

MARKETING ANALYTICS NANODEGREE PROGRAM

6TH PROJECT: Navigating, Reports, and Dashboards

Using Google Merchandise Store Demo Account
on Google Analytics

Google Analytics



Project: Navigating,
Reports, & Dashboards



Part One: Primary Views & Filters



1. Best Practice Check: Three Primary Views

The screenshot displays the Google Analytics interface. At the top, the '1 Master View' dropdown menu is open, showing three options: '1 Master View', '2 Test View', and '3 Raw Data View'. An orange arrow points to the '1 Master View' dropdown menu. Another orange arrow points to the 'Create View' button in the top right corner. A third orange arrow points to the 'Admin Gear' button in the bottom left corner. A blue box highlights the 'All accounts' table, which lists three views: '1 Master View' (92320289), '2 Test View' (92324711), and '3 Raw Data View' (90822334). The table also includes columns for 'Analytics Accounts' and 'Properties & Apps'.

Analytics Accounts	Properties & Apps	Views
Demo Account 54516992	Google Merchand... UA-54516992-1	1 Master View 92320289
	Attribution Projects	2 Test View 92324711
	Google Merchandise ... 1839269076	3 Raw Data View 90822334
	Google Merchandise ... 1864999626	

In the screenshots, we see 3 Views of Google Merchandise Store Demo Account property, 'Master View' as a production or working View, 'Test View' for testing purposes and the 'Raw Data View' which represents the data unfiltered; and we are not allowed to create more Views here.

For own business, to create views we have to click the 'Admin Gear' button as numbered, then click 'Create View' and name it.

2. Best Practice Check: Filtering Internal Traffic

The screenshot displays the Google Analytics 'Admin' view. In the left sidebar, the 'Filters' option is highlighted with an orange box and an arrow. The main content area shows a table of filters:

Rank	Filter Name	Filter Type
1	Rename AdWords Campaigns	Search and Replace
2	Include Hostname	Include

Below the table, the 'View Filter' configuration panel is shown. It includes the following elements:

- Filter Name:** Exclude Internal IP Addressees (1)
- Filter Type:** Predefined (2)
- Action:** Exclude (3)
- Source:** traffic from the IP addresses (4)
- Condition:** that contain (5)
- Scope:** (for IPv4) (6)

To filter internal traffic within a 'View' also from admin page on the View column, we select the Main View then click filters below it.

In this demo account we aren't allowed to add new View filter, so if we decide to add one in our business account, we will find 'Add Filter' red button and a form like what in the second screenshot, then we fill the Filter Name box, choose Filter Type and we have a predefined type for IP Traffic so we will choose predefined -> Exclude from drop down list-> Traffic from the IP addresses (ISP Domain or Organization upon own business choice) -> then select 'that contains' from last drop down list-> then we fill the last box with the IP range we want to exclude in a regular expression form like 63\212\171\[1-9]

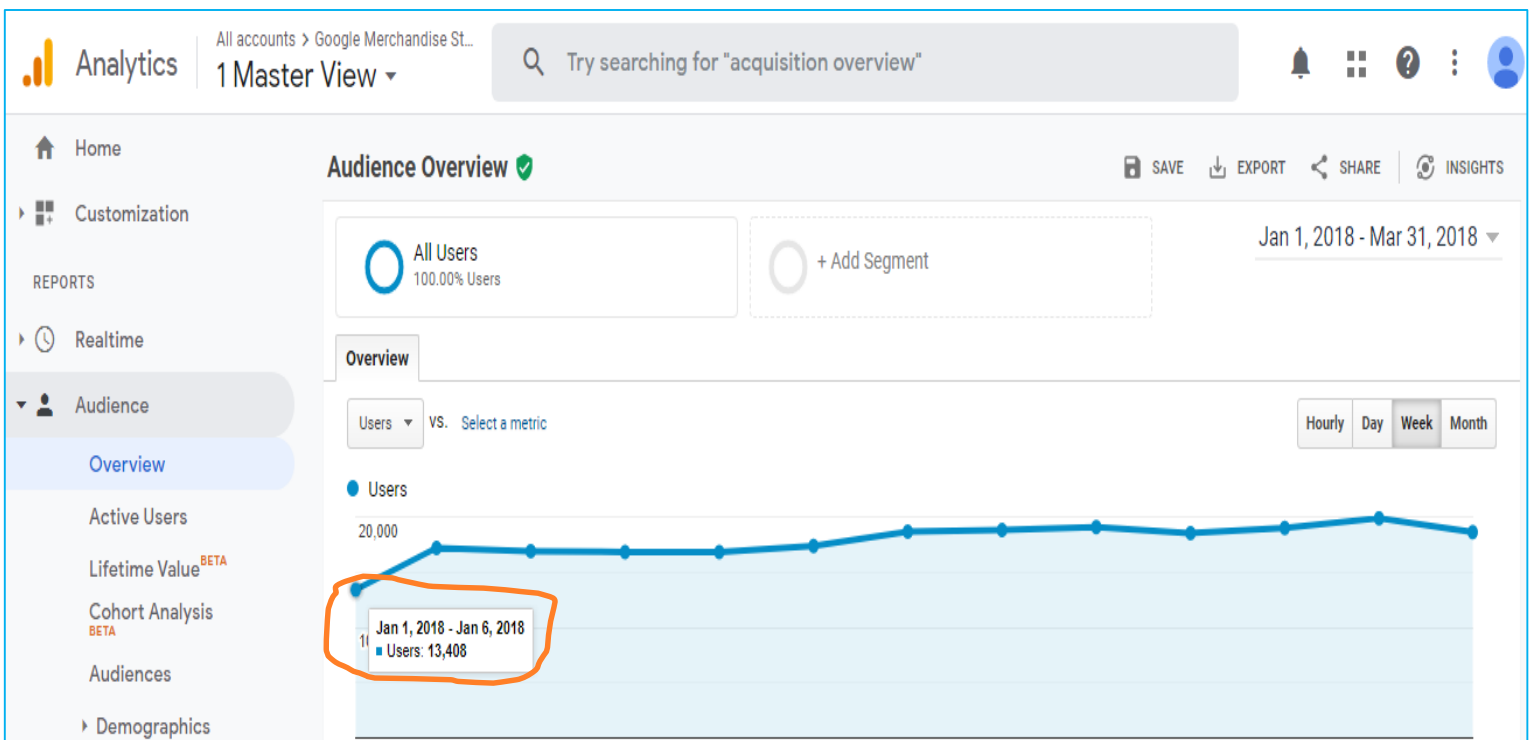
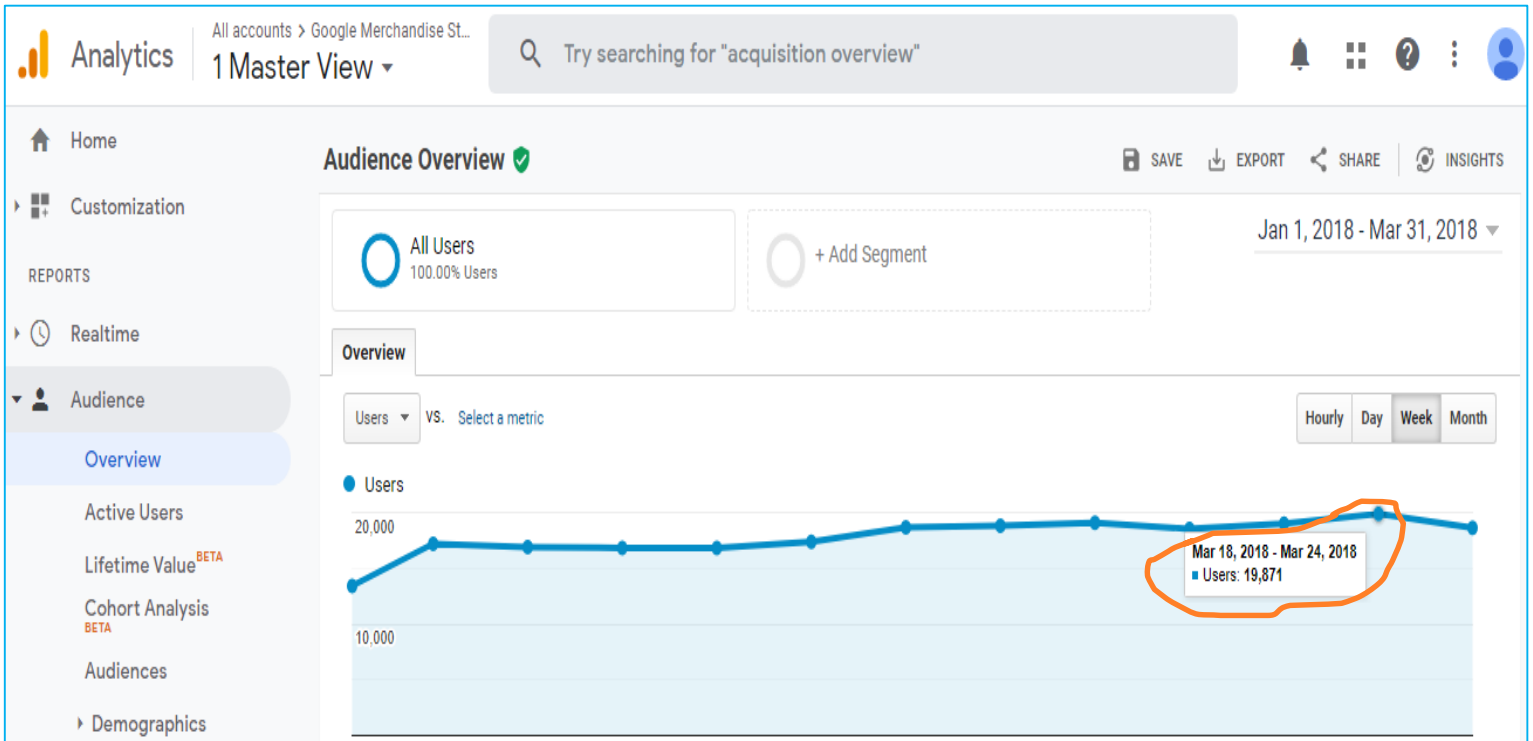


