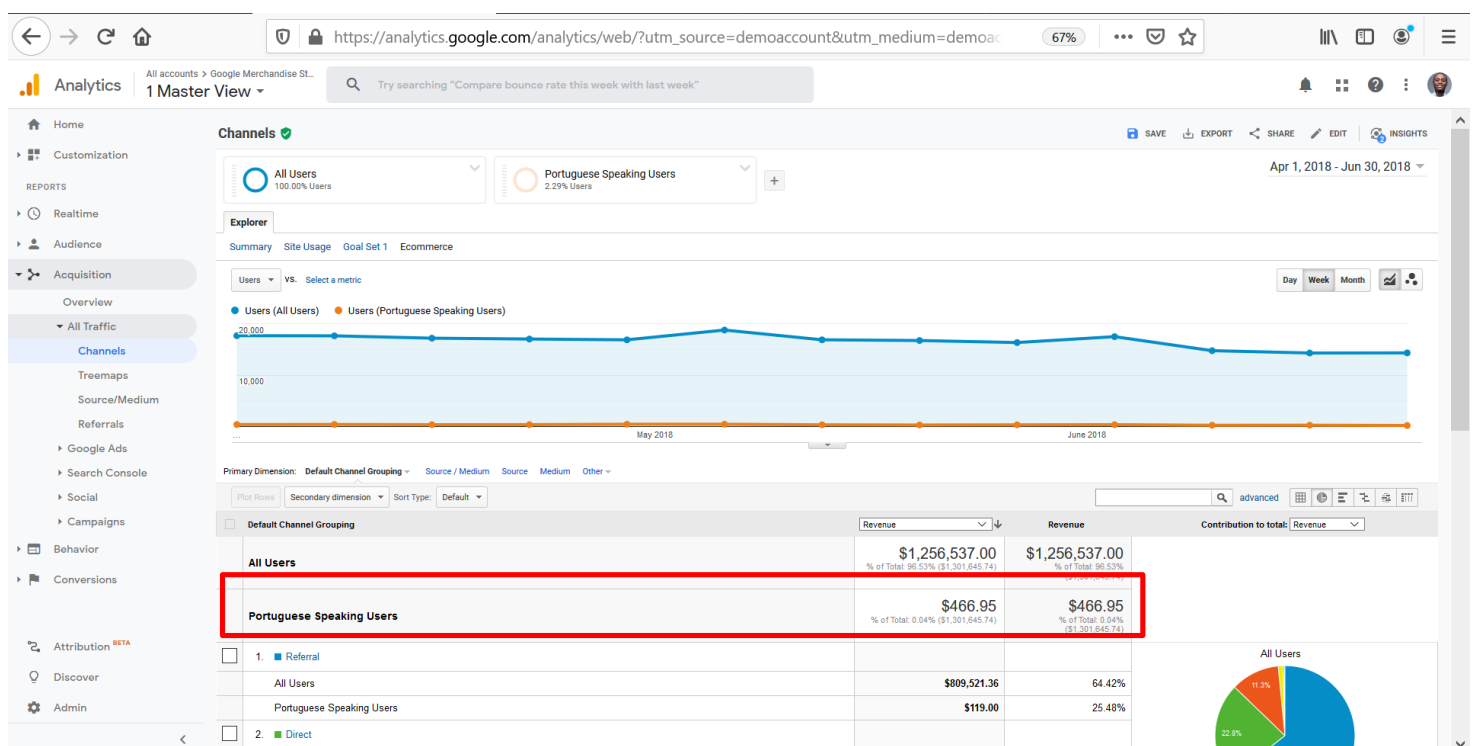
A segment for “Non Portuguese speaking users” can be easily created by excluding this segment and then the above questions can be extended to compare Portuguese speaking with non Portuguese speaking segments as well.

