



# Marketing Web Analytics and Insights

## Lesson 6



# Last Week...

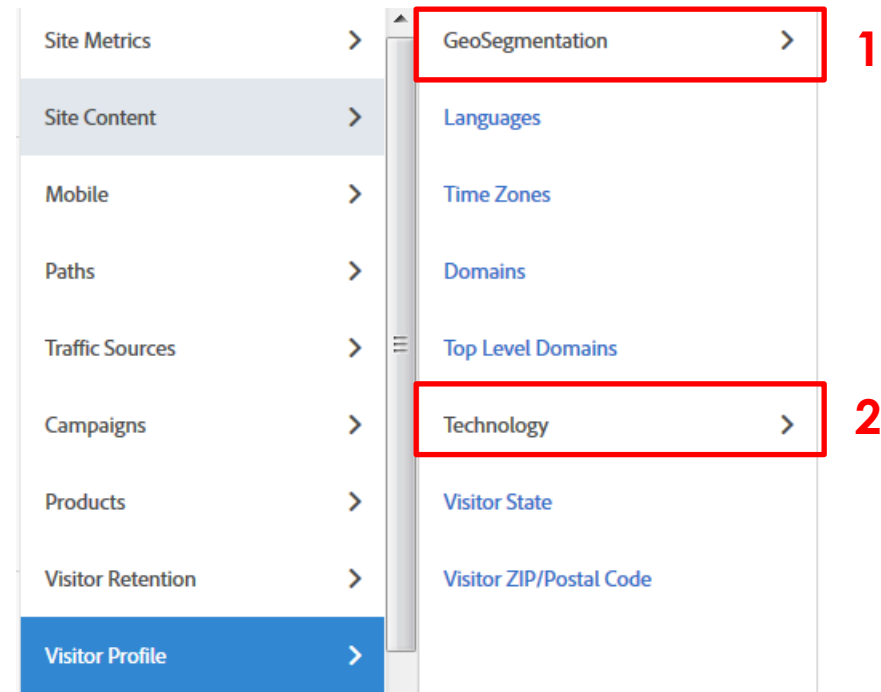
- Visitor Profile
- Importance of Mobile Traffic
- Site Content
- Product Saint Classification

# Visitor Profile

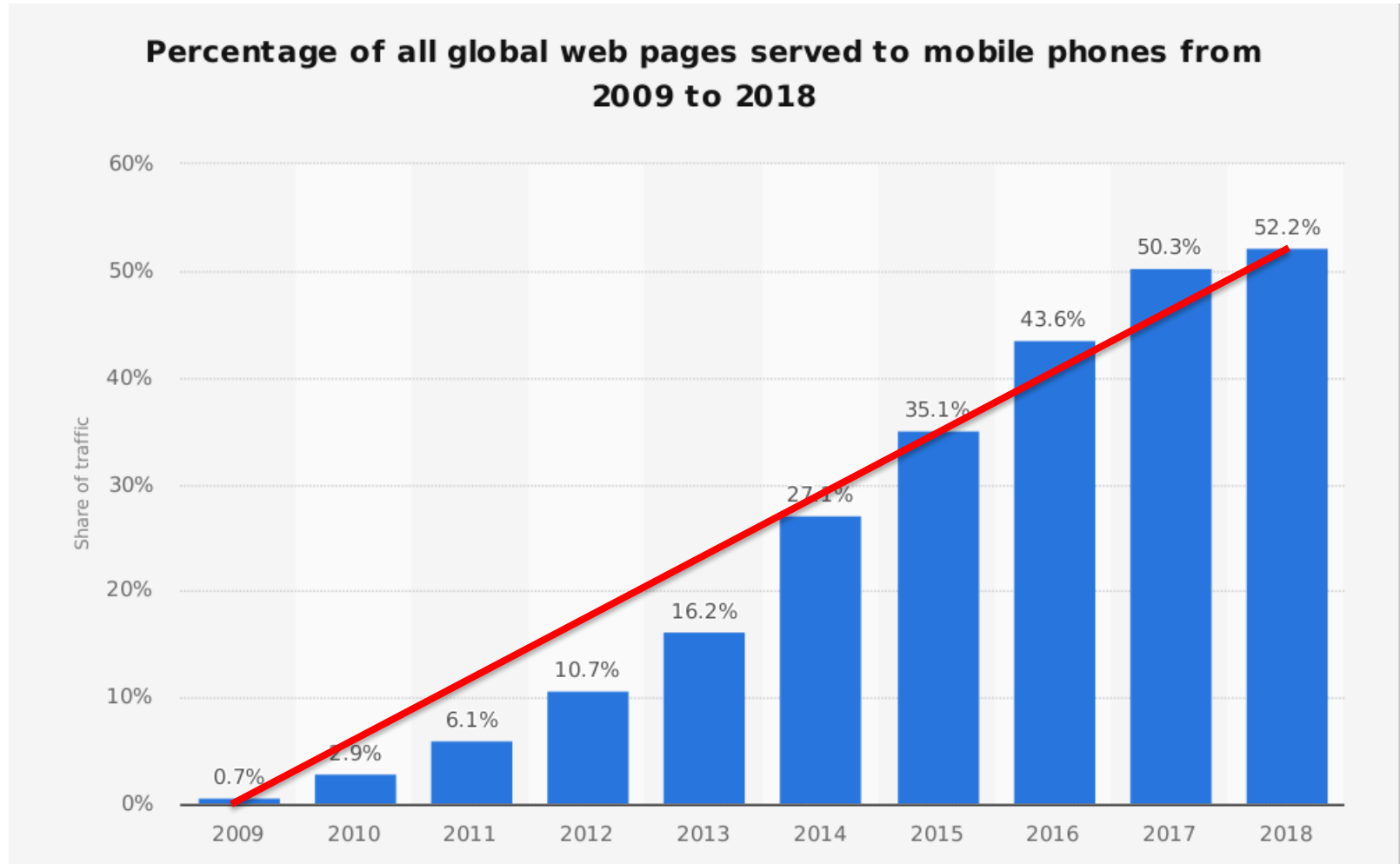
Used to understand “who the people coming to our site” are

