

# ECON7960 User Experience and A/B Test

Hong Kong Baptist University

Topic 3: Know User Experience

# Content

- A Model of Behavior Change
- How to Learn about Your Customer from the Experiment – Google Analytics
- Background: Wendel Chapter 2-3

# A Quick Review

- What did we learn last week
- Please use your phone to download an apps "SOCRATIVE" student version, and open it, you should see

Enter the Room Name "HUNG5085"

When most of you are ready, we can start together



Student Login

Room Name

HUNG5085

JOIN

## Points to noted



Trade off between A/B Test and MVT



The Framework of Experimentation



Typical 5 kinds of Non-rational Behaviour



5 Mechanism to focus on Behavior Pattern

# Myers-Briggs Type Indicator

Source of Energy: Extroverts, who draw energy from outside world vs Introverts, who prefer limited social relationship

Information gathering: Sensors, live in the present moment vs Intuitive, live in the future world of possibilities

Information processing: Thinker, who tend to be objective and just vs Feelers, who are subjective and social

Lifestyle: Judgers, like control and structure vs Perceivers prefer flexibility and open-ended orientation

## An Overview of the Myers-Briggs Type Indicator



# Personas

A name and picture

Demographics

Job title and major responsibilities

Goals and task in relations to your site

Environment

Behavior Pattern



# An example

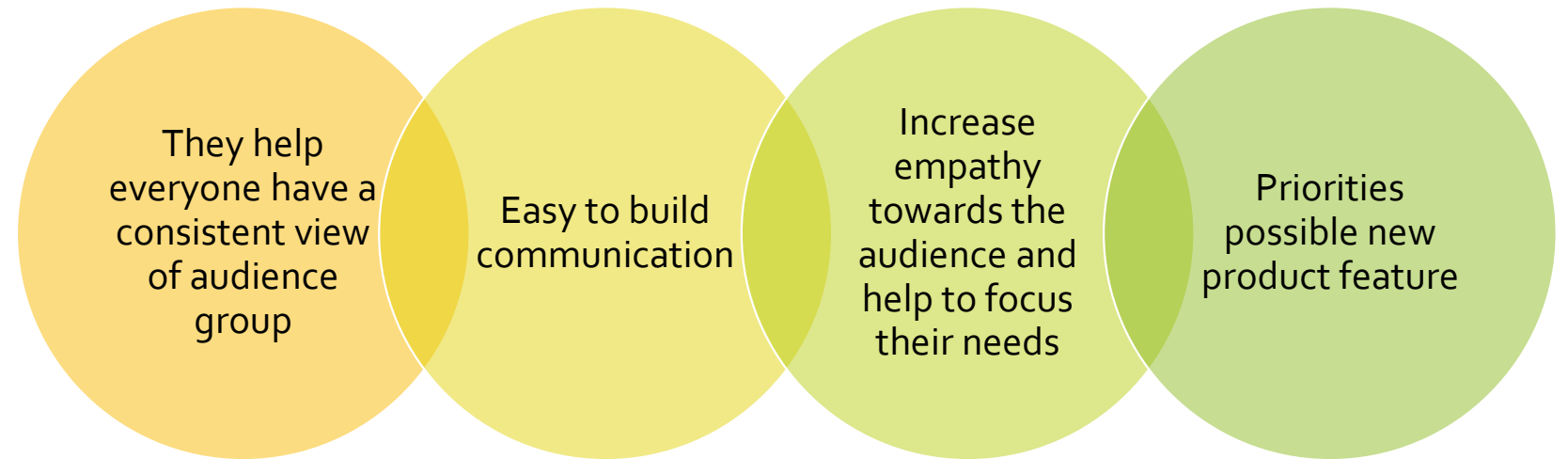


**Ned Adams ("Ned the Nerd")**

Ned Adams is a "thought leader" for people who are interested in emerging consumer technologies.