# Audience Segment: Characteristic

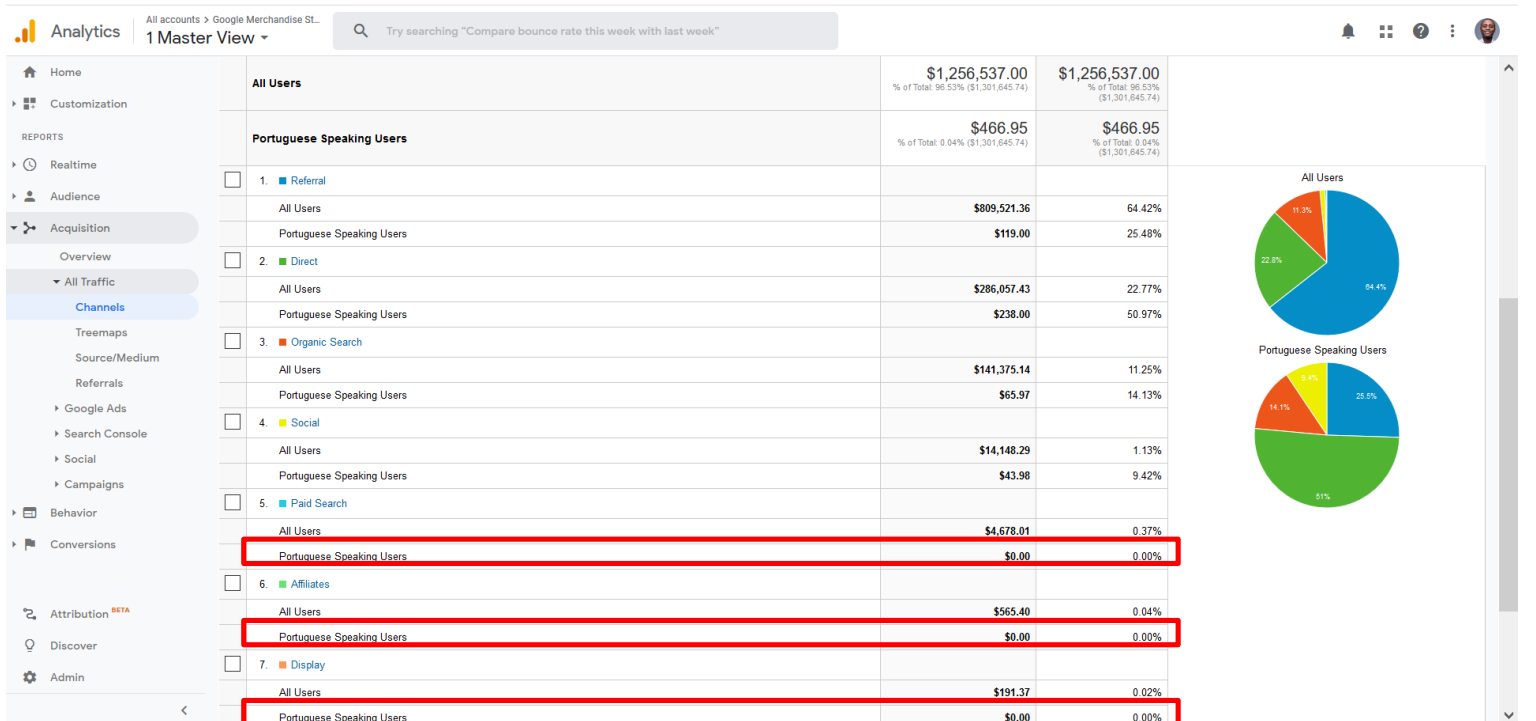
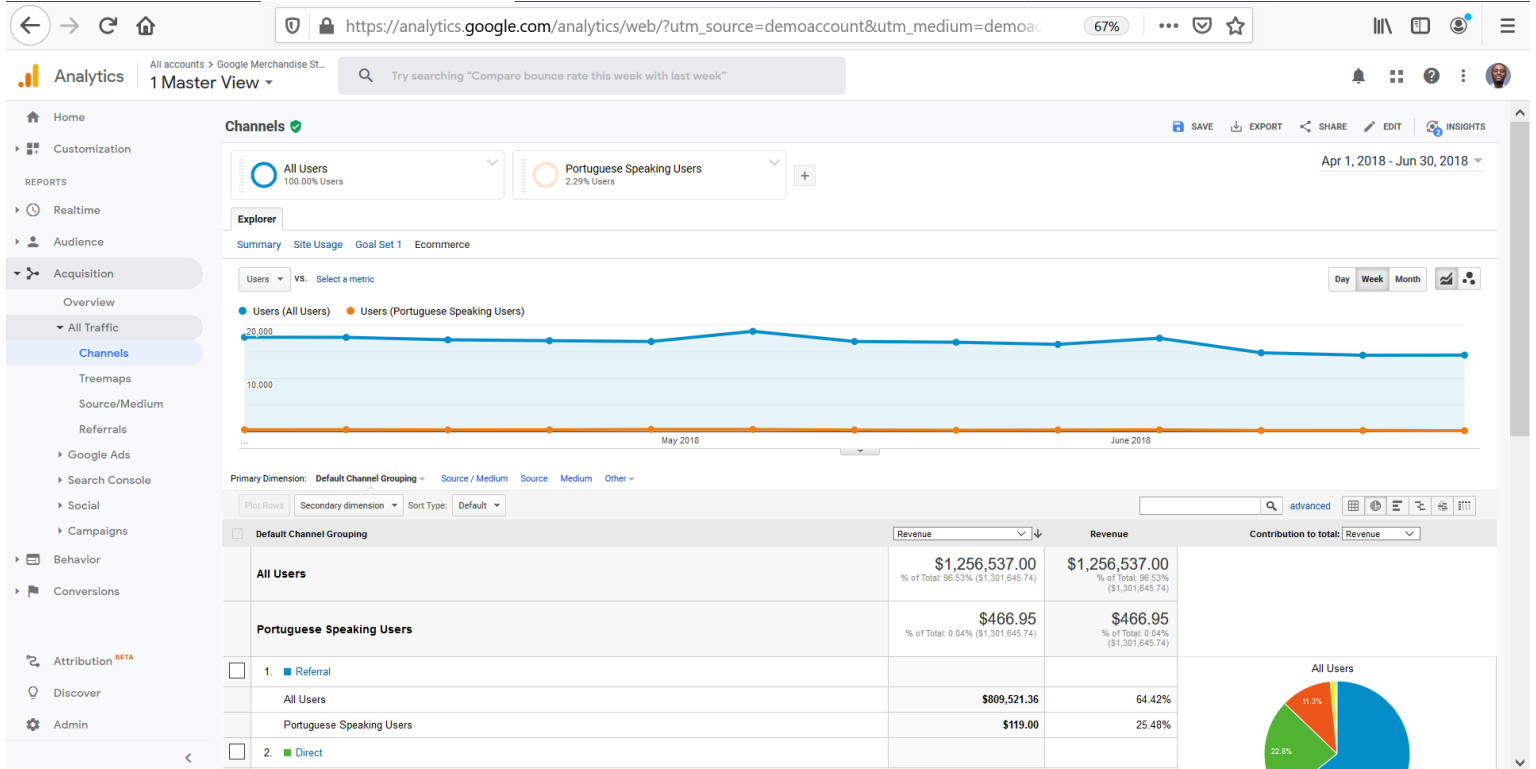
In the three month period that I selected (01/04/2018 – 30/06/2018), I will answer the business question how much eCommerce revenues come from this segment and what proportion of the total eCommerce revenues is that?

Acquisition : All Traffic/Channels Reports(01/04/2018 – 30/06/2018)