Most important folders are:

1. GeoSegmentation
2. Technology



# The Importance of Mobile Traffic



Source: Statista

# Product Saint Classification

SKU: abc00000001

SKU	Category	Department	Department Name	Class	Class Name	Product Name	Vendor
abc00000001	Women's Apparel	980	Dresses	11	Daytime Dresses	Red Velvet Dress	Valentino

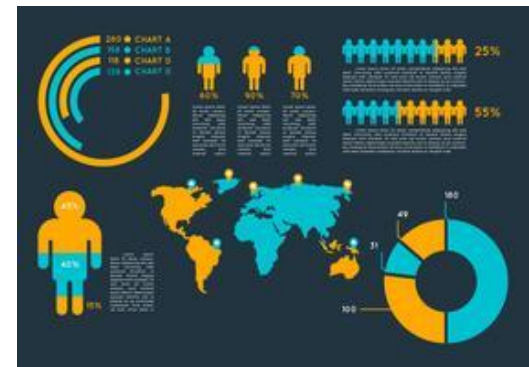
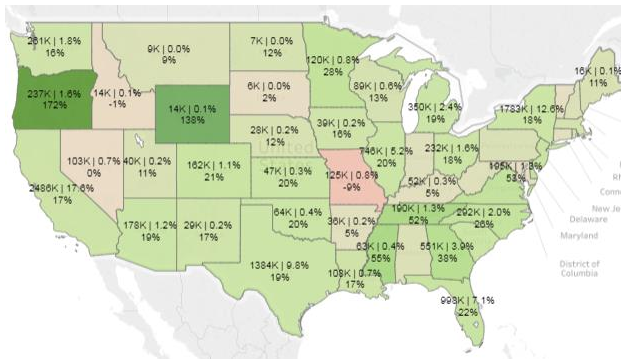
Class	Marketing Category	Marketing Vendory Type	Marketing Price Point
11	Apparel	Luxury	Medium

# Visualizations

# Where are we?

- We have learned about the different reports that exist and the kinds of business questions we can answer
- We have added traffic and conversion metrics to those reports to provide useful insights