Data Exploration



Standard Display - Audience

From the Audience Overview Report, we selected a three month time period from Jan 1, 2018 till Mar 31, 2018 to explore. We wonder about, which week had the most visitors, and which week had the fewest visitors to Google Merchandise site?



Standard Display - Audience

As the graphs above shows, the week of Mar 18 to 24, 2018 had the largest number of users with a count of 19,871 users, it could be due to a number of some national and occasions days in the month.

And we can find that the week of Jan 1-6, 2018 had the least count of users who got on the site pages with a number of 13,408 users, and this could be due to new year observances.

Standard Display - Acquisition

In the Acquisition All traffic Channels Report, after applying two advanced table filters to exclude *Direct* and *(Other)* channels, within the same time period from Jan 1 till Mar 31, 2018 to explore, we wanted to know which channels had the highest and lowest bounce rates and the highest and lowest eCommerce conversion rates? What do these metrics mean?

The screenshot shows the Google Analytics interface with the Acquisition report selected. Two advanced filters are applied to exclude 'Direct' and '(Other)' channels. The main table displays acquisition metrics for various channels. A secondary table highlights the top and bottom channels for Bounce Rate and eCommerce Conversion Rate.

Filters:

- Exclude Default Channel Grouping Containing Direct
- Exclude Default Channel Grouping Containing (Other)

Primary Dimension: Default Channel Grouping

Acquisition Report Data:

	Users ?	New Users ?	Sessions ?	Bounce Rate ?	Pages / Session ?	Avg. Session Duration ?	Ecommerce Conversion Rate ?	Transactions ?
Default Channel Grouping	178,434 (85.65% of Total)	169,001 (84.70% of Total)	232,015 (73,767)	46.81% (Avg for View: 47.19% (-0.81%))	3.89 (Avg for View: 3.89 (0.06%))	00:02:04 (Avg for View: 00:02:08 (-2.68%))	2.23% (Avg for View: 2.27% (-2.00%))	5,166 (83.05% of Total)
1. Display	2,678 (1.47%)	2,459 (1.46%)	3,202 (1.38%)	81.70%	1.64	00:00:30	0.28%	9 (0.17%)
2. Social	52,771 (28.87%)	51,729 (30.61%)	57,824 (24.92%)	58.49%	2.30	00:00:49	0.11%	63 (1.22%)
3. Paid Search	5,636 (3.08%)	4,799 (2.84%)	7,558 (3.26%)	58.24%	3.52	00:01:47	1.10%	83 (1.61%)
4. Affiliates	4,415 (2.42%)	4,047 (2.39%)	5,578 (2.40%)	53.46%	3.14	00:02:48	0.04%	2 (0.04%)
5. Organic Search	91,746 (50.20%)	86,904 (51.42%)	111,707 (48.15%)	48.34%	3.86	00:02:03	0.76%	851 (16.47%)
6. Referral	25,517 (13.96%)	19,063 (11.28%)	46,146 (19.89%)	23.39%	6.25	00:03:44	9.01%	4,158 (80.49%)

Top and Bottom Channels for Bounce Rate and eCommerce Conversion Rate:

	Users ?	New Users ?	Sessions ?	Bounce Rate ?	Pages / Session ?	Avg. Session Duration ?	Ecommerce Conversion Rate ?	Transactions ?
1. Referral	25,517 (13.96%)	19,063 (11.28%)	46,146 (19.89%)	23.39%	6.25	00:03:44	9.01%	4,158 (80.49%)
2. Paid Search	5,636 (3.08%)	4,799 (2.84%)	7,558 (3.26%)	58.24%	3.52	00:01:47	1.10%	83 (1.61%)
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This report was generated on 12/23/20 at 9:55:51 PM - Refresh Report

Standard Display: Acquisition

From the second screenshot in the previous page, it's clear that 'Display' channels had the highest bounce rate with 81.70%.

On the other hand 'Referral' channels had the lowest bounce rate with 23.39%.

This means that the percentage of single-page sessions with no page interaction and zero seconds duration on 'Display' channels was too high and they needed rethinking about marketing modeling and designing to attract audiences through those channels, though 'Referral' channels was doing well with a low bounce rate, and they indicated that they were grasping audiences.

