# Capstone: Attribution

Learn SQL from Scratch

Robert Warmbier 4 July 2018

### SQL notes

- Please note: SQL coding for this is located on code.sql file
- There are 6 different 'segments' on the file
- - 1. distinct campaigns; distinct sources, and distinct number of campaigns and sources
- - 2. distinct page names from the page visits table
- - 3. first\_touches for each campaign
- 4. last touches for each campaign
- - 5. number of visitors who made a purchase
- - 6. number of last touches on the purchase page for each campaign

## CoolTShirts' user data

page_visits	A table describing each time a user visits the CoolTShirts website
Column	Description
user_id	A unique identifier for each visitor to a page
timestamp	The time at which the visitor came to the page
page_name	The title of the section of the page that was visited
utm source	Identifies which site sent the traffic (i.e., google, newsletter, or facebook ad)
utm_medium	Identifies what type of link was used (i.e., cost-per-click or email)
utm_campaign	Identifies the specific ad or email blast (i.e., june-21-newsletter or memorial-day-sale)

1. Getting familiar with the company.

How many campaigns and sources does CoolTShirts use and how are they related? Be sure to explain the difference between utm\_campaign and utm\_source.

They're related are far as news/website sources.

The utm\_source and utm\_campaign are defined as follows:

- utm\_source Identifies which site sent the traffic (i.e., google, newsletter, or facebook\_ad)
- utm\_campaign Identifies the specific ad or email blast (i.e., june-21-newsletter or memorial-day-sale)

# Number of campaigns and sources

source	campaign
6	8

#### sources

- nytimes
- email
- buzzfeed
- facebook
- medium
- google

# Number of campaigns and sources

source	campaign
6	8

#### campaigns

- getting-to-know-cool-tshirts
- weekly-newsletter
- ten-crazy-cool-tshirts-facts
- retargetting-campaign
- retargetting-ad
- interview-with-cool-tshirtsfounder
- paid-search
- cool-tshirts-search

#### 2. What is the user journey?

- How many first touches is each campaign responsible for?
- How many last touches is each campaign responsible for?
- How many visitors make a purchase?
- How many last touches on the purchase page is each campaign responsible for?
- What is the typical user journey?

A typical user journey:

<b>User Journey</b>	
1 - landing_page	
2 - shopping_cart	
3 - checkout	
4 - purchase	

## First touches each campaign is responsible for:

source	campaign	first_touches
buzzfeed	ten-crazy-cool-tshirts-facts	576
google	cool-tshirts-search	169
medium	interview-with-cool-tshirts-founder	622
nytimes	getting-to-know-cool-tshirts	612

# Last touches is each campaign responsible for:

source	campaign	last_touch
email	weekly-newsletter	447
facebook	retargetting-ad	443
email	retargetting-campaign	245
nytimes	getting-to-know-cool-tshirts	232
buzzfeed	ten-crazy-cool-tshirts-facts	190
medium	interview-with-cool-tshirts-founder	184
google	paid-search	178
google	cool-tshirts-search	60

Number of visitors making a purchase:

# visitors\_purchase

361

# Last touches on the purchase page each campaign responsible for:

source	campaign	last_touches
email	weekly-newsletter	115
facebook	retargetting-ad	113
email	retargetting-campaign	54
google	paid-search	52
buzzfeed	ten-crazy-cool-tshirts-facts	9
nytimes	getting-to-know-cool-tshirts	9
medium	interview-with-cool-tshirts-founder	7
google	cool-tshirts-search	2

- 3. Optimize the campaign budget
- •CoolTShirts can re-invest in 5 campaigns. Which should they pick and why?

#### Re-invest campaigns

 Based upon the data presented on a previous slide, where the customers last-touched the item and purchased on the item, the company should reinvest in the 5 best campaigns as presented on the following table

number	source	campaign	last_touches
1	email	weekly-newsletter	115
2	facebook	retargetting-ad	113
3	email	retargetting-campaign	54
4	google	paid-search	52
5	buzzfeed	ten-crazy-cool-tshirts-facts	9