How to **configure and customize** your reports and visualizations



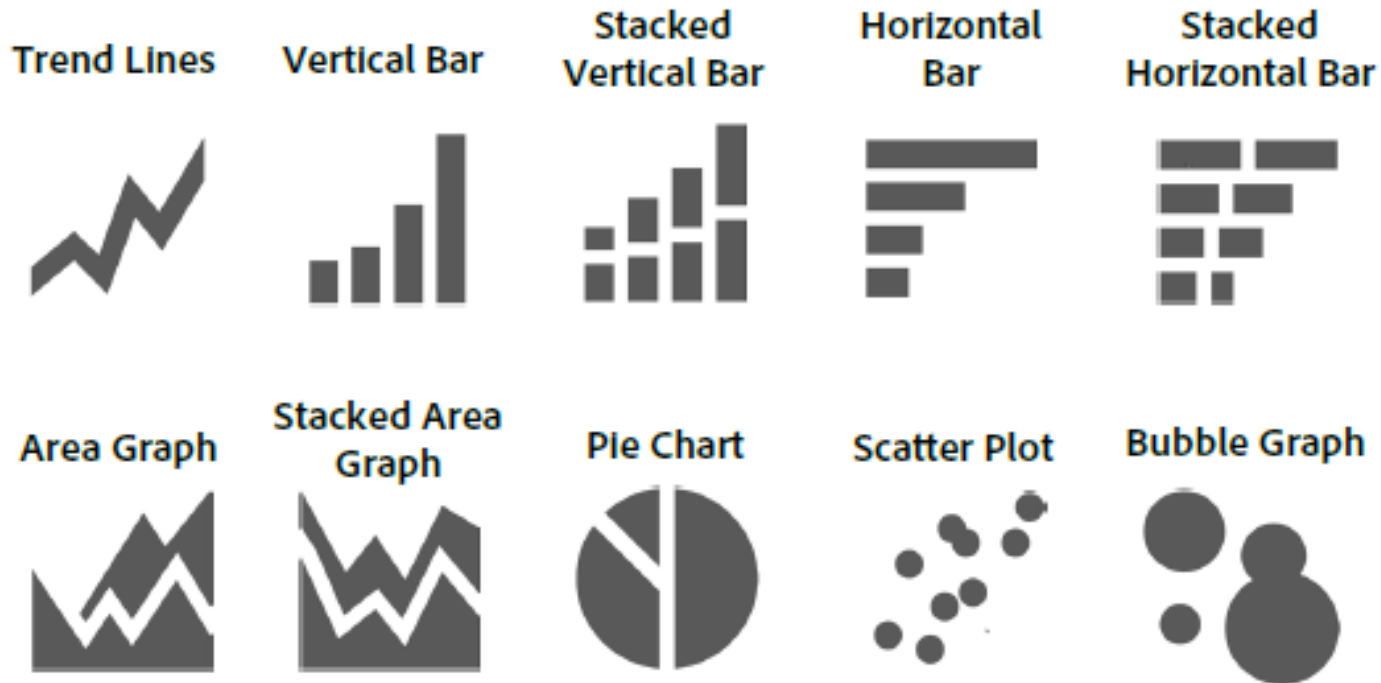
# Objectives

- Display information in ways that are **clearer** and more **effective**
- Put data into a **context** that can be easily understood
- Dig deeper into the data for **actionable** insights



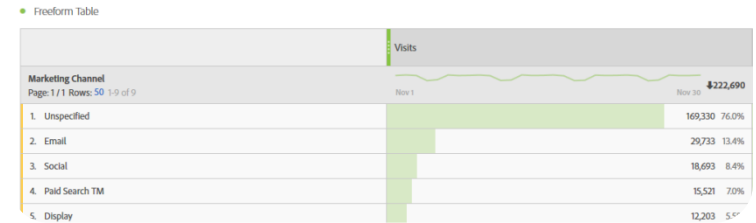
# Graph Type in Report & Analytics

- Visualizations are basic and not customizable



# Visualization in Workspace

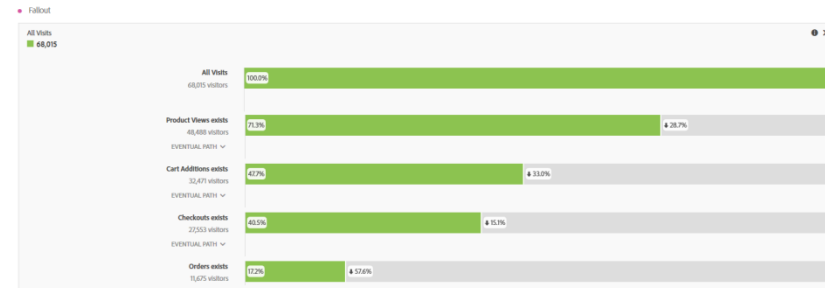
Freeform Table: customized table of data using dimensions, segments, metrics



Cohort Table: group users based on completion of event

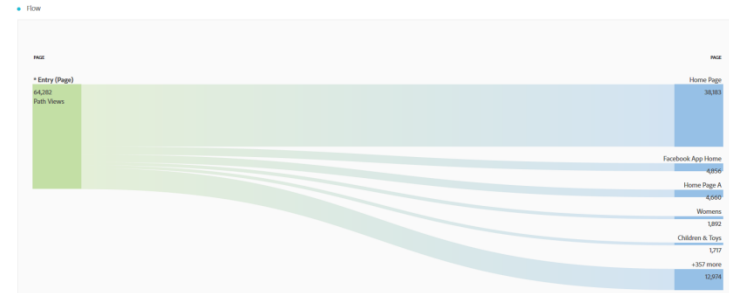
Cohort	Included	Week 1
Oct 30 - Nov 5	4,224	90 2.1%
Nov 6 - Nov 12	4,187	78 1.9%
Nov 13 - Nov 19	4,200	75 1.8%
Nov 20 - Nov 26	4,187	96 2.3%
Nov 27 - Dec 3	4,168	