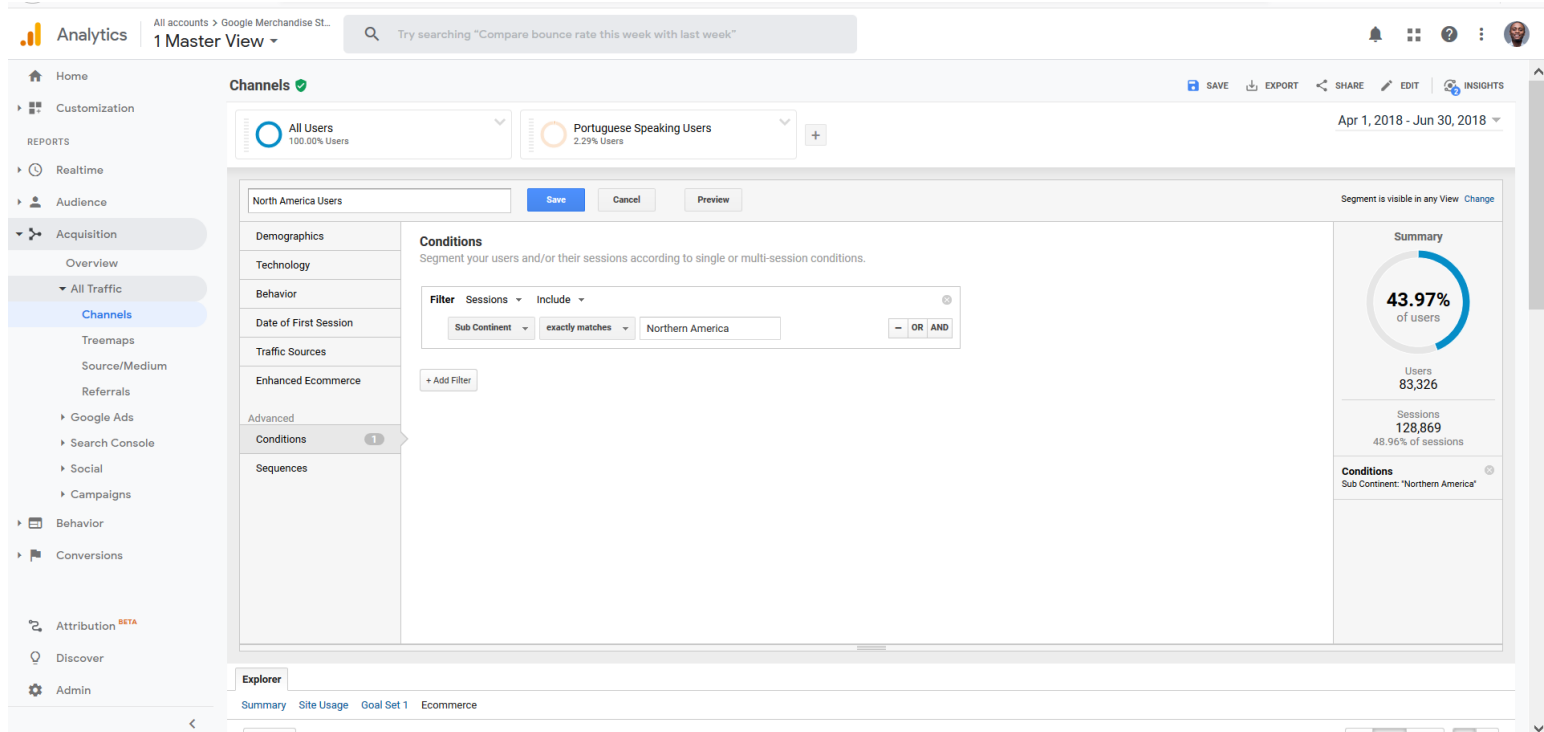
- The report shows total eCommerce revenue pulled in by this segment was **\$466.95** which is **0.04%** of the total revenue.
- The trend reveals Portuguese speakers are does not yet contribute for Paid Search, Affiliates, Display and Other on Google Merchandise Store as the image below shows



# Audience Segment: Characteristic



# Audience Segment: Geography



The screenshot displays the Google Analytics Audience Segmentation interface. The top navigation bar includes the 'Analytics' logo, account information ('All accounts > Google Merchandise St...'), a search bar with the text 'Try searching "Compare bounce rate this week with last week"', and user profile icons. The left sidebar lists various report categories: Home, Customization, Reports, Realtime, Audience, Acquisition (selected), Behavior, and Conversions. Under 'Acquisition', the 'Channels' report is selected. The main content area is titled 'Channels' and shows two segments: 'All Users' (100.00% Users) and 'Portuguese Speaking Users' (2.29% Users). The 'North America Users' segment is selected, and the 'Conditions' tab is active. The conditions are defined as: Filter Sessions Include Sub Continent exactly matches Northern America. The summary on the right shows that 43.97% of users (83,326 users, 128,869 sessions, 48.96% of sessions) are included in this segment. The bottom of the interface shows the 'Explorer' tab with 'Summary' selected.

Analytics All accounts > Google Merchandise St... 1 Master View

Try searching "Compare bounce rate this week with last week"

Home Customization Reports Realtime Audience Acquisition Behavior Conversions Attribution BETA Discover Admin

Channels

SAVE EXPORT SHARE EDIT INSIGHTS

Apr 1, 2018 - Jun 30, 2018

North America Users

Save Cancel Preview

Segment is visible in any View Change

Demographics Technology Behavior Date of First Session Traffic Sources Enhanced Ecommerce Advanced Conditions Sequences

Conditions

Segment your users and/or their sessions according to single or multi-session conditions.

Filter Sessions Include

Sub Continent exactly matches Northern America - OR AND

+ Add Filter

Summary

43.97% of users

Users 83,326

Sessions 128,869 48.96% of sessions

Conditions Sub Continent: "Northern America"

Explorer

Summary Site Usage Goal Set 1 Ecommerce

# Audience Segment: Geography

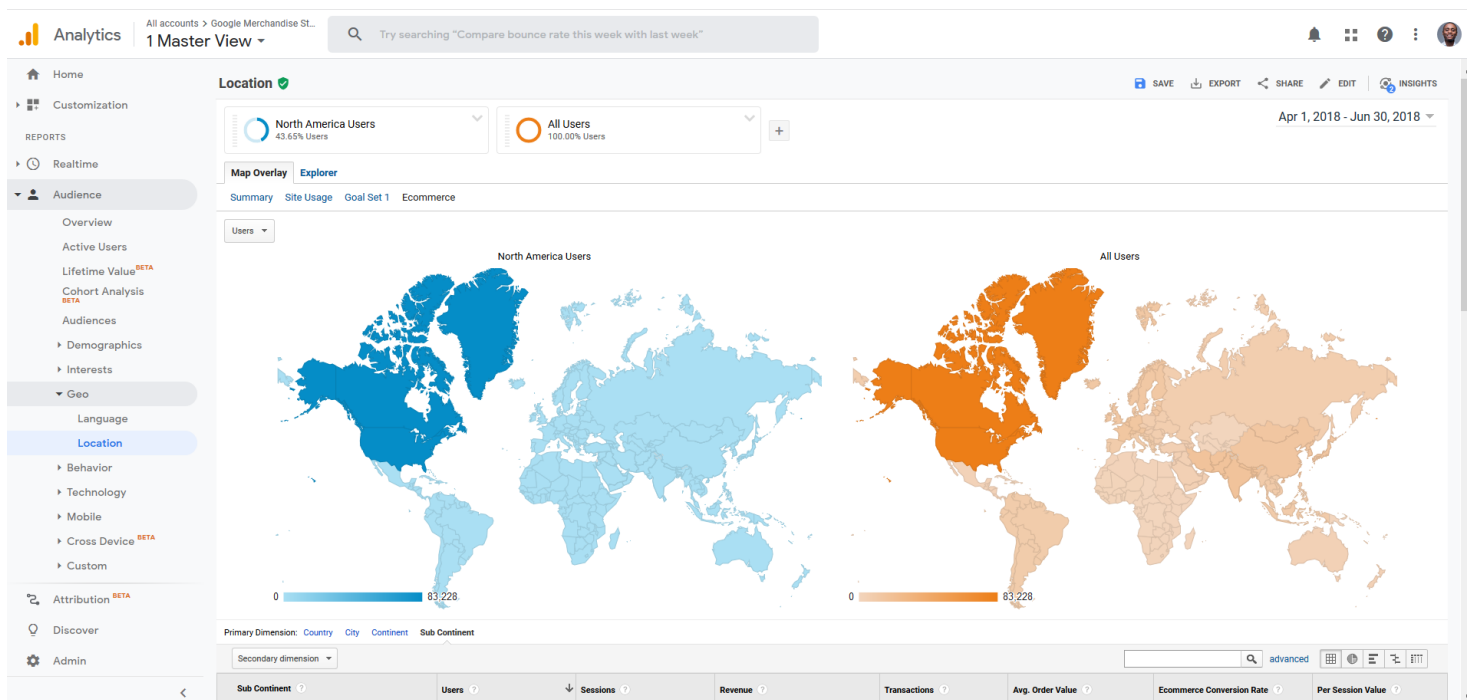
This segment was created on the North America Sub Continent. The Summary shows this segment accounts for 43.97 % of all users, so it is a significant user base. I am interested in finding out the significance of this segment to Google Merchandise Store which I will put the following business questions to guide me on the insights:

- What was the ecommerce Conversion Rate of this segment relative to other sub continents ?
- What was the Revenue relative to other sub continents ?

I will apply this segment to Audience: Geo/Location Report to find out the answers.

## Audience: Geo/Location Report (01/04/18 – 30/06/18)

- The report shows the eCommerce Conversion rate of this segment was **5.06%**, relative to Northern America Users and 2.86% for all users.
- The Revenue from this segment Northern America Users was **\$1,229.106.29**(corresponding 97.82% of total revenue).
- Analyzing the trend we identified that North America is the main market for Google Merchandise Store, which is not surprising given it is the birth place of Google and its brand name a household name there.







# Audience Segment: Geography

Analytics

All accounts > Google Merchandise ST...

1 Master View

Try searching "Compare bounce rate this week with last week"

Home

Customization

REPORTS

Realtime

Audience

Overview

Active Users

Lifetime Value

Cohort Analysis

Audiences

Demographics

Interests

Geo

Language

Location

Behavior

Technology

Mobile

Cross Device

Custom

Attribution

Discover

Admin

Primary Dimension: Country

City

Continent

Sub Continent

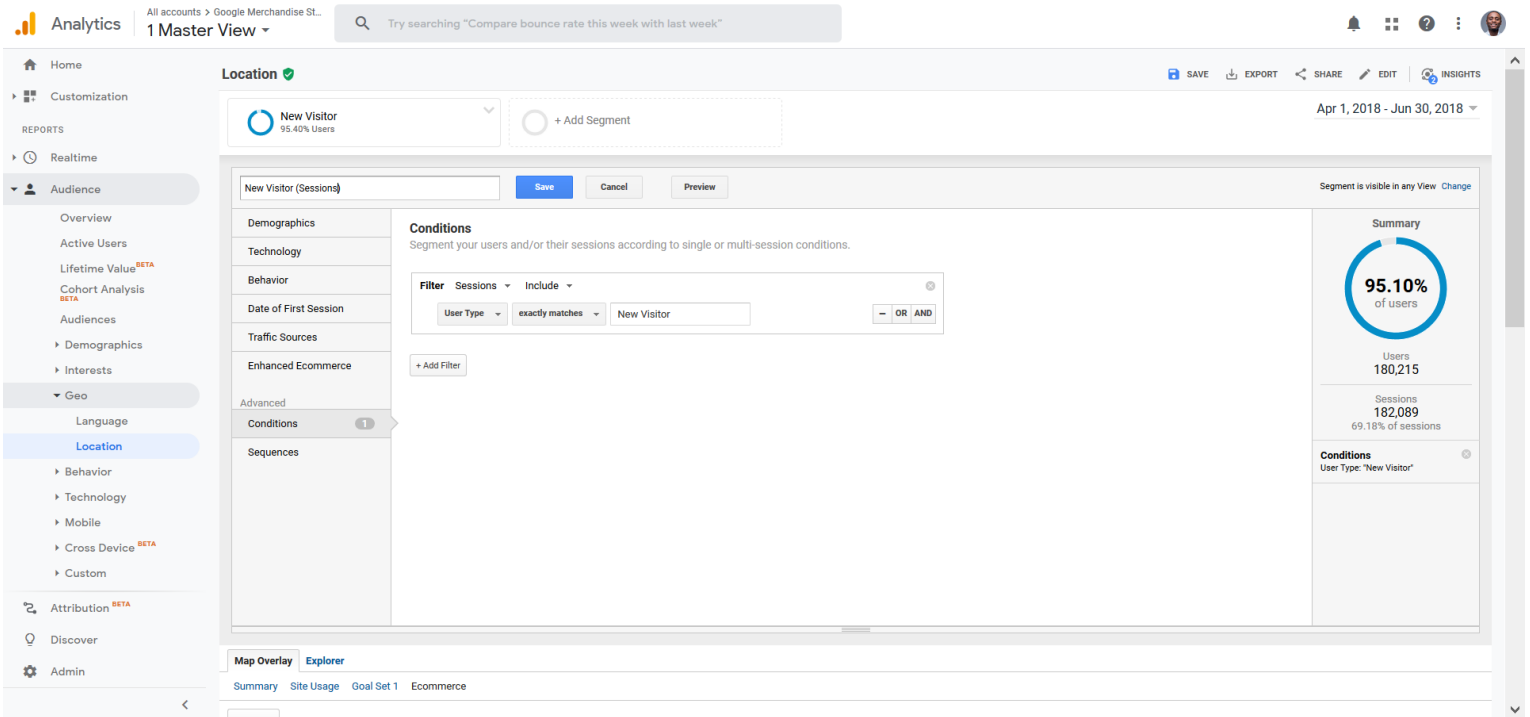
Secondary dimension

advanced

Sub Continent	Users	Sessions	Revenue	Transactions	Avg. Order Value	Ecommerce Conversion Rate	Per Session Value
North America Users	83,228 % of Total: 43.66% (190,689)	128,917 % of Total: 48.98% (263,214)	\$1,229,106.29 % of Total: 97.82% (\$1,256,537.00)	6,527 % of Total: 86.71% (7,527)	\$188.31 Avg for View: \$166.94 (12.80%)	5.06% Avg for View: 2.86% (77.03%)	\$9.53 Avg for View: \$4.77 (99.72%)
All Users	190,689 % of Total: 100.00% (190,689)	263,214 % of Total: 100.00% (263,214)	\$1,256,537.00 % of Total: 100.00% (\$1,256,537.00)	7,527 % of Total: 100.00% (7,527)	\$166.94 Avg for View: \$166.94 (0.00%)	2.86% Avg for View: 2.86% (0.00%)	\$4.77 Avg for View: \$4.77 (0.00%)
