



**Below is a methodology description of a Google-commissioned Nielsen study. This was a three-part study which focused on whether or not engagement with a TV show's content on YouTube was related to tuning into the program on TV.**

### **Part 1: Exploring a Relationship Between YouTube Engagement and Reach on TV through Multivariate Regression Analysis**

*Nielsen conducted multivariate regression models to explore this relationship by utilizing YouTube census activity (data provided by YouTube) and TV currency viewership (Nielsen data)*

Time Period: 1/1/2014 – 3/27/2016

Programs: 30 TV programs across mainly comedy, drama, and talk show genres with engagement on YouTube

Source: Nielsen National People Meter Panel, YouTube data

#### **CONTROL VARIABLES**

Seasonality of TV usage as measured by currency viewership by week (Weekly HUT/PUT Viewing Source, Live+7)

- TV Show Promotion Ad units and GRPs as measured by Nielsen Ad Intel (Weekly, National TV)
- TV Program Engagement as measured by TV Brand Effect (Quarterly)
- Prior Month TV Program Reach and Time Spent (Live+7)

#### **INDEPENDENT VARIABLES**

Weekly Data (provided by YouTube) for TV Program Content on YouTube

- Views
- Seconds of content uploaded
- Number of videos published
- Channel subscribers

#### **DEPENDENT VARIABLE MODELED**

TV, Live+7, Weekly

- Reach: Total number of people who tuned into a program for at least one minute

## Part 2: Assessing the Difference in Tune-in Rate for those who Engaged with TV content on YouTube vs. those who did not

*Nielsen Cross Platforms Homes Panel used to analyze:*

*The percentage of panelists who watched TV related content on YouTube and tuned into the show on TV compared to the percentage of panelists who did not engage in TV-related content on YT and tuned into the show.*

Time Period: 4/1/2015 – 3/31/2016

Programs: Subset of 12 TV programs across mainly comedy, drama, and talk show genres with engagement on YouTube

Source: Nielsen Cross-Platform Homes Panel

TV: Live+7, 1 minute qualifier

YouTube: Load TV-related YouTube URL

## Part 3: Assessing the Lift in Tune-in Rate for those who Engaged with TV Content on YouTube vs. those who did not, by controlling for Demos and prior Viewing

*An ANCOVA analysis run on Nielsen Cross Platforms Homes Panel data to determine if people who engaged with a TV show on YouTube had a meaningful difference in Tune-in compared to a matched sample of those who did not.*

Program: TV talk show program with engagement on YouTube

Source: Nielsen Cross-Platform Homes Panel

Unexposed: No YouTube in pre-period AND tuned into TV in following TV season

Exposed: Yes YouTube in pre-period AND tuned into TV in following TV season

TV: Live+7, 1 minute qualifier

YouTube: TV-related YouTube URL visitation

Matching Variables between test and control group:

- Age
- Gender
- Education
- Household size
- Income
- Race
- Pre-season viewing (August 2015)