Fallout: how visitors successfully proceed to desired checkpoints

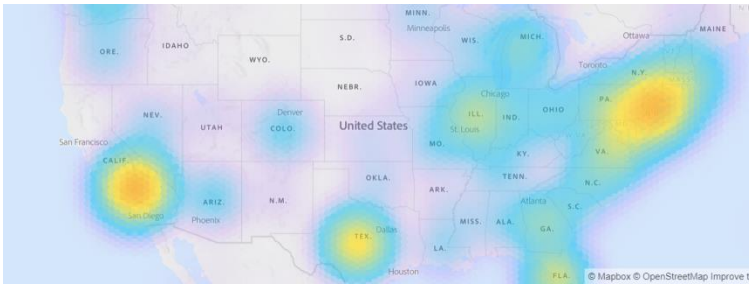


# Visualization in Workspace

Flow: flow of visitors from one checkpoint to the next



Map: identify data across geographic dimensions

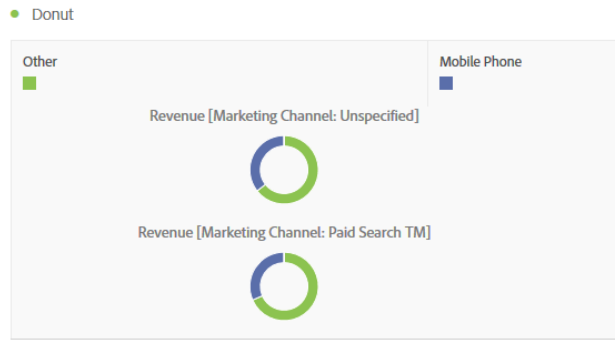
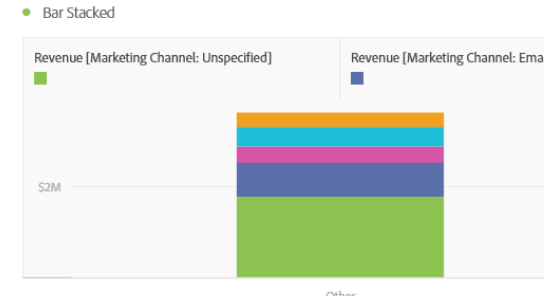


Area: visualize the area expressed by the intersection of two or more metrics



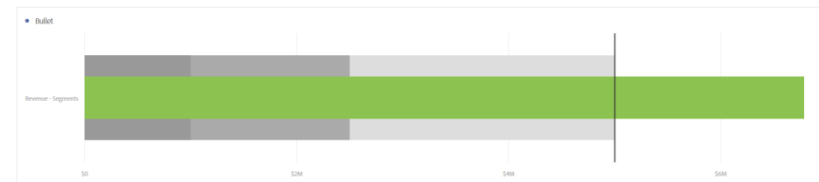
# Visualization in Workspace

Bar: vertical bars representing various values across metrics



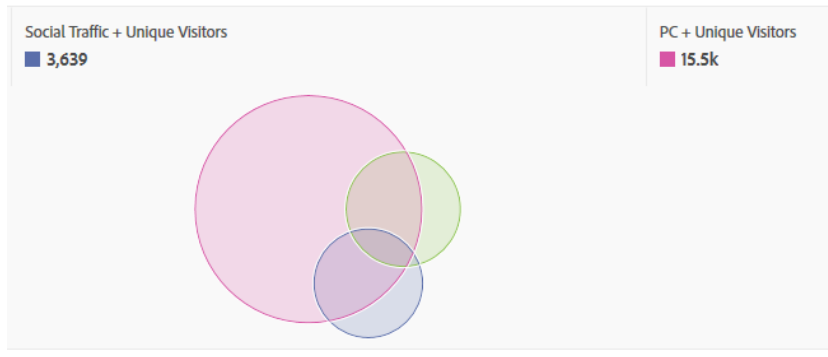
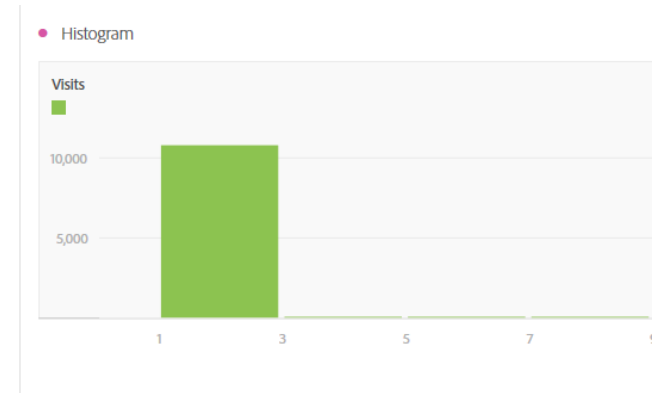
Donut: similar to pie chart

Bullet: primary measure vs other, with qualitative range of performance (poor, satisfactory, good)