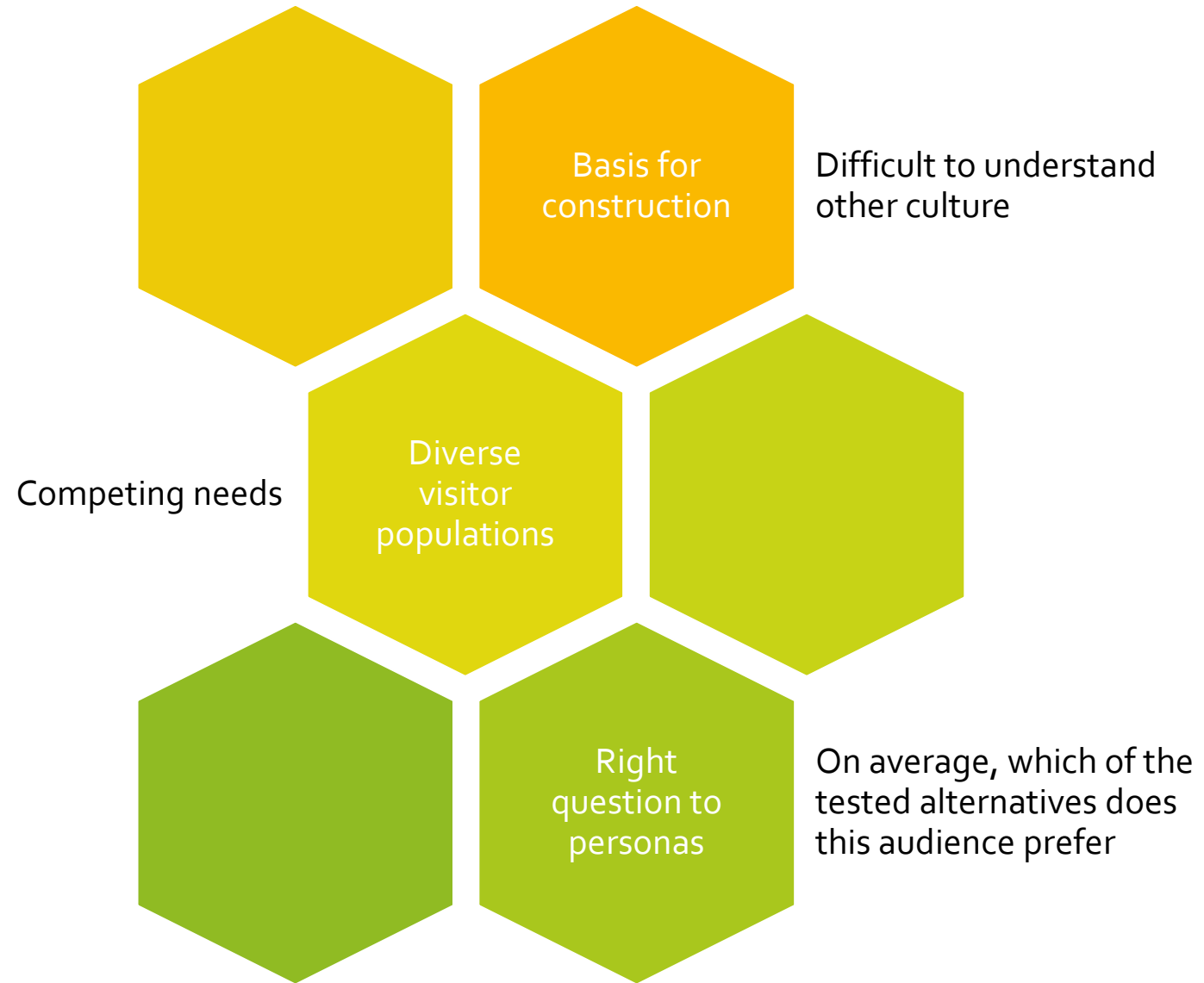
- 24 year old college drop out: studied CS
- Single, not in relationship, lives at home with his parent
- Clerk at the local computer game arcade and Internet cafe
- Influencer for new gadgets among his peers
- Spends a lot of time on the Internet
- Has his own consumer technology blog
- Always upgrades his high-tech gear to have the "latest and greatest"
- Quote: "If it's cool and new, I want to know about it!"
- Tim Ash. Landing Page Optimization: The Definitive Guide to Testing and Tuning for Conversions (Kindle Locations 862-863). Kindle Edition.