1. Northern America							
North America Users	83,228 (100.00%)	128,917 (100.00%)	\$1,229,106.29 (100.00%)	6,527 (100.00%)	\$188.31	5.06%	\$9.53
All Users	83,228 (43.51%)	128,917 (48.98%)	\$1,229,106.29 (97.82%)	6,527 (86.71%)	\$188.31	5.06%	\$9.53
2. South America							
North America Users	0 (0.00%)	0 (0.00%)	\$0.00 (0.00%)	0 (0.00%)	\$0.00	0.00%	\$0.00
All Users	8,790 (4.60%)	11,162 (4.24%)	\$1,379.89 (0.11%)	96 (1.28%)	\$14.37	0.86%	\$0.12
3. Western Africa							
North America Users	0 (0.00%)	0 (0.00%)	\$0.00 (0.00%)	0 (0.00%)	\$0.00	0.00%	\$0.00
All Users	1,268 (0.66%)	1,413 (0.54%)	\$0.00 (0.00%)	5 (0.07%)	\$0.00	0.35%	\$0.00
4. Central America							
North America Users	0 (0.00%)	0 (0.00%)	\$0.00 (0.00%)	0 (0.00%)	\$0.00	0.00%	\$0.00
All Users	2,632 (1.38%)	3,339 (1.27%)	\$2,045.16 (0.16%)	33 (0.44%)	\$61.97	0.99%	\$0.61
5. Eastern Africa							
North America Users	0 (0.00%)	0 (0.00%)	\$0.00 (0.00%)	0 (0.00%)	\$0.00	0.00%	\$0.00
All Users	724 (0.38%)	815 (0.31%)	\$0.00 (0.00%)	2 (0.03%)	\$0.00	0.25%	\$0.00
6. Northern Africa							
North America Users	0 (0.00%)	0 (0.00%)	\$0.00 (0.00%)	0 (0.00%)	\$0.00	0.00%	\$0.00
All Users	1,534 (0.80%)	1,664 (0.63%)	\$0.00 (0.00%)	2 (0.03%)	\$0.00	0.12%	\$0.00

# Audience Segment: User Behavior

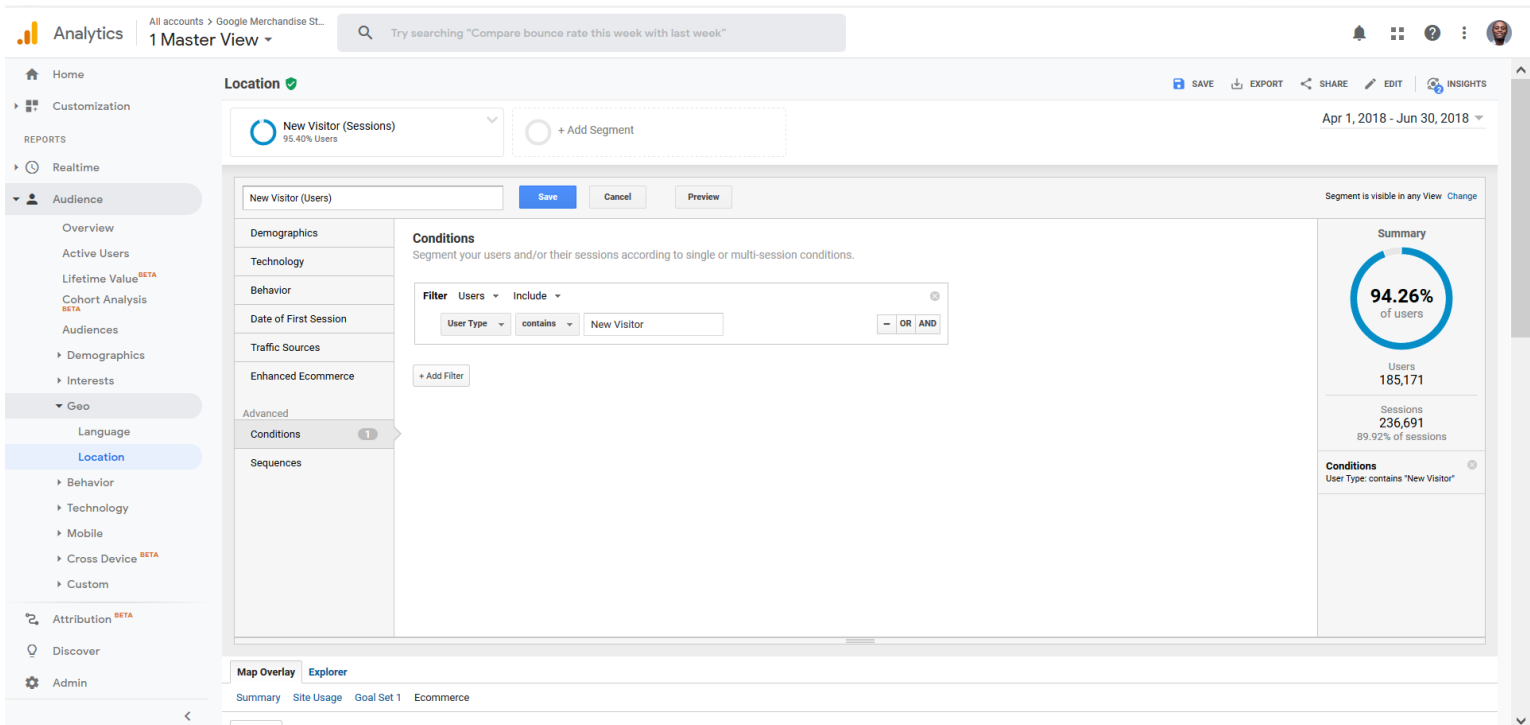
## Segment: New Visitor (Sessions)



The screenshot displays the Google Analytics 'Audience' section for the 'New Visitor (Sessions)' segment. The left sidebar shows the navigation menu with 'Location' selected under 'Geo'. The main content area shows the segment configuration for 'New Visitor (Sessions)' with a 95.40% user rate. The 'Conditions' section is set to 'Filter Sessions' and 'Include', with the condition 'User Type exactly matches New Visitor'. The summary on the right shows 95.10% of users, 180,215 users, and 182,089 sessions (69.18% of sessions).