# Visualization in Workspace

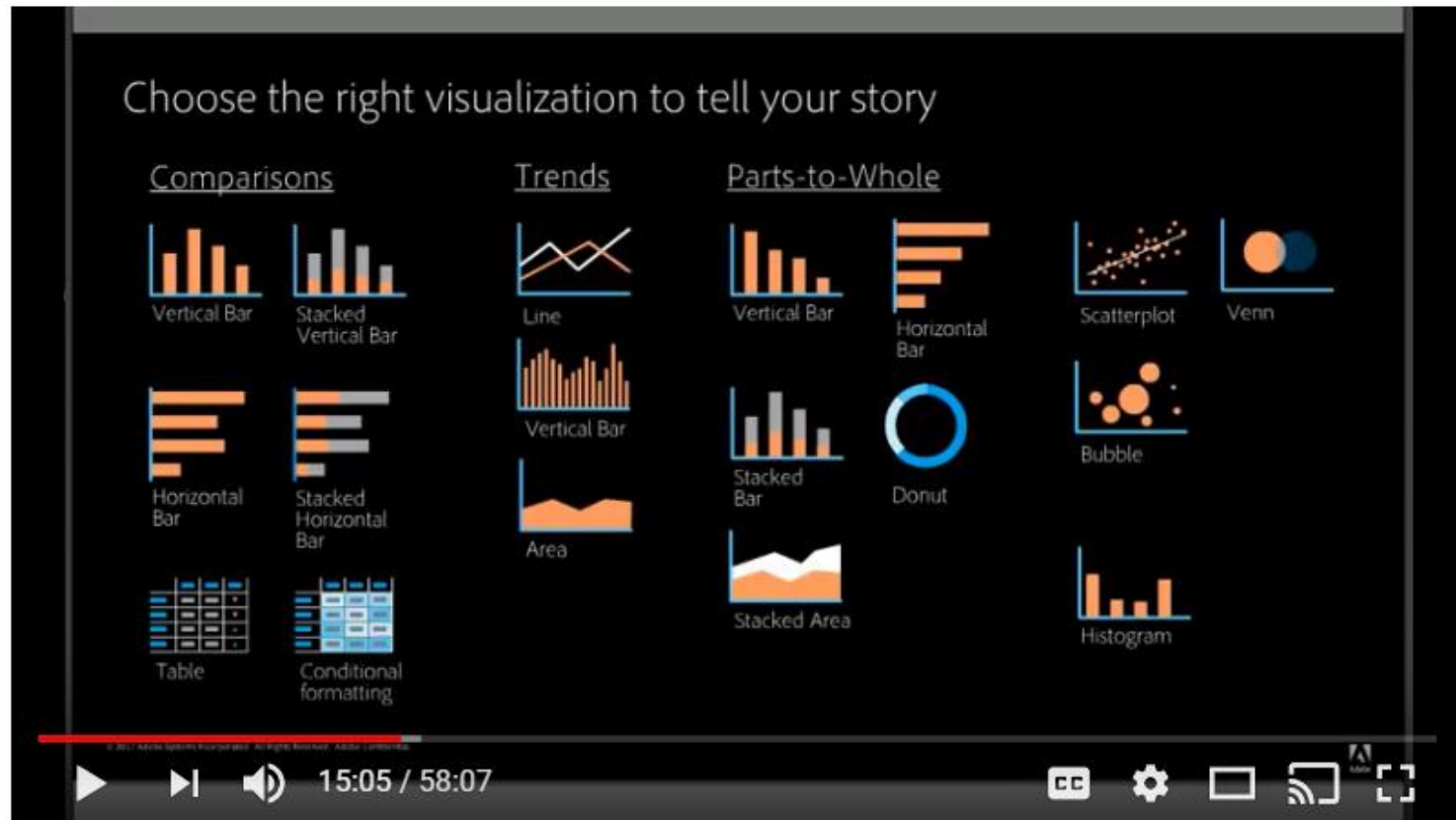
Histogram: distribution of numerical data in group of ranges



Venn: comparison of 2 elements and size of overlap

Other: Scatter, Summary Change/Number, Text, Treemap

# Visualization in Workspace (Optional)



[Click here for video](#)

# Metric Builder

# Calculated Metrics

You can create calculated metrics from existing metrics, numbers, operations (add, subtract, multiply, divide), segments and **advanced mathematical functions**.