# Advantage of Personas





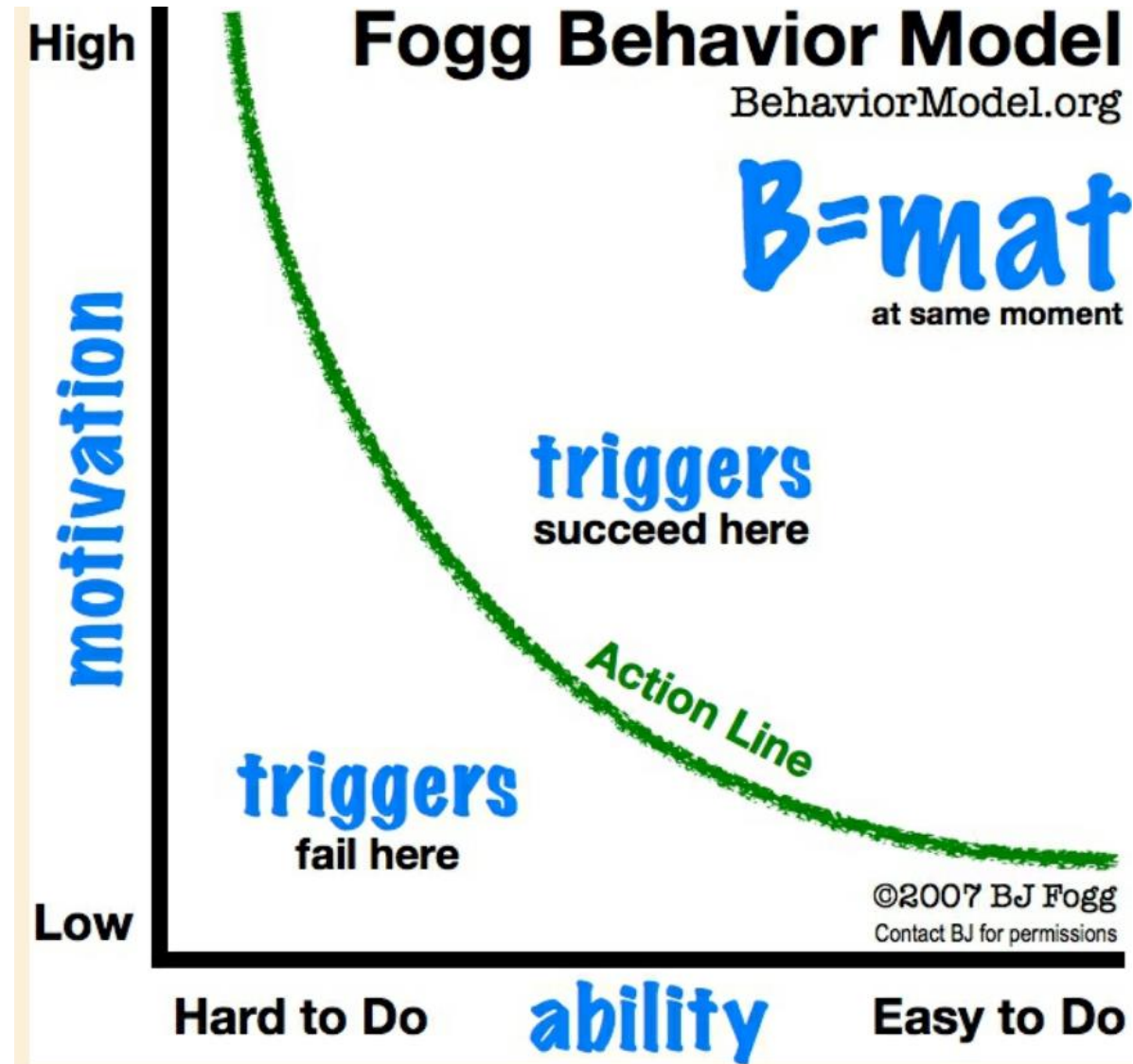
# User-centered Design



# A Model of when, Why we Act

- **Cue.** The possibility of using the app needs to somehow cross your mind. Something needs to cue you to think about it: maybe you're hungry or you see a commercial about healthy food on TV.
- **Reaction.** Second, you'll intuitively react to the idea of using the app in a fraction of a second. Is using the app interesting? Was it a good experience last time you used it? What other options come to mind, and how do I feel about them?
- **Evaluation.** Third, you might briefly think about it consciously, evaluating the costs and benefits. What will you get out of it? What value does the app provide to you? Is it worth the effort of getting up and working through some meal plans?
- **Ability.** Fourth, you'll check whether actually using the app now is feasible. Do you know where your mobile phone is? Do you have your username and password for the app? If not, you'll need to solve those logistical problems first, and then use the app.
- **Timing.** Fifth, you'd gauge when you should take the action. Is it worth doing now, or after the TV show is over? Is it urgent? Is there a better time? This may occur before or after checking for the ability to act. Both have to happen though.
- Wendel, Stephen. Designing for Behaviour Change: Applying Psychology and Behavioural Economics . O'Reilly Media. Kindle Edition.

The person responds to a **cue** that starts her thinking about the action. Her **intuitive mind** automatically reacts at an intuitive level to the idea. Her **conscious mind** evaluates the idea, especially in terms of costs and benefits. She checks if she has the **ability** to act — if she knows what to do, has what she needs, and believes she can succeed. She determines if the **timing** is right for action — especially whether or not the action is urgent.



# CUE

<https://youtu.be/VJG6g8U2Mvo>

- External cues Something in our environment can trigger us (like an email or text message) to think about it. It could be a pair of running shoes that makes us think of running, or something more overt, like a friend calling us on the phone and asking us why we aren't out running in the park with them.