Segment	Users	Sessions	Percentage of Users	Percentage of Sessions
New Visitor (Sessions)	180,215	182,089	95.10%	69.18%

## Segment: New Visitor (Users)



The screenshot displays the Google Analytics 'Audience' section for the 'New Visitor (Users)' segment. The left sidebar shows the navigation menu with 'Location' selected under 'Geo'. The main content area shows the segment configuration for 'New Visitor (Users)' with a 95.40% user rate. The 'Conditions' section is set to 'Filter Users' and 'Include', with the condition 'User Type contains New Visitor'. The summary on the right shows 94.26% of users, 185,171 users, and 236,691 sessions (89.92% of sessions).

Segment	Users	Sessions	Percentage of Users	Percentage of Sessions
New Visitor (Users)	185,171	236,691	94.26%	89.92%

# Audience Segment: User Behavior

## Analysis:

The two segments created were based on user type New Visitor by users and session.

They can be used to answer the following business questions:

- How much did New Visitor segment (user scope) contribute to Goal Conversion Rate?
- Is there a correlation between the two scopes of New Visitor segment's contribution to Goal Conversion Rate?

I would apply the segments to Acquisition: All Traffic/Channels Report (on Goal Set 1 view) to find out the answers.

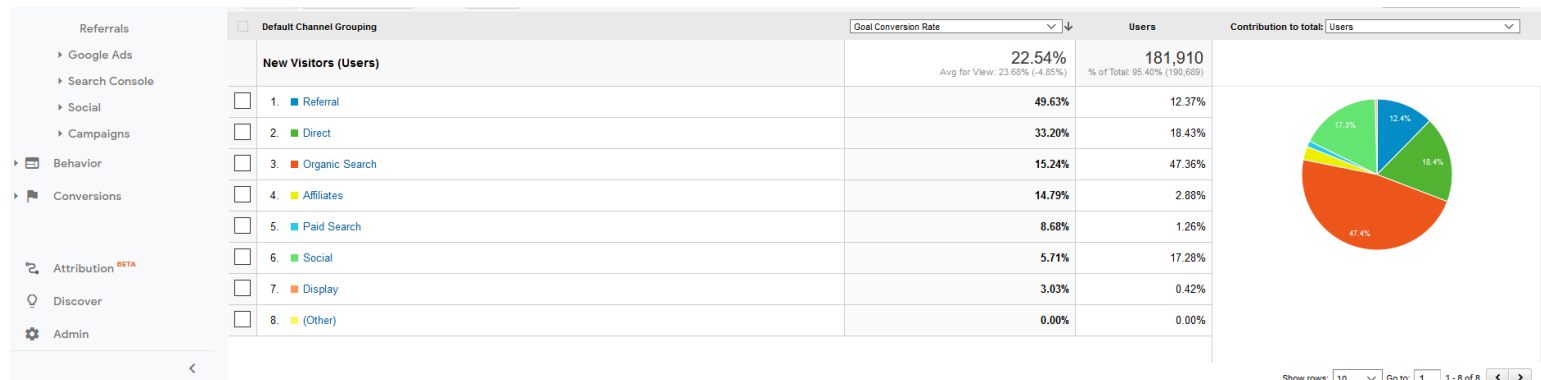
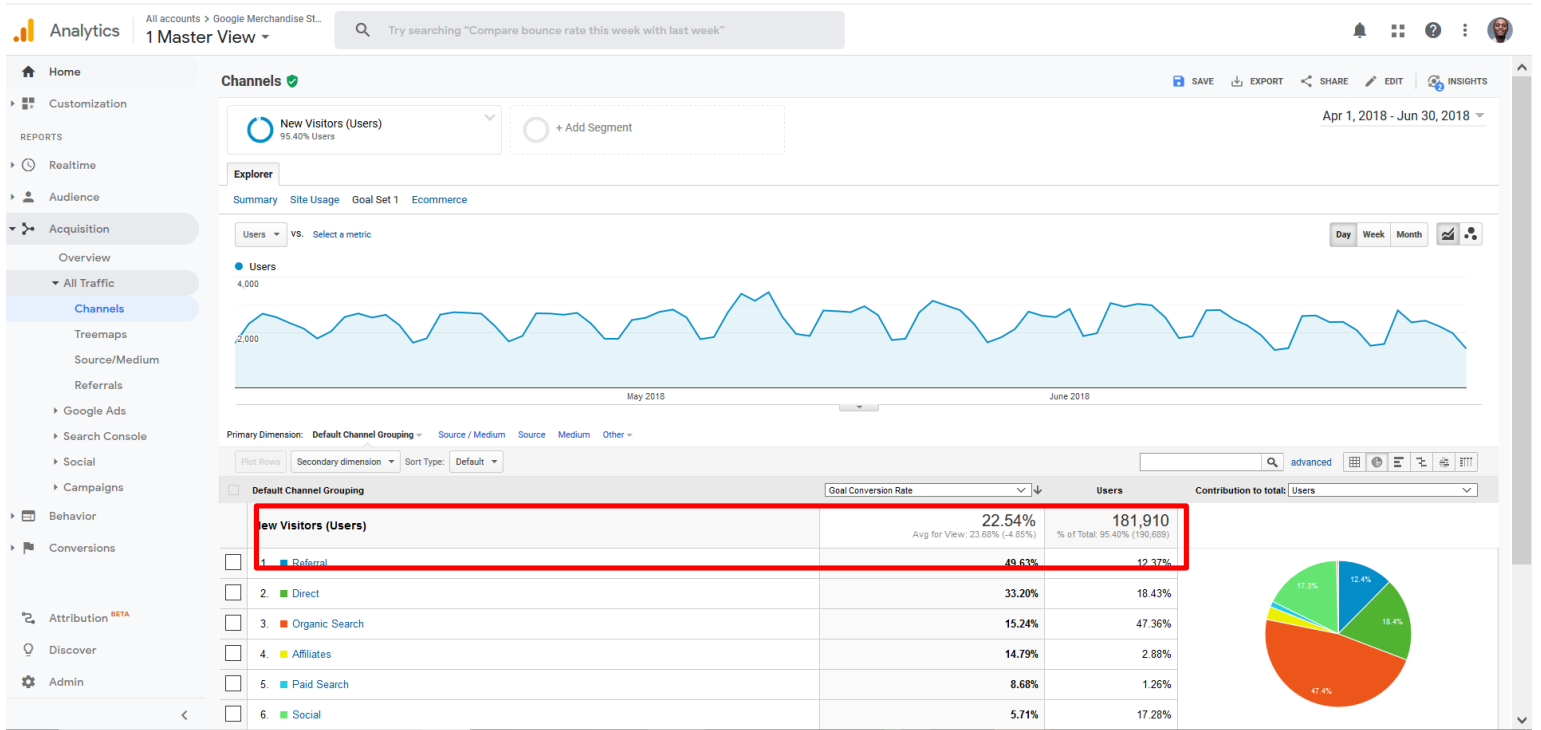
In the three month period selected, how much did New Visitor segment (user scope) contribute to *Goal Conversion Rate*?