The screenshot shows the 'New Calculated Metric' interface in Google Analytics. On the left, there is a sidebar with a search bar and two categories: 'DIMENSIONS' and 'METRICS'. Under 'DIMENSIONS', there are options for Marketing Channel (Track...), Mobile Device Type, Page, Tracking Code, and US States. Under 'METRICS', there are options for Visits, Revenue, Unique Visitors, Product Views, and Cart Additions. Below these is a 'SEGMENTS' section with the option for PC. The main area is titled 'New Calculated Metric' and contains several fields: 'Title' (empty), 'Description' (empty), 'Format' (set to 'Decimal'), 'Decimal Places' (set to '0'), 'Show Upward Trend As' (set to 'Good (Green)'), 'Tags' (set to 'Add Tags'), 'Summary' (empty), and 'Definition' (empty). A 'Preview' section on the right shows a chart with the title '[Untitled]' and the text 'No Data Yet'. The chart has a date range from 'October 2017' to 'January 2018' and a legend for 'Product Compatibility' with a value of 'None'. At the bottom right of the 'Definition' field, there is an 'Add' button.

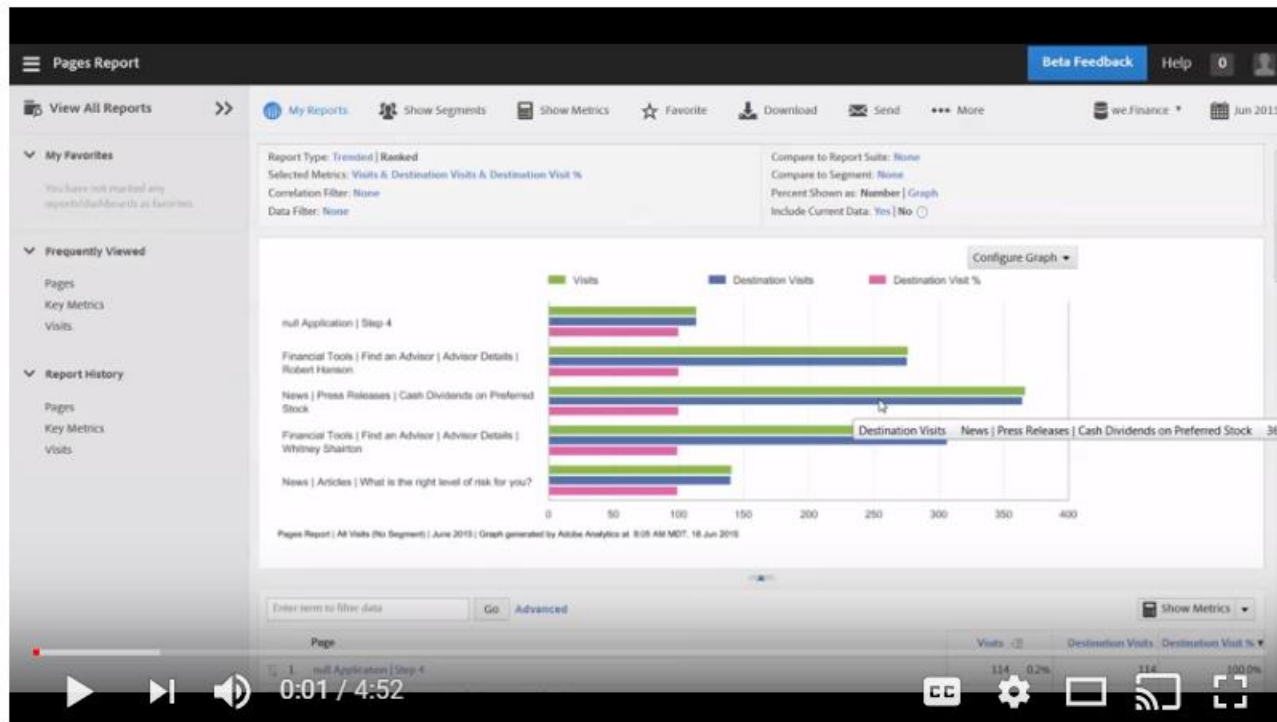


# Calculated Metrics Format

There are 4 formats for calculated metrics:

- Decimal (#)
- Percent (%)
- Currency (\$)
- Time (HH:MM:SS)

# Calculated Metrics



Calculated metrics: Functions

[Watch video here](#)

# Metrics Allocation

- Linear: credit is split equally between a variable's values
- First Touch: full credit is given to the first variable's value
- Last Touch: full credit is given to the last variable's value
- Visit Participation: full credit is given to every variable's value within the visit
- Reporting Window Participation: full credit is given to every variable's value within the analyzed period