From the third screenshot on the previous page, we could see that 'Referral' channels had the highest eCommerce conversion rate with 9.01%, and the lowest was for 'Affiliates' channels, meaning that 'Referral' channels achieved the largest percentage of sessions that resulted in an e-commerce transaction, so these channels are the best in making ecommerce conversions we should keep it up doing well. However, 'Affiliates' channels weren't so good as Referral's in ecommerce conversion rate, but at all it had a rate of 0.04%, perhaps they needed more advertising plans.

Percentage Display: Conversion

Through mentioned three months, 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?

Product Performance

Customization

REPORTS

- Realtime
- Audience
- Acquisition
- Behavior
- Conversions
 - Goals
 - Ecommerce
 - Overview
 - Shopping Behavior
 - Checkout Behavior
 - Product Performance
 - Sales Performance
 - Product List Performance
 - Marketing

Attribution BETA

Product Performance

New Users

26.91% Product Revenue

+ Add Segment

Jan 1, 2018 - Mar 31, 2018

+ NEW SEGMENT Import from gallery Share segments

VIEW SEGMENTS

VIEW SEGMENTS	Segment Name	Created	Modified	Actions
All	Mobile Traffic			Actions
System	Multi-session Users			Actions
Custom	New Users			Actions
Shared	No Cart Addition [Funnel Segment]	Dec 20, 2020	Dec 20, 2020	Actions
Starred	Non-bounce Sessions			Actions
Selected				

Primary Dimension: Product Product SKU Product Category (Enhanced Ecommerce) Product Brand

Secondary dimension

Product Category (Enhanced Ecommerce)

Unique Purchases

New Users

Product Category (Enhanced Ecommerce)	Unique Purchases	Unique Purchases
1. Apparel	946	25.84%
2. Nest-USA	842	23.00%
3. Nest	431	11.77%
4. TYCTWD 2018	362	9.89%
5. Office	321	8.77%
6. Drinkware	263	7.18%
7. Lifestyle	109	2.98%
8. Accessories	91	2.49%

Contribution to total: Unique Purchases

Product Category (Enhanced Ecommerce)

Product Revenue

New Users

Product Category (Enhanced Ecommerce)	Product Revenue	Product Revenue
1. Nest-USA	\$145,001.00	44.55%
2. Nest	\$94,996.00	29.19%
3. Apparel	\$26,403.24	8.11%
4. Office	\$14,794.52	4.55%
5. Drinkware	\$12,605.49	3.87%
6. TYCTWD 2018	\$7,896.05	2.43%
7. Bags	\$6,848.25	2.10%
8. \${productitem.product.origCatName}	\$4,675.01	1.44%
9. Nest-Canada	\$3,828.00	1.18%
10. Notebooks & Journals	\$2,061.47	0.63%

Contribution to total: Product Revenue

Show rows: 10 Go to: 1 1 - 10 of 47

This report was generated on 12/23/20 at 11:23:53 PM - Refresh Report

Comparison Display: Behavior

For traffic from All Users between the start and end of mentioned three months period, here is a comparison report showing Site Speed Page timings for our top ten pages (based on pageviews).

Realtime	Secondary dimension	Sort Type: Default		advanced	
Audience	Page	Pageviews		Avg. Page Load Time (sec) (compared to site average)	
Acquisition		1,063,778 % of Total: 100.00% (1,063,778)		4.80 Avg for View: 4.80 (0.00%)	
Behavior					
Overview	1. /home	217,254	-2.54%		
Behavior Flow	2. /google+redesign/shop+by+brand/youtube	95,846		124.57%	
Site Content	3. /basket.html	51,589	-32.60%		
Site Speed	4. /google+redesign/apparel/mens	51,362	-27.69%		
Overview	5. /google+redesign/accessories	49,506	-22.88%		
Page Timings	6. /signin.html	42,975	-55.95%		
Speed	7. /google+redesign/bags	38,935	-25.61%		
Suggestions	8. /google+redesign/office	36,062	-22.54%		
User Timings	9. /store.html	34,117		17.40%	
Site Search	10. /google+redesign/drinkware	33,578	-19.81%		
Events					
Publisher					

Show rows: 10 Go to: 1 1 - 10 of 674

This report was generated on 12/24/20 at 12:19:15 AM - Refresh Report

It looked like we had two trouble spots in loading time of two of top ten most viewed pages:

- First: when shopping goods by YouTube Brand on the website the page “YouTube | Shop by Brand | Google Merchandise Store” took more than full percentage with additional 24% of average time to load.
- Second: the ‘Store’ page loads in more amount of average loading time with 17%.

And for that we had to review designing of embedded elements on pages and reduce its sizes, require from developers to see if they could make the code cleaner, and trying to upgrade servers as needed at last condition.

Percentage Display: Audience

From Overview of Mobile report within Audience Reports Section and by using percentage display with pie charts after adding 'Paid Traffic' segment, we can show percentage of All Users came from mobile, desktop, and tablet devices and percentage of Paid Traffic Users came from mobile, desktop, and tablet devices, during months selected.

REPORTS

Realtime

Audience

Overview

Active Users

Lifetime Value BETA

Cohort Analysis BETA

Audiences

Demographics

Interests

Geo

Behavior

Technology

Mobile

Overview **1**

Devices

Cross Device BETA

Custom

Attribution BETA

Discover

Admin

Overview

All Users
100.00% Users

+ Add Segment **2**

SHARE EDIT INSIGHTS

Jan 1, 2018 - Mar 31, 2018

All Users

Paid Traffic

Choose segment from list

+ NEW SEGMENT Import from gallery Share segments

VIEW SEGMENTS

Segment Name	Created	Modified	Actions
<input type="checkbox"/> Non-bounce Sessions			Actions
<input type="checkbox"/> Non-Converters			Actions
<input type="checkbox"/> Organic Traffic			Actions
<input checked="" type="checkbox"/> Paid Traffic 3			Actions
<input type="checkbox"/> Performed Site Search			Actions
<input type="checkbox"/> Referral Traffic			Actions
<input type="checkbox"/> Returning Users			Actions
<input type="checkbox"/> Search Traffic			Actions

4 Apply Cancel

REPORTS

Realtime

Audience

Overview

Active Users

Lifetime Value BETA

Cohort Analysis BETA

Audiences

Demographics

Interests

Geo

Behavior

Technology

Mobile

Overview

Devices

Cross Device BETA

Custom

Attribution BETA

Discover

Admin

Plot Rows Secondary dimension Sort Type: Default

Users

Users

Contribution to total: Users

Device Category	Users	Users	Contribution to total: Users
All Users	208,336 % of Total: 100.00% (208,336)	208,336 % of Total: 100.00% (208,336)	
Paid Traffic	4,760 % of Total: 2.28% (208,336)	4,760 % of Total: 2.28% (208,336)	
1. desktop			
All Users	134,840	65.13%	
Paid Traffic	1,773	37.25%	
2. mobile			
All Users	64,639	31.22%	
Paid Traffic	2,774	58.28%	
3. tablet			
All Users	7,562	3.65%	
Paid Traffic	213	4.47%	