- Internal cues Our minds can drift into thinking about the action on its own, through some unknown web of associated ideas (which may themselves have been cued externally, or by an internal state like hunger).[40]
- Wendel, Stephen. Designing for Behaviour Change: Applying Psychology and Behavioural Economics . O'Reilly Media. Kindle Edition.

# Reaction

- A verdict or “gut feeling about the action
  - Associate with possible actions and ideas
  - Automatically initiate the action
- Trust. Your product is encouraging your users to do something. Even when they want to take the action, they will be hesitant if they don't trust the company behind that encouragement. Whether or not a user trusts the product, and company, is often an intuitive sense.
  - Watch where you get your product signal. If you ask people what they want to do, or whether they have the motivation to use your app, you're engaging their conscious minds. But it's their intuitive minds you have to pass first, and that isn't something people articulate on surveys. Ideally, watch their behaviour, and don't listen to their mouths.
  - The first-time user experience really matters. You may be able to convince or entice someone to try out your product and action the first time. But the more your action requires repeated use, the more that you rely on intuitive reactions. And those reactions build on what they've actually experienced, the associations they've made, and the emotions they felt about your product and action.
  - Wendel, Stephen. Designing for Behaviour Change: Applying Psychology and Behavioural Economics . O'Reilly Media. Kindle Edition.

# Evaluation:

vital questions, let's leave it at this if we deem the action worth the effort, and better than the alternatives

- The common approach to encouraging people to take the stairs would be to focus on:
  - Highlighting benefits Taking the stairs will get you in shape, and may lengthen your life.
  - Minimizing costs Taking the stairs will only cost you three more minutes, and if you go slowly, you won't sweat like a pig.
  - Downplaying alternatives The elevator is slow and crowded at this time of day.
- Wendel, Stephen. Designing for Behaviour Change: Applying Psychology and Behavioural Economics . O'Reilly Media. Kindle Edition.