# Calculated Metrics Examples

Calculated Traffic Metric Examples

Name	Formula	Type	Description
Weighted Bounce Rate	$(\text{Bounces}/\text{Entries}) * (\text{Page Views}/\text{Total Page Views})$	Percent	Same as Bounce Rate, but gives a higher value to pages that are viewed more often on the site, thus pushing your most popular pages with this problem to the top of the list.
Page Views per Visit	Page Views/Visits	Numeric	When applied at a site level: What is the average number of pages in a visit? When applied in the Pages report: What is the average number of times that this specific page was viewed per visit?
Page Views per Visitor	Page Views/Daily Unique Visitors, Page Views/Weekly Unique Visitors, etc.	Numeric	What is the average number of pages per visitor (daily uniques, weekly uniques, monthly uniques, etc.)?
Exit Rate	Exits/Visits	Percent	In the Pages Report, when a page is part of a visit, how often is it the exit page?
Entry Rate	Entries/Visits	Percent	In the Pages Report, when a page is part of a visit, how often is it the entry page?
Multi-Page Visit Entry Rate	$(\text{Entries} - \text{Single Access}) / \text{Entries}$	Percent	In the Pages Report, when a page is the entry page, how often does it lead to at least one other page?
Visits per Visitors	Visits/Daily Unique Visitors, Visits/Weekly Unique Visitors, etc.	Numeric	What is the average number of visits per unique visitor (daily, weekly, monthly, etc.)?
Page Views, No Reloads	Page Views - Reloads	Numeric	How many page views did a page get, not counting reloads, but counting back button or additional path views to the page?
Reload Percentage	Reloads/Page Views	Percent	What percentage of the page views were reloads of that page?

Calculated Conversion Metric Examples

Name **	Formula	Type	Description
Average Order Value	Revenue/Orders	Currency	Average revenue per order
Order Conversion	Orders/Visits	Percent	What percentage of visits results in an order?
Buyer Conversion	Orders/Visitor	Percent	What percentage of visitors results in an order?
Checkout Conversion Rate	Orders/Checkouts	Percent	What percentage of checkouts results in an order?
Checkout Initiation Rate	Checkouts/Visits	Percent	What percentage of visits results in a checkout?
Average Order Size	Units/Orders	Numeric	How many items are purchased per order, on average?
Event Conversion	Events/Visits	Percent	Usable for ANY custom success event: What is the percentage of visits that result in that success event? For example, registrations per visit, form completions per visit, downloads per visit, etc.
Product View Conversion	Orders/Product View	Percent	Available in the Products reports only, the percentage of product views that results in an order.
Abandoned	Cart Adds - Orders	Numeric	How many cart additions did not result in an order? Effective at a product level as well as a site level.
Abandonment Rate	$1 - (\text{Orders}/\text{Cart Adds})$	Percent	What percentage of people put something in their cart and then don't buy it? This can be very interesting at a product level.
Abandoned Revenue	$(\text{Revenue}/\text{Orders}) * (\text{Cart Adds} - \text{Orders})$	Currency	What is the general amount of revenue that has been abandoned? Revenue is based on the value of the average order.

# Calculated Metrics Examples

Functions and Segments			
Name	Formula	Metric Type	Description
Estimated Revenue	$(\text{Revenue} / \text{Visits}) * \text{percentile}(\text{Visits}, 85) * 0.80$	Currency	Estimate what a piece of content would generate in terms of revenue if it were promoted such that it was in the 85 <sup>th</sup> percentile, weighted at 80% because conversion isn't as high for trafficked pages.
Weighted Bounce Rate	$\text{mean}(\text{Bounce Rate}) * (1 - (\text{Page Views} / \text{maxv}(\text{Page Views}))) + (\text{Bounce Rate} * \text{Page Views} / \text{maxv}(\text{Page Views}))$	Percent	Pushes the "interesting" traffic to the top and bottom of the report. Sort or reverse sort this metric on the Pages report to find dogs and diamonds. Be sure to include the real Bounce Rate in the report.
Percent Mobile Visitors	$(\text{Unique Visitors Metric in a segment where Device Type is a Phone or Tablet}) / \text{Unique Visitors Metric}$	Percent	Percentage of visitors who visit content from a mobile device. Use on pages report to see which content is frequented by mobile devices.
Filtered Revenue per Visit	$\text{If } (\text{visits} > 100, \text{revenue} / \text{visits}, 0)$	Currency	Revenue per Visit for products with non-trivial traffic. Uncovers products with opportunity for promotion, while filtering out products with high revenue per visit but little traffic and, therefore, little opportunity.
Standard Deviations	$\text{Z-score}(\text{metric})$	Decimal	The number of standard deviations an item is away from the mean. Use this in a ranked or trended report to identify outliers in the report for any metric.
New Visitors	Unique Visitors Metric in a segment where Visit Number = 1	Number	Shows the number of new visitors acquired. Use this globally or in ranked reports to identify how new visitors interact with the site.

# Report Breakdowns

# Report Breakdowns

These are a form of **segmentation** that helps you better understand how 2 or more reports **relate** to each other.

