



# From Data to Insights with Google Cloud

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Welcome back to the Data Insights course series. I'm Evan and I'll be your guide on your big data journey.

## Data to Insights with Google Cloud course series

01

Exploring and Preparing your Data with BigQuery

02

Creating New BigQuery Datasets and Visualizing Insights

03

Achieving Advanced Insights with BigQuery

04

Applying Machine Learning to your Data with Google Cloud



In this course, we'll cover how to connect and bring in a new datasets into BigQuery, and I can join them all together to create a proper data analytics warehouse.

Create your own data warehouse



We'll first cover what different types of data BigQuery can connect to and ingest. Which range from things like CSV files, or files at Google Cloud Storage to more nuanced concepts like querying a Google Spreadsheet directly, or ingesting things like JSON, or AVRO formats.

Partition your datasets for  
performance and cost savings

date	userid	page	...
12/1/2017	1	signup	
12/1/2017	2	home	
12/2/2017	1	home	
12/2/2017	2	home	
12/2/2017	1	home	
12/2/2017	2	signin	
12/2/2017	1	home	
12/3/2017	1	catalog	
12/3/2017	1	catalog	
12/3/2017	1	catalog	



date	userid	page	...
12/1/2017	1	signup	
12/1/2017	2	home	
date	userid	page	...
12/2/2017	1	home	
12/2/2017	2	home	
12/2/2017	1	home	
12/2/2017	2	signin	
date	userid	page	...
12/3/2017	1	home	
12/3/2017	1	catalog	
12/3/2017	1	catalog	
12/3/2017	1	catalog	

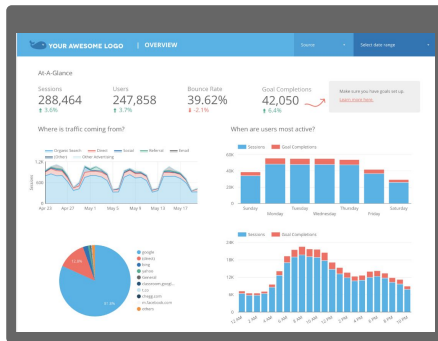
Now no topic on data storage would be complete without talking about a few of the unique ways you can partition your datasets and other flexible storage options for you to explore.

Compare permanent and  
temporary tables versus views

data-to-insights	project
▼ ecommerce	dataset
■ rev_apparel	view
■ rev_transactions	table
■ web_analytics	table

Then we'll move on to the core differences between BigQuery permanent and temporary tables, as well as logical view creation, and when you should use each of those three in your reporting applications.

Visualize and share your insights

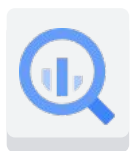


Lastly, we'll close out the course with a few data visualization options and best practices. So you can present and share your insights and interactive dashboards, for your own audiences. Let's get started first with how you can set up and use BigQuery to store your new datasets.

## Course dataset recap



Analytics



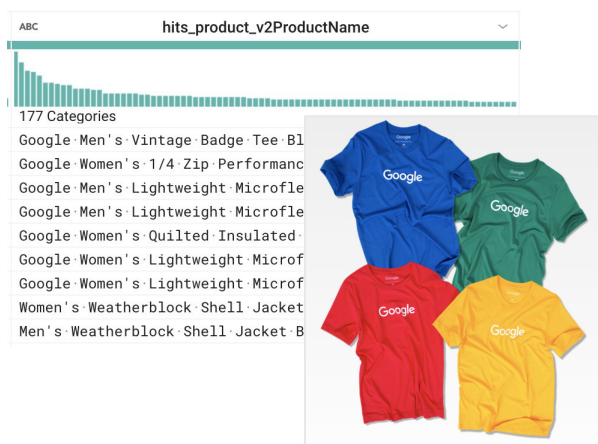
BigQuery



Dataprep

If you've taken the first course in this course series and exploring your data with BigQuery, you're already familiar with the e-commerce course dataset that we've been using so far. If you skipped the first course, here's a brief recap of the dataset that we'll be working with.

## Real-world ecommerce dataset



Dataset that you use for your hands-on labs is a year of Google Analytics records behind the Google merchandise store, which sells Google brand and merchandise like sunglasses and even t-shirts. That's over a million site hits and transaction records, to include insights like, what users were close to transacting but never completed? What top keywords are high-value customers using to reach the site? What top channels are customers going through to reach your site?