5

All Users

Paid Traffic

Show rows: 10 Go to: 1 1 - 3 of 3

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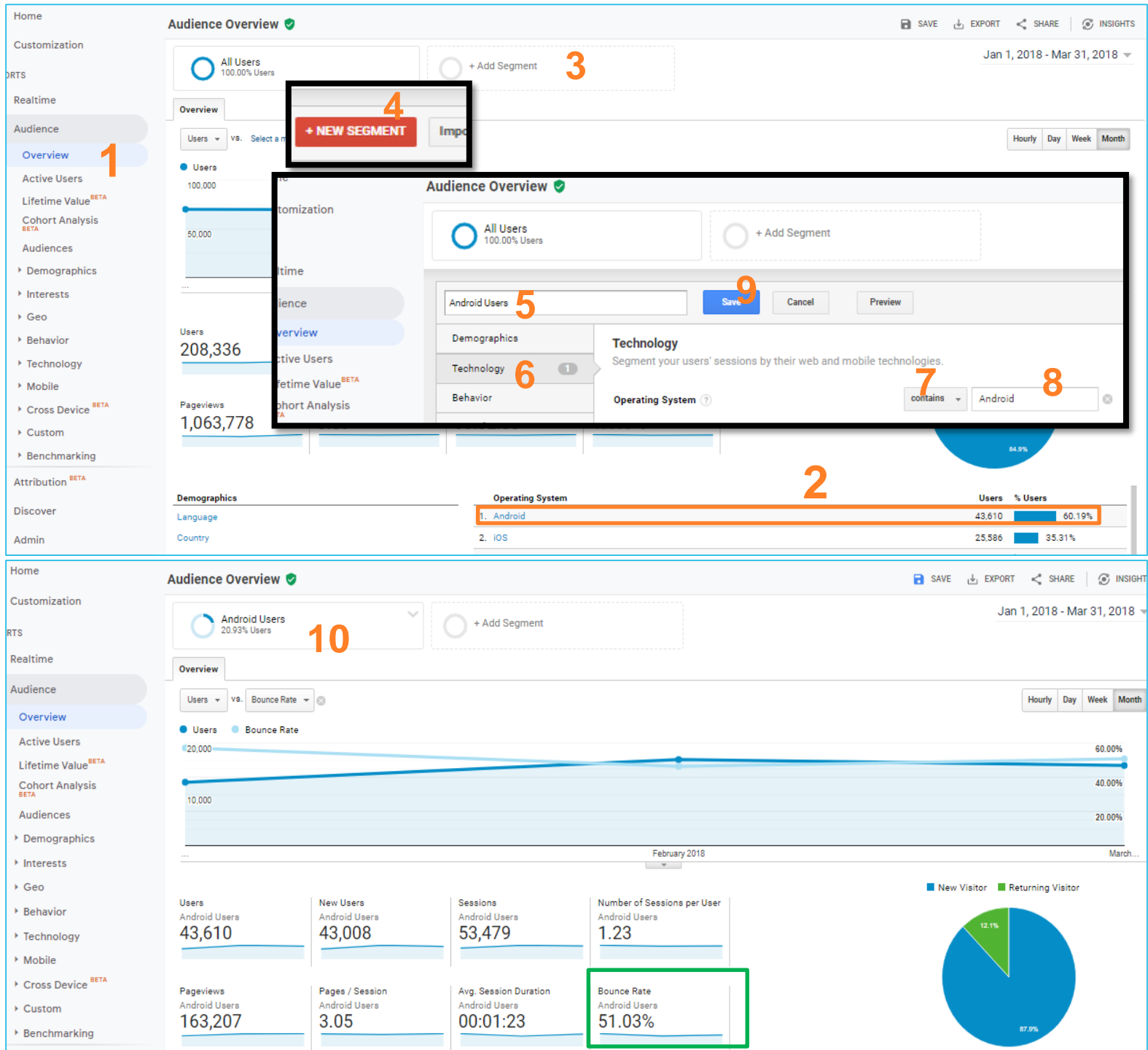


Segmentation



Audience Segment: Characteristic

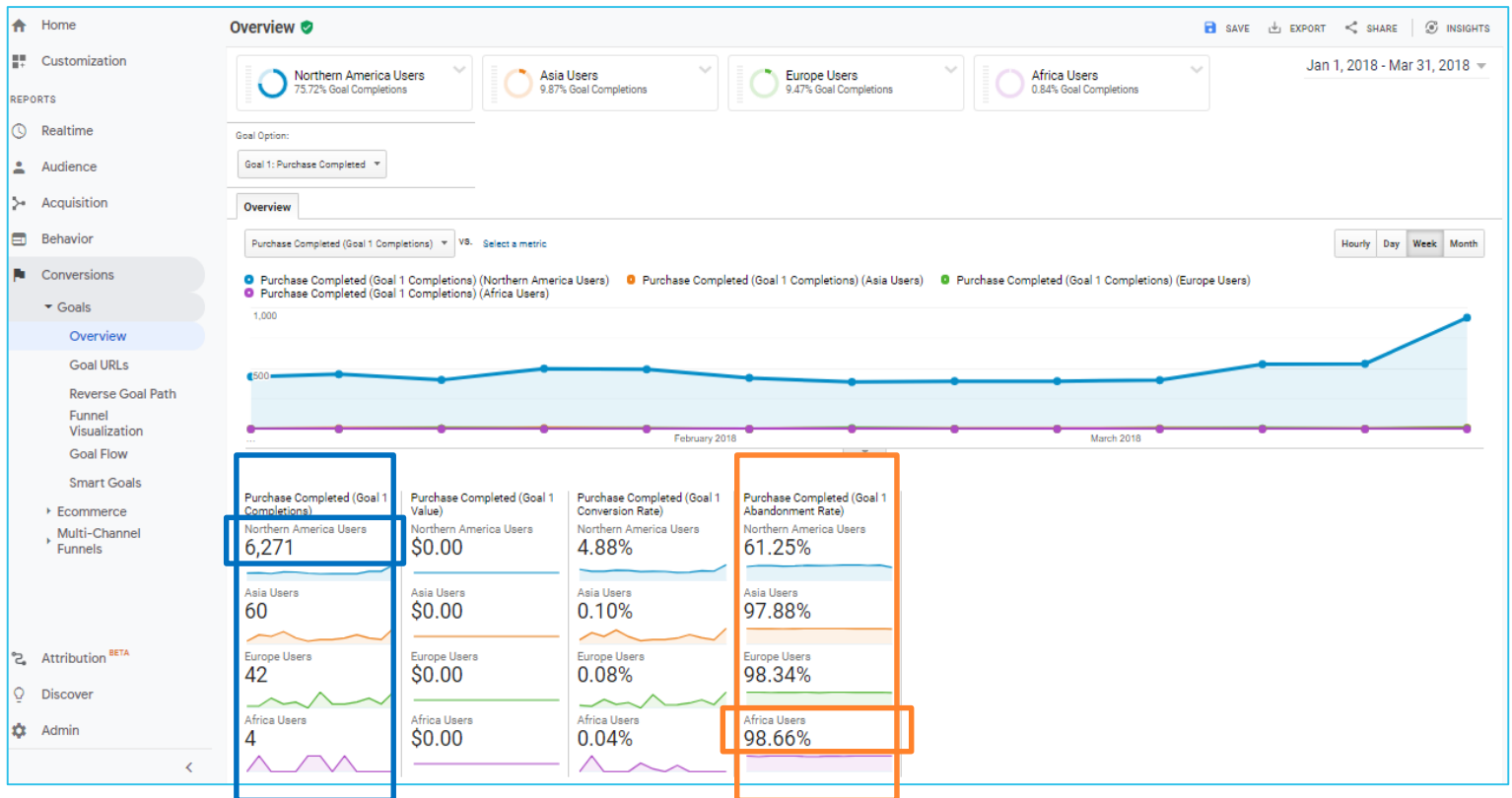
Android operating system users were forming the majority of All users of the website during the three months, so let's put them in a characteristic segment.