There are 2 type of breakdowns:

1. Traffic breakdowns
2. Conversion breakdowns

# Traffic Breakdowns

- A traffic report (sProp) can be broken down by another traffic report, but **not** by a conversion report (eVar)
- They are multi-level, meaning that you can break down up to **20 reports** by each other
- The only applicable metric for traffic breakdown is **page views**



# Conversion Breakdowns

- A conversion report (eVar) can be broken down by another conversion report, but **not** by a traffic report (sProp)
- They are **single level**, meaning that you can only break down one report by another

# Practice Problem #1

For January 2024:

- Create a RPV metric for products with non-trivial traffic (visits >100 ). This is useful for uncovering products with opportunity for promotion.
- Which product has the highest RPV with non-trivial traffic?

RPV (>100 visits)	
Product	
Page: 1 / 27 > Rows: 50 1-50 of 1,311	Jan 1 Jan 31 ↓ \$96.87 out of \$96.87
1. Pumi Luggage Set	\$1,083.60 1,000.0+%
2. Swiss Rocks Luggage	\$995.13 1,000.0+%
3. Black Automatic Watch	\$768.94 793.8%
4. Toiletry Organizer	\$753.85 778.2%

# Practice Problem #2

For January 2024:

1. Create a standard deviation metric for cart additions (include zero).
2. Create a mean metric for cart additions(include zero).
3. Identify products that are outliers (2 standard deviations above the mean).

**See next slide**

# Practice Problem #2 Solutions

Freeform ?

JJ Esquire - U of Dallas (AAI) ▾ ×



Drop a segment here (or any other component)

Jan 1, 2024 - Jan 31, 2024

## Freeform table



### Cart Additions Outliers



#### Product

Page: 1 / 14 > Rows: 50 1-50 of 695

Jan 1

Jan 31

↓ 66,429  
out of 66,429

1. LA Flare Wide Leg	1,291	1.9%
2. Basic High Waist Jean	1,245	1.9%
3. Ocean Blue Jean	1,225	1.8%
4. Not Your Mom's High-Waist Jean	1,223	1.8%
5. Bling Belt High Waist Jean	1,201	1.8%
6. Anyones Skinny Jean	1,191	1.8%
7. Straight Light Jean	1,185	1.8%
8. Super High-Rise Wide Leg Jean	1,163	1.8%
9. Bell Bottom Jean	1,145	1.7%
10. Dark Slimmer Jean	1,139	1.7%

## Practice Problem #3

For January 2024 which of the below products are outliers using revenue as metric? (use 3 standard deviation).

- a. Black Automatic Watch
- b. Canvas Charcoal Messenger Bag
- c. Flower Print Dress
- d. Albert Black Leather Bag

# Practice Problem #4

For January 2024 and “Quartz Chronograph Watch” product:

1. Which product finding method generated the most revenue?

**Browse \$123,460**

2. Which marketing channel drove the most traffic?

**Direct Load/Natural Search 1,297**

# Additional Practice Problems

# Practice Problem #5

For January 2024:

1. Create a standard deviation metric for page views (include zero).
2. Create a mean metric for page views (include zero).
3. Identify pages that are outliers (2 standard deviations above the mean).

**See next slide**



# Practice Problem #5 Solution

Freeform ?

JJ Esquire - U of Dallas (AAI) ▾ ✕



Drop a segment here (or any other component)

Jan 1, 2024 - Jan 31, 202

## Freeform table

Page Views Outliers (Fall2020)	
Page	
Page: 1 / 9 > Rows: 50 1-50 of 422	Jan 1 Jan 31 ↓ 1,017,181 out of 1,017,181
1. Home Page	107,177 10.5%
2. Shopping Cart	37,173 3.7%
3. Shopping Checkout	30,278 3.0%
4. Womens	28,128 2.8%
5. Shopping Shipping	23,467 2.3%
6. Shopping Billing	16,439 1.6%
7. Children & Toys	11,721 1.2%
8. Search Result	8,482 0.8%
9. Mens	7,925 0.8%
10. Shopping Order Confirmation	7,235 0.7%
11. Error Page	1,791 0.2%
12. Order Completion	1,145 0.1%
13. Womens:Apparel	-901 -0.1%
14. Order Satisfaction Survey	-4,503 -0.4%

# Practice Problem #6

For January 2024 which of the below products are outliers using units as metric? (use 1 standard deviation)

- a. **LA Flare Wide Leg**
- b. Pea Coat
- c. Deluxe Jeans
- d. **Bell Bottom Jean**

# Practice Problem #7

For January 2024, run a product conversion funnel report for “Straight Light Jean” and populate the below information

1. Checkouts **1,720**
2. Average Revenue per Unit **\$99.11**
3. Average Orders per Product **0.03**

# Practice Problem #8

For January which of the below products are outliers using orders as metric? (use 1 standard deviations)

- a. Striped Shirt
- b. Basic High Waist Jean**
- c. Belted Satin Dress**
- d. Ridge Jeans