Acquisition: All Traffic / Channels Report (01/04/2018 – 30/06/2018)

The report shows the New Visitors(users)segment contributed **22.54%** of the total Goal Conversion Rate. Breaking this down by channels, *Referral*, *Direct* and *Organic Search* the top three spots with contribution rate of **49.63%**, **33.20%** and **15.24%** respectively.

# Audience Segment: User Behavior

## Segment: New Visitor (Users)



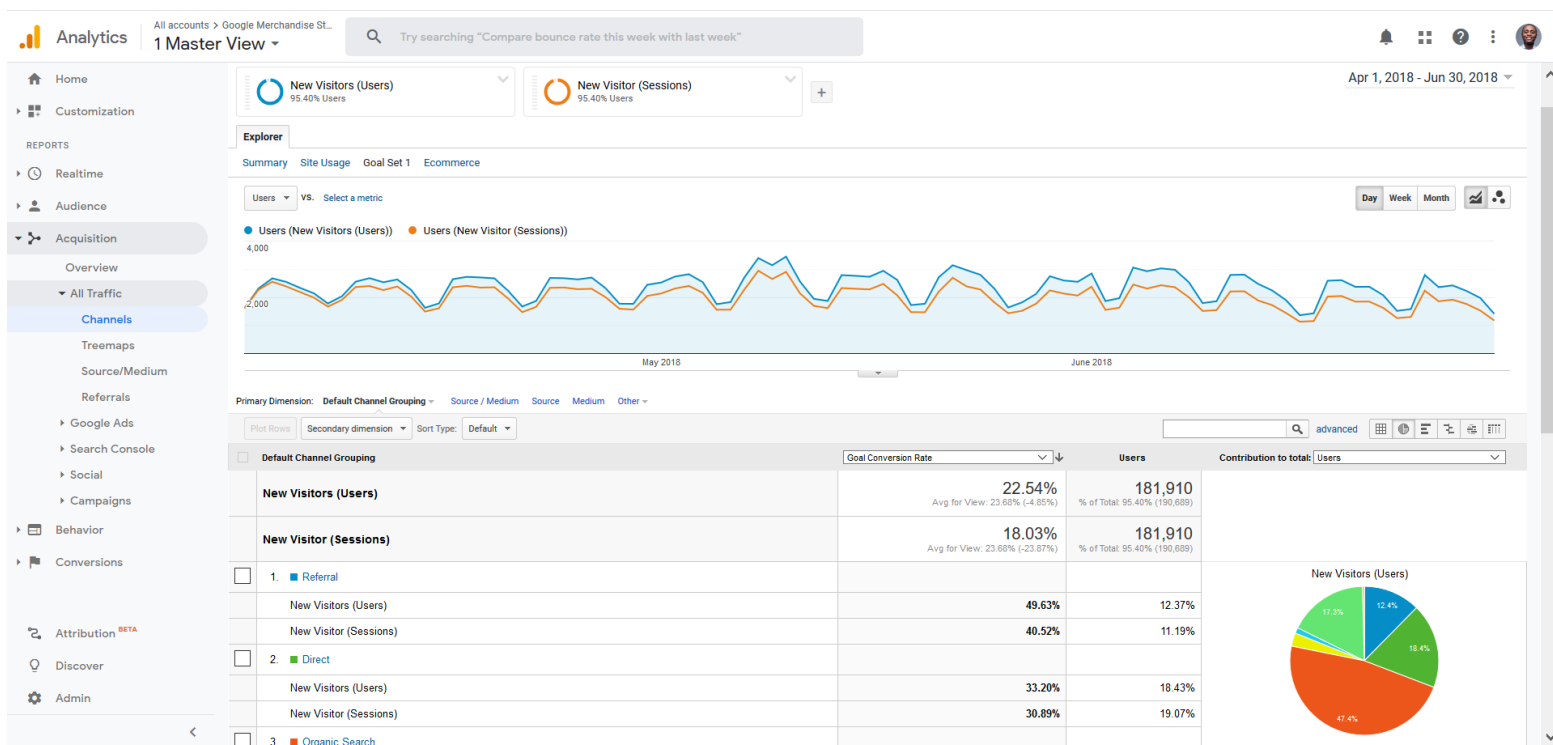
# Audience Segment: User Behavior

## Analysis:

In the three month period that I selected, is there a correlation between the two scopes of New Visitor segment's contribution to Goal Conversion Rate?