Let's answer a question, **Did Android Users were satisfied with the site services?** From the bounce rate (percentage of single-page sessions in which there was no interaction with the page. A bounced session has a duration of 0 seconds), it looked that they were somewhat satisfied but there might be a room for more improvements, such as reducing size of web-pages elements and rethinking a bout more easier attractive interactive design for web-pages on android operating system .

Audience Segment: Geography

Here we have created four geography segments of website users according to their Geo-location: three segments of users in continents (Africa, Asia and Europe), and one segment for Northern America subcontinent users.



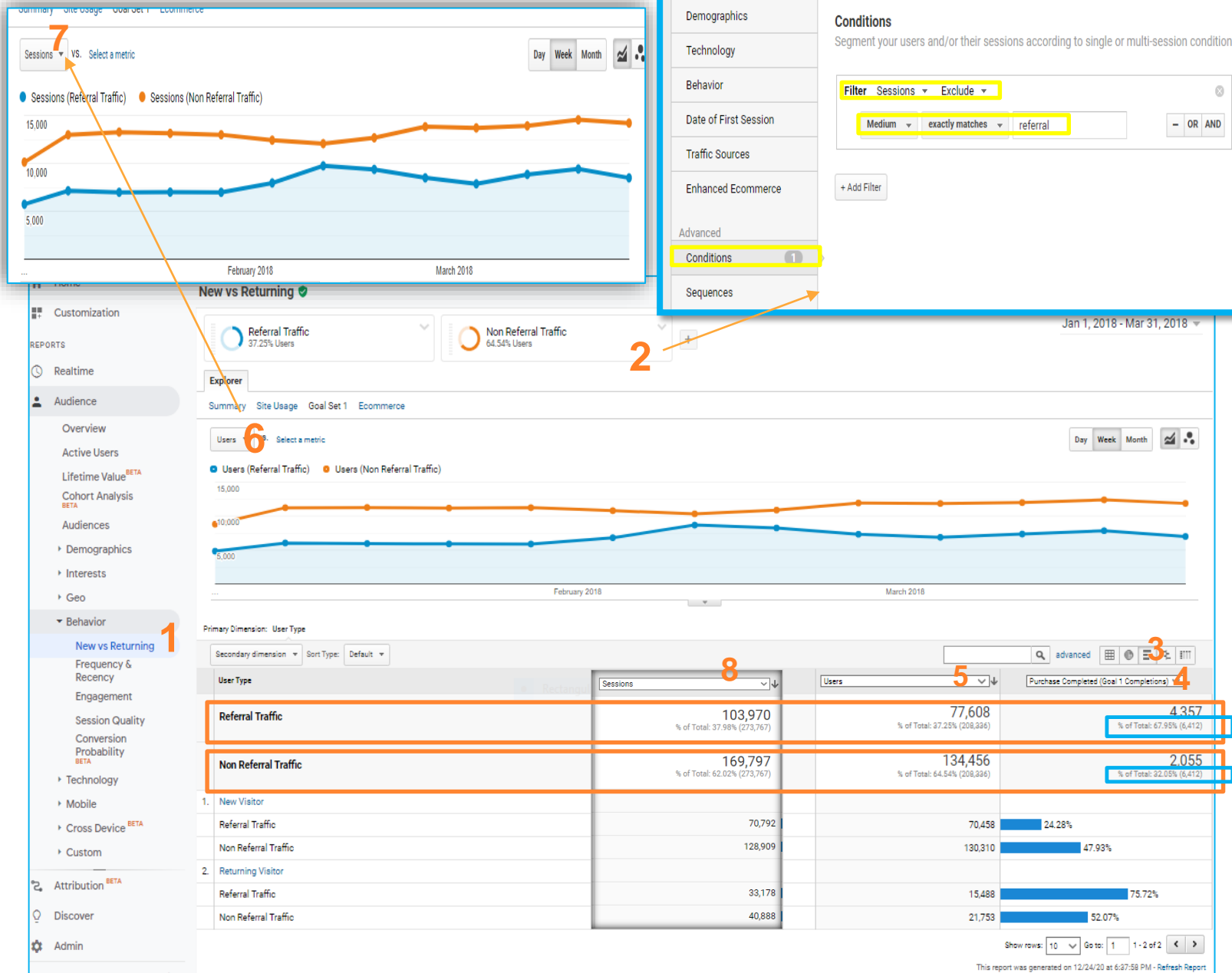
Which geo-location had the highest number of users who completed purchases during the three months? And which one had the highest Abandonment rate for completing purchases? Why could that be?

We can see from the screenshot that Northern America subcontinent had the largest number of users who did complete purchases. On other side, Users in Africa had the highest Abandonment rate of completing purchases.

This could happen due to the farness of distances among users and Google Merchandise stores, causing more costing for far users.

Audience Segment: User Behavior

Here we have two segments upon user behavior. 'Referral Traffic' system segment, and created one called 'Non Referral Traffic' segment.



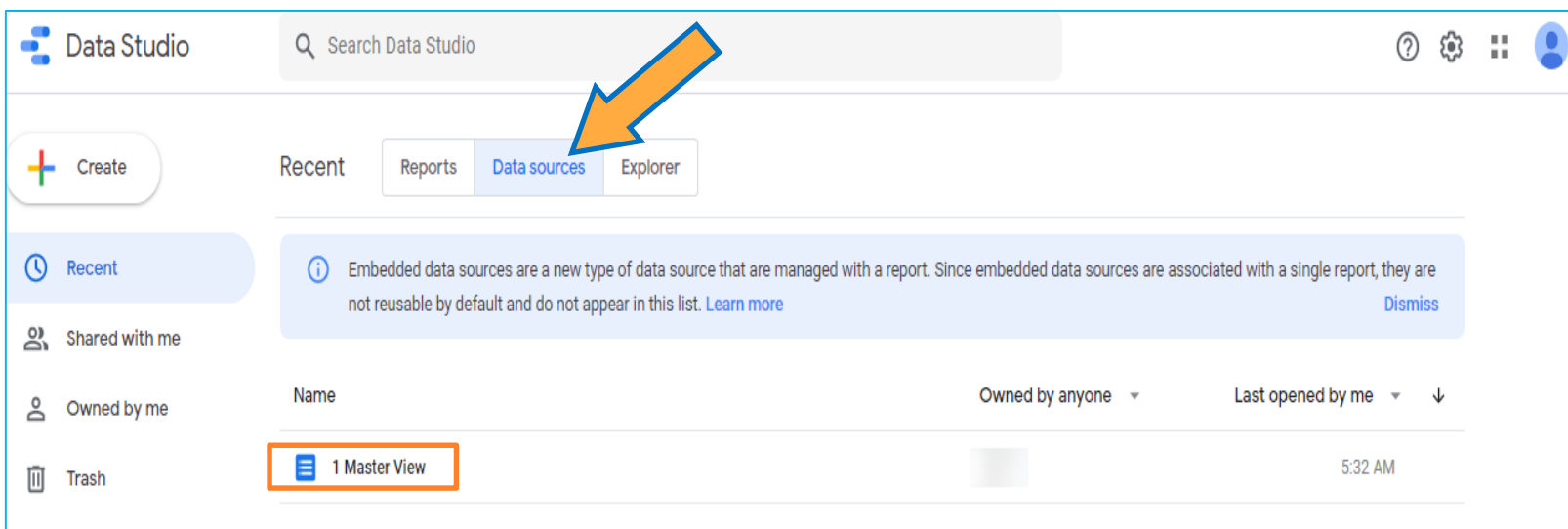
So, Which segment did better in completing purchases through the three mentioned months?