# Ability

- Ability has four dimensions
- Action plan The person must know what steps are required to take the action. For example, he must know that setting up a retirement account requires going to a particular website, entering information provided by his employer, and so on.
- Resources The person must actually have the resources required to act. For example, the person must have money available and access to a computer to go to the retirement website and set up an account.
- Skills The person must have the necessary skills to act. For example, in order to sign up for a retirement account online, he must know how to use a computer and navigate its (too often impenetrable) user interface.
- Belief in success No one wants to feel like a failure. The person needs to feel reasonably sure that he can be successful at the action, and not end up looking like an idiot. That's known as a feeling of self-efficacy.
- Wendel, Stephen. Designing for Behaviour Change: Applying Psychology and Behavioural Economics . O'Reilly Media. Kindle Edition.

# Timing: Urgency and Right time to act

- External urgency In the Hong Kong, we really do need to put in our taxes (or file for an extension) by April 1. Otherwise, the Government comes after us. That's a true, external urgency that results in something bad if we delay.
- Internal urgency Very rarely, changes in behaviour are urgent because we have a biological need that we can't ignore (hunger, thirst, etc.). However, these needs just don't apply to most actions and products. Negative mental states like boredom may provide a lesser, but still potent, urgency to act.
- Specificity: Think about these two statements: "I should save for retirement" versus "I should set up a retirement account on Thursday night, at 8 p.m., right after dinner." The latter one feels more real, right? Simply by putting a specific time on an action, that can settle the issue of "when" to act. It also helps us remember to act then, too!
- Consistency Another way to help us decide when to act (and to follow through on it) is to pre-commit to a specific time in the future, especially if we tell others about our commitment. That moves the action from the domain of something that we might do sometime, to an issue of personal consistency with our word. Our desire to be consistent with our prior statements means that the right time to act is exactly when we said we'd act.





## Google Analytics for Beginners

Learn the basic features of Google Analytics including how to create an account, implement tracking code, analyze basic reports, and set up goals and campaign tracking.



## Advanced Google Analytics

Learn about advanced Google Analytics features including data collection, processing and configuration, and more complex analysis and marketing tools.



## Google Analytics for Power Users

After you're familiar with the range of features Analytics offers, learn and practice actionable analyses to track business performance and identify areas for business improvement.



## Getting Started With Google Analytics 360

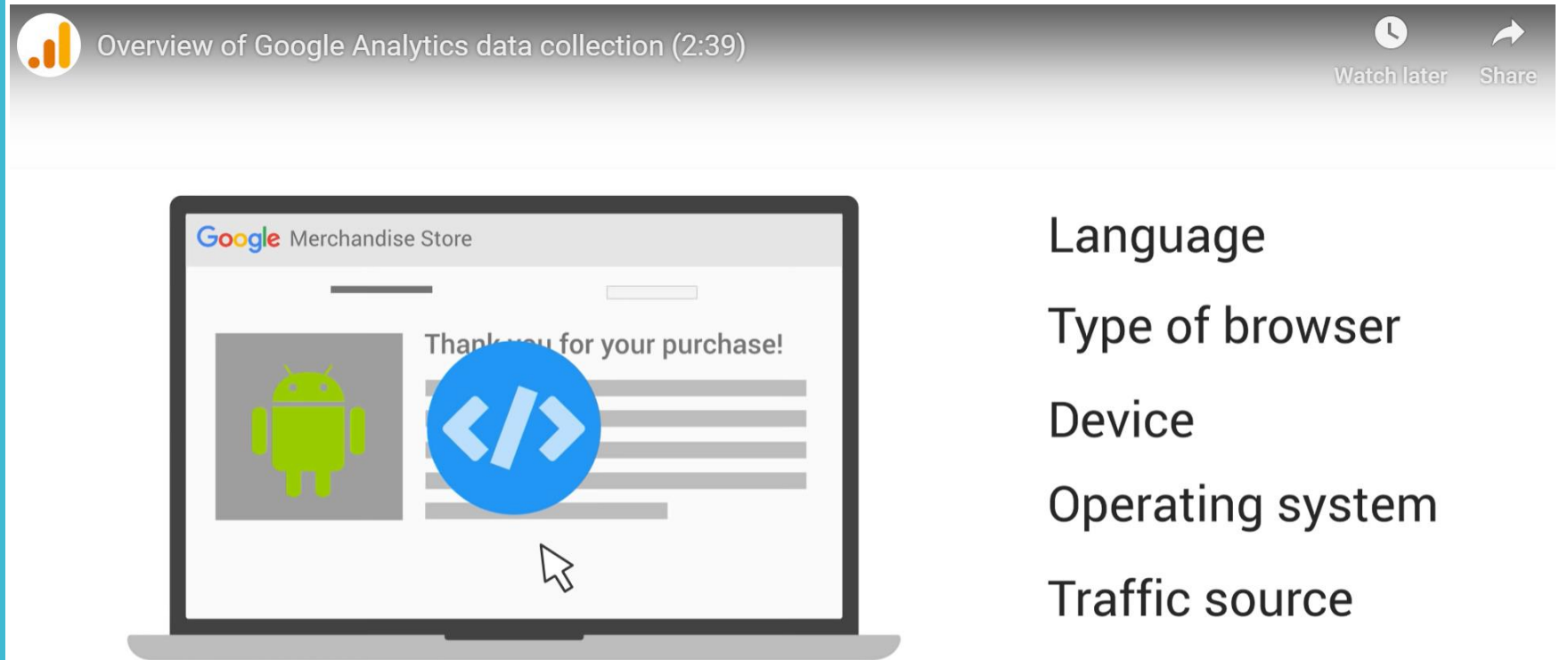
Learn about powerful Google Analytics 360 features that are not available in the standard product, and gain insight into how you can benefit from integrations with BigQuery, Google Marketing Platform products, and Google Ad Manager.