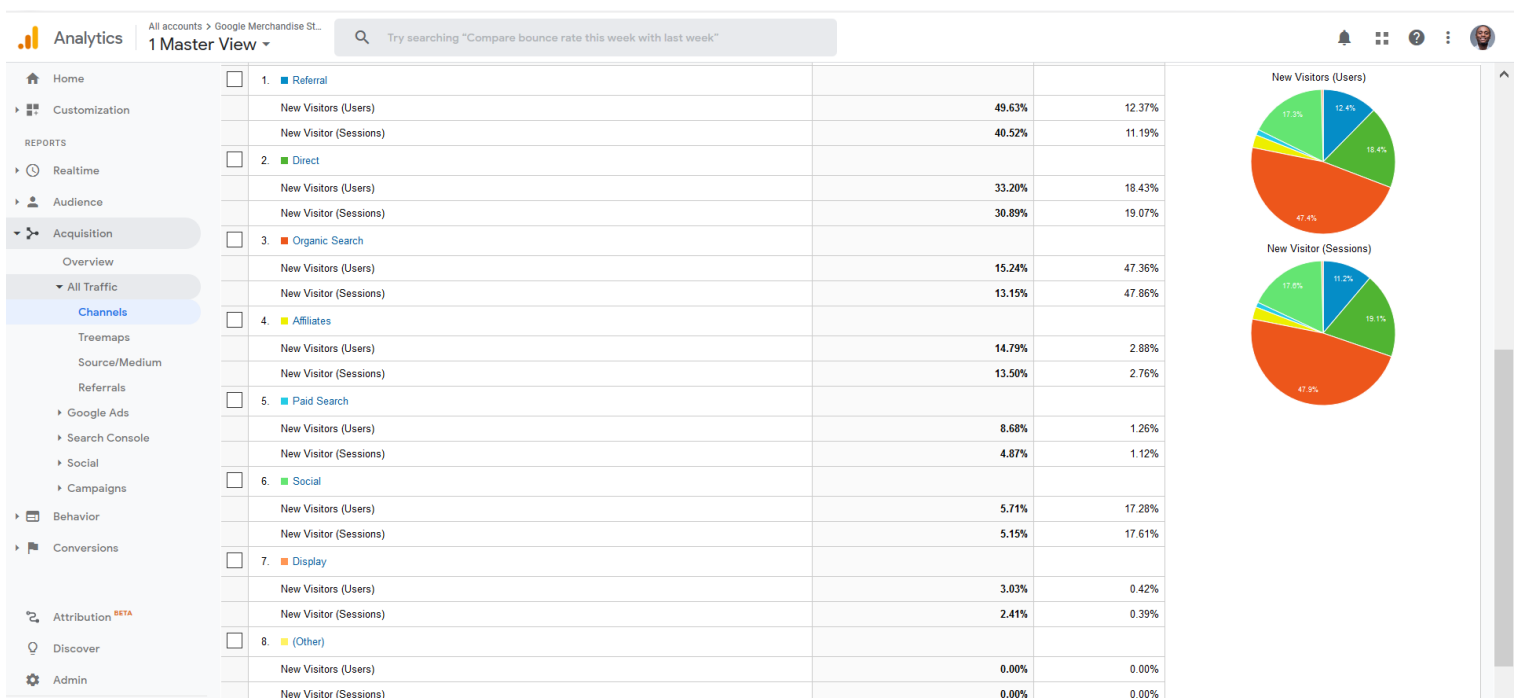
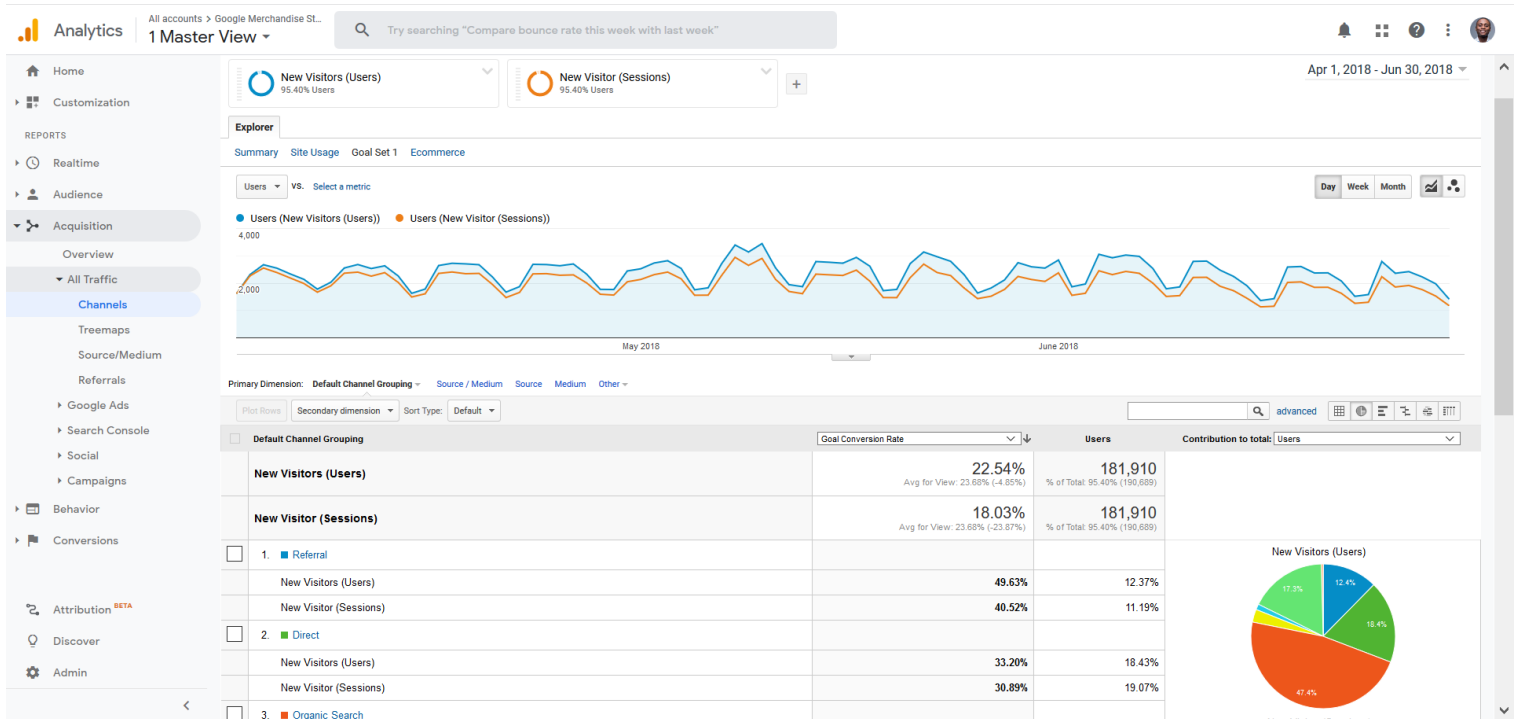
Acquisition: All Traffic / Channels Report (01/04/2018 – 30/06/2018)

From the data range that I selected, the report shows a positive correlation between the user and session scopes of New Visitor Segment on Goal Conversion Rate. The same correlation is mirrored among the channels, where both scopes move in the same direction in New Visitor segment's contribution to Goal Conversion Rate.



# Audience Segment: User Behavior

## Acquisition: All Traffic / Channels Report (01/04/2018 – 30/06/2018)



# NÉLIO MACOMBO

## Portfolio

---

Advanced Displays,  
Segmentation &  
Filtering