



# Capstone: Attribution

Learn SQL from Scratch

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# Basic Data on CoolTShirts

# Campaigns & Sources

CoolTShirts has recently begun a series of new marketing **campaigns**, using several different **sources**.

The goal is to increase website visits and purchases – and it will be important to map the customer journey on their site to continually optimize the expenditure on marketing. This will be accomplished by examining UTM parameters that signify

**UTM Campaign:** The specific advertising effort that led the user to that page

**UTM Source:** This is the web traffic medium or touchpoint that sent the actual traffic out

# Campaigns & Sources

unique_campaigns	utm_source
cool-tshirts-search	google
getting-to-know-cool-tshirts	nytimes
interview-with-cool-tshirts-founder	medium
paid-search	google
retargeting-ad	facebook
retargeting-campaign	email
ten-crazy-cool-tshirts-facts	Buzzfeed
weekly-newsletter	email

- Each source is used to send out each specific campaign
- The company has 8 active campaigns, that are sent through a total of 5 different sources
- Each column header for campaigns and sources is included here

# Landing Pages

- These are the possible pages that a customer can go to at CoolTShirts' website
- Each page represents a step in the user journey
- Understanding the behavior of users will help to optimize how to best engage with users and ultimately, get them to purchase more CoolTShirts products!

page_name
1 - landing_page
2 - shopping_cart
3 - checkout
4 - purchase

# The User Journey

# First Touch Attribution

The first touch is very first time that a user is exposed to CoolTShirts.com

- We can see based on our analysis that the “Interview with CoolTShirts Founder” campaign was the most successful at getting users to the site for the first time
- The least effective campaign was “Cool TShirts Search”

ft_attr.utm_source	ft_attr.utm_campaign	COUNT (*)
medium	interview-with-cool-tshirts-founder	622
nytimes	getting-to-know-cool-tshirts	612
buzzfeed	ten-crazy-cool-tshirts-facts	576
google	cool-tshirts-search	169

```
WITH first_touch AS (  
  SELECT user_id,  
  MIN(timestamp) as first_touch_at  
  FROM page_visits  
  GROUP BY user_id),  
ft_attr AS (  
  SELECT ft.user_id,  
    ft.first_touch_at,  
    pv.utm_source,  
    pv.utm_campaign  
  FROM first_touch ft  
  JOIN page_visits pv  
    ON ft.user_id = pv.user_id  
    AND ft.first_touch_at = pv.timestamp)  
SELECT ft_attr.utm_source,  
ft_attr.utm_campaign,  
COUNT (*)  
FROM ft_attr  
GROUP BY 1, 2  
ORDER BY 3 DESC ;
```



# Last Touch Attribution

lt_attr.utm_source	lt_attr.utm_campaign	COUNT(*)
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

- The table shows which campaigns led users to their last touch
- The last touch is the exposure to CoolTShirts.com that led to a purchase
- The “Weekly Newsletter” email campaign was the most successful, followed closely by the “Retargetting Ad” on Facebook
- The least