- When looking to the screenshots, it comes to eyes that users who visited the site through referral channels contributed more purchases completing than who came through non referral ones, though non referral traffic had the higher counts of sessions and users.

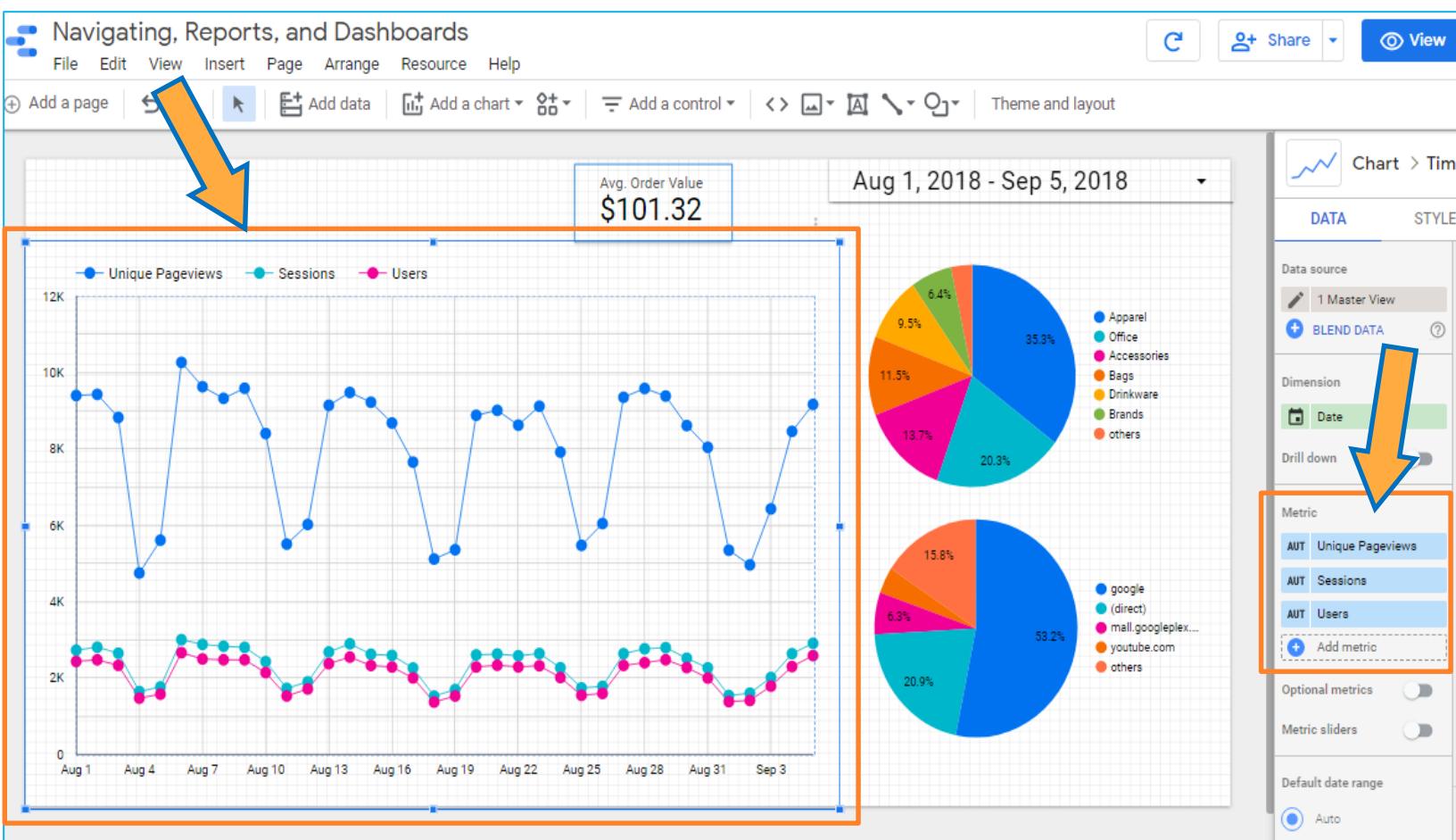
Part Two:

Connecting a Data Source and Creating a Custom Dashboard

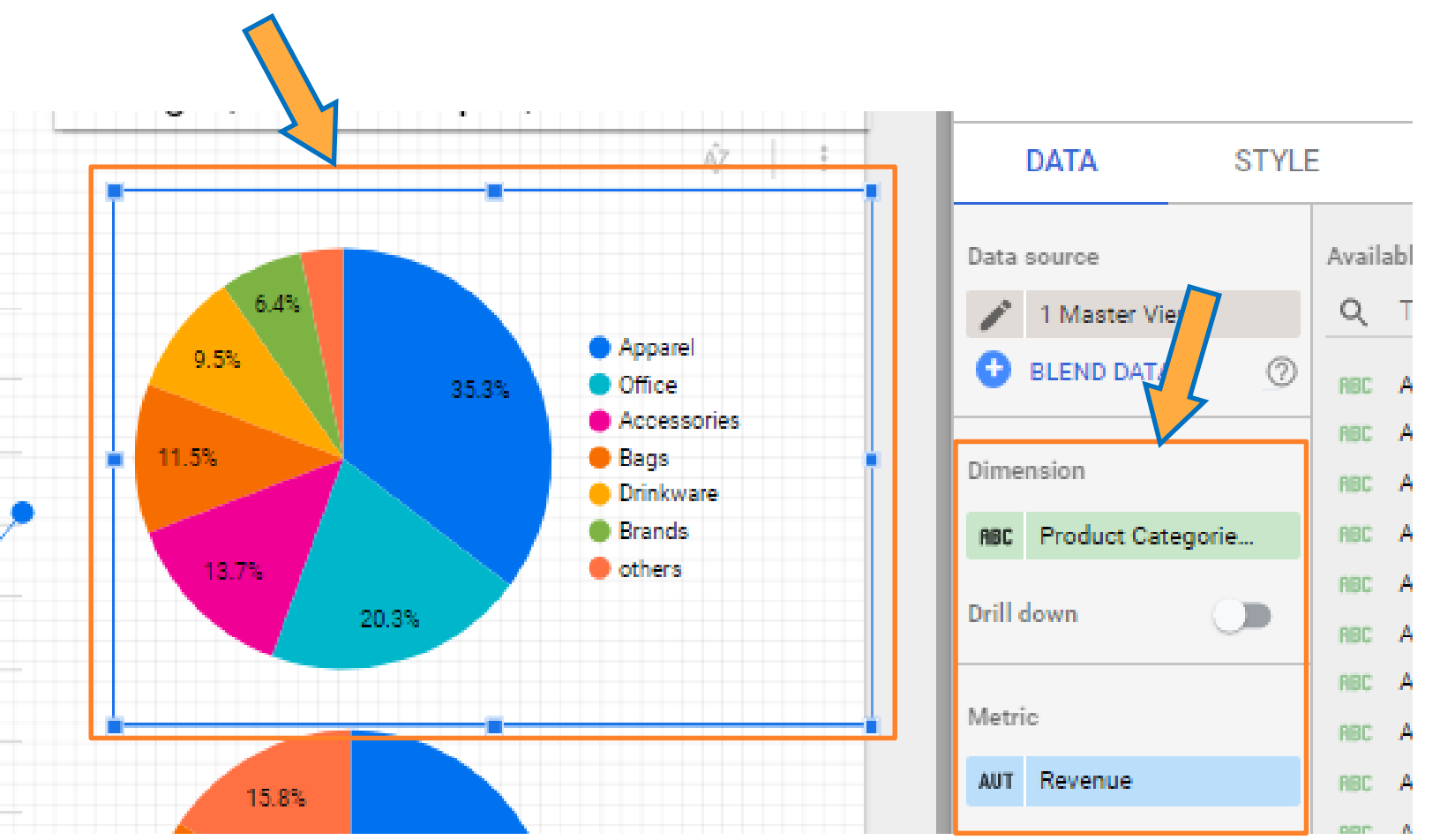
1. Merchandise Store Draft Dashboard: Built on the Master View



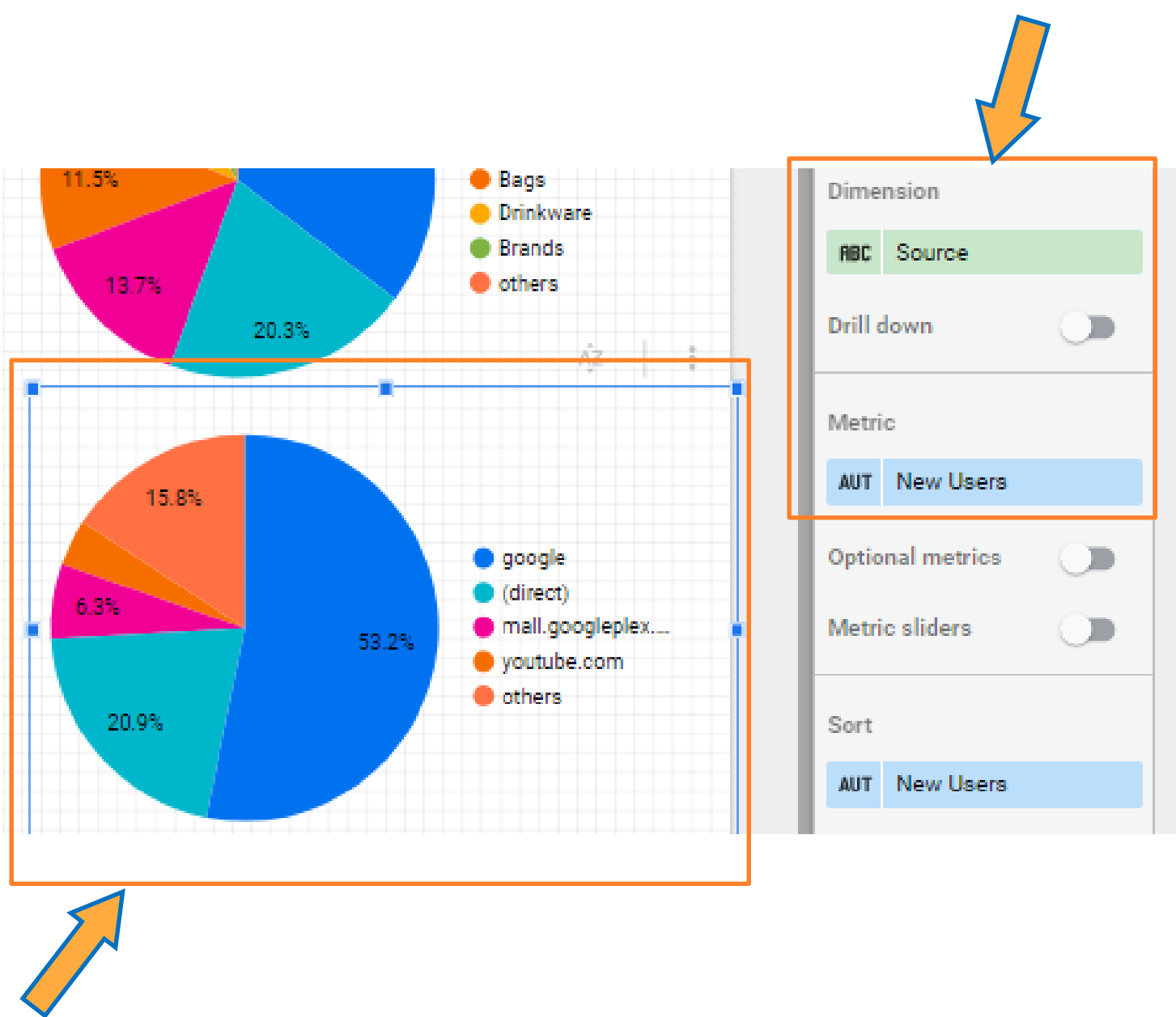
2. Merchandise Store Draft Dashboard: Time Series chart