# Learning Basics of Google Analytics

# Some Basics

Google Analytics allows you to measure how people interact with your website, mobile app and other platforms. The Google Analytics tracking code is used to understand people's behaviour as they engage with your website. Mobile apps can be measured using the mobile SDKs (Software Development Kits) for iOS and Android devices.

Mangold, Benjamin. Learning Google AdWords and Google Analytics (p. 179).



Language

Type of browser

Device

Operating system

Traffic source

Beside browsing interactive records in the visited web site, Google makes use of its tracking data of its Google user account, it can provide more extensive average profiling of the type of the visitor from the prediction of its data analysis.

# Some Basics

Google's servers then process all the information sent by the Google Analytics tracking code into a database (taking into account any configurations that have been made). When you log into Google Analytics and view a report you are simply querying the database, this is then generating the report in the Google Analytics interface.

Mangold, Benjamin. Learning Google AdWords and Google Analytics (p. 180).


## How to set up views with filters

In Google Analytics, you can set up different "views" of the data that you've collected. You can use filters within each view to determine what data will be available in that view. Having different views can help you focus on subsets of data or give other users access to specific views.

### Click through the demonstration

Click through this interactive tour to learn how to set up properties and views with filters in your Analytics account.

<https://analytics.google.com/analytics/academy/course/6/unit/1/lesson/4>

 Click the closed caption button in the lower right corner of the demo to view subtitles in your language.

[TEXT TRANSCRIPT](#) 

Note that once you have applied a filter to data that you have collected in a view, you will not be able to recover any data that was filtered out or reprocess historical data from before the filter was applied. So be sure to test out any data you wish to filter in your Test view first.

# A Demonstration of GA report

## Click through the guide

This tour will guide you through the Analytics demo account for the *Google Merchandise Store*. Note that:

- Each step will prompt you to click on either the Analytics interface or a Next button to continue
- If you click elsewhere on the screen, it may break the flow
- To start the tour again, click the button below

[https://analytics.google.com/analytics/web/?utm\\_source=demoaccount&utm\\_medium=demoaccount&utm\\_campaign=demoaccount&ghstartflowid=7110773&authuser=0#/report/defaultid/a54516992w87479473p92320289/\\_u.date00=20160201&\\_u.date01=20160229/](https://analytics.google.com/analytics/web/?utm_source=demoaccount&utm_medium=demoaccount&utm_campaign=demoaccount&ghstartflowid=7110773&authuser=0#/report/defaultid/a54516992w87479473p92320289/_u.date00=20160201&_u.date01=20160229/)