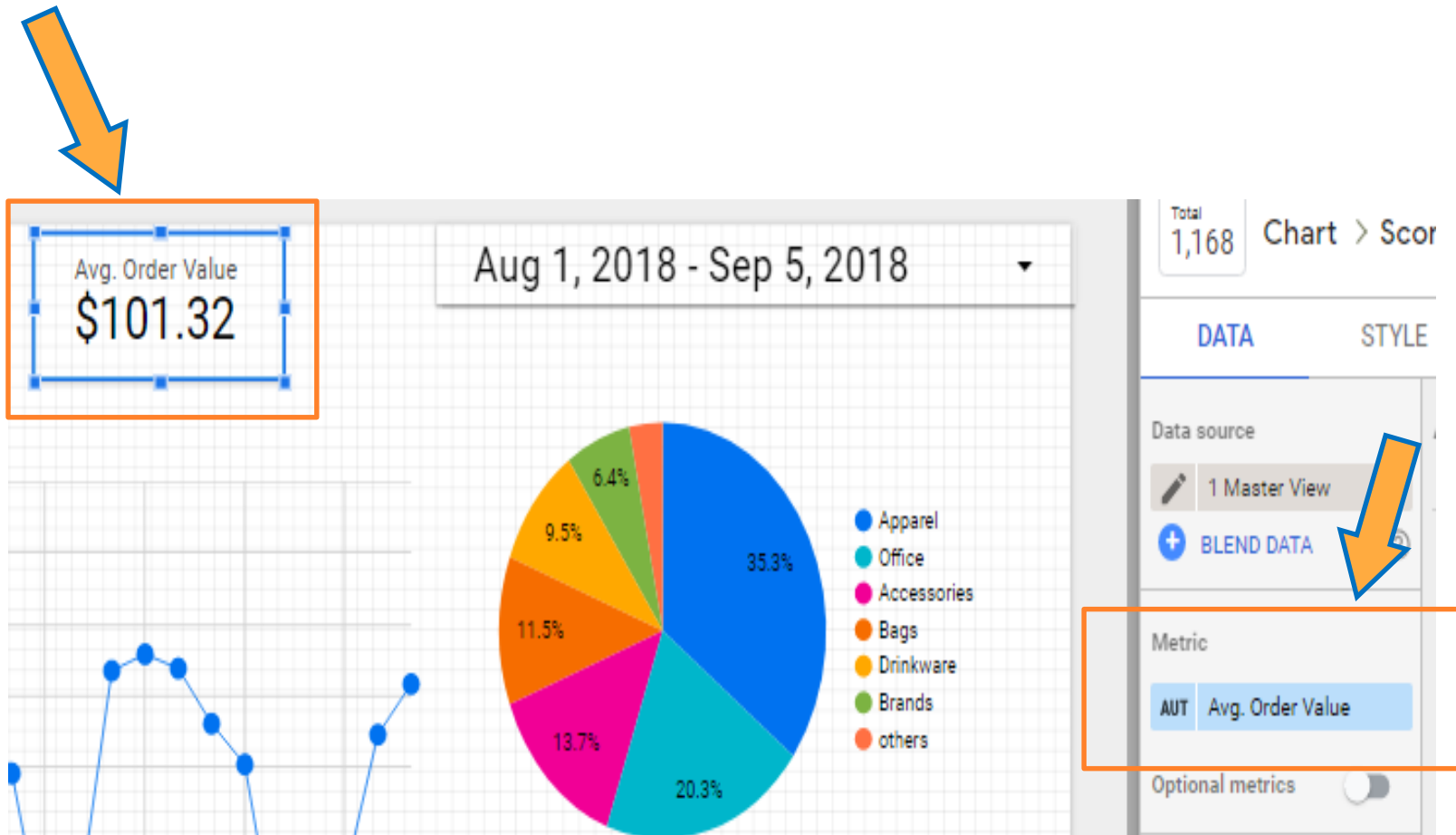
3. Merchandise Store Draft Dashboard: Pie chart, 7 slices



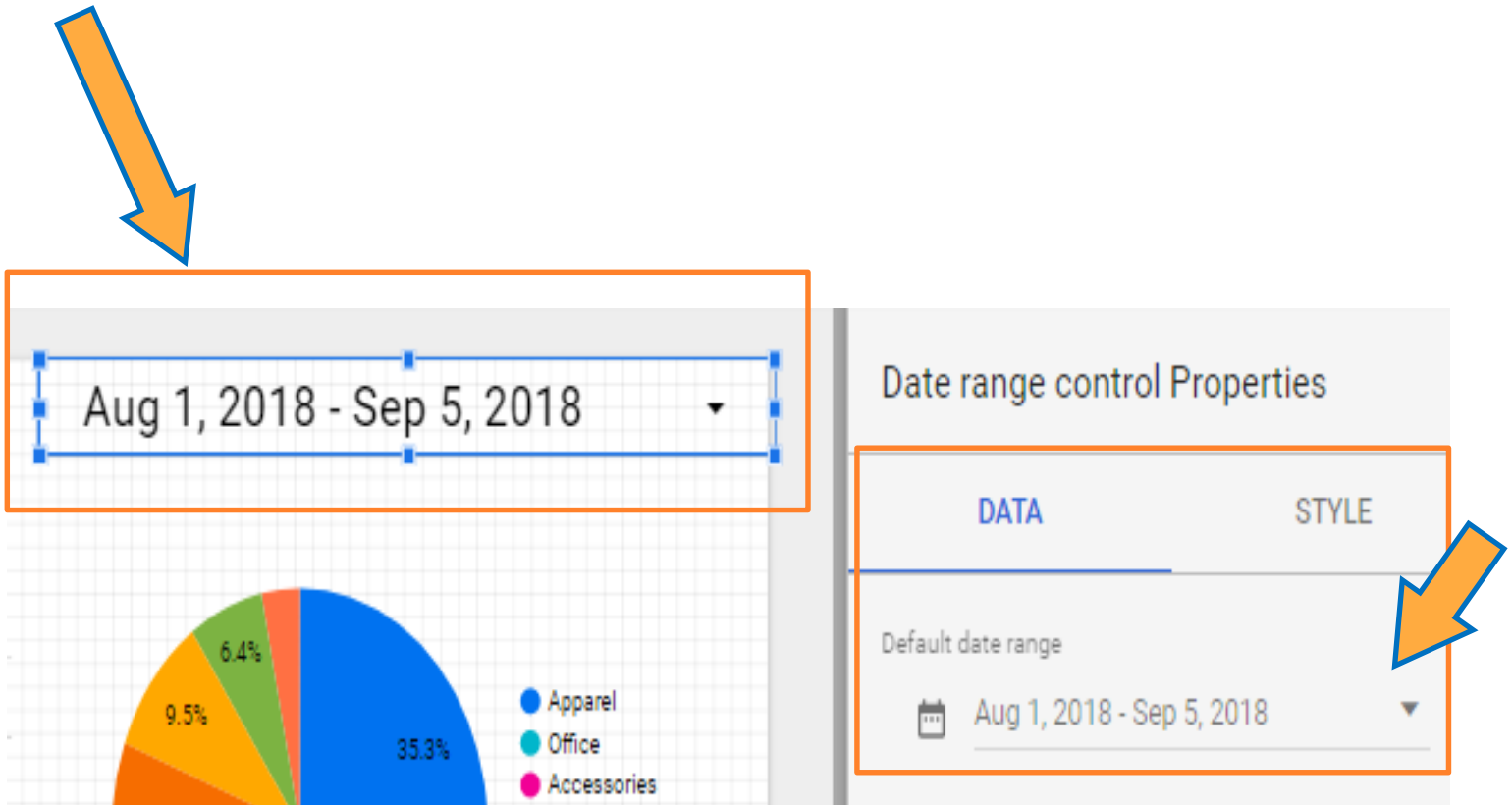
4. Merchandise Store Draft Dashboard: Pie chart, 5 slices



5. Merchandise Store Draft Dashboard: Scorecard



6. Merchandise Store Draft Dashboard: Date Range Control



THANKS

Marketing Analytics Nanodegree Program

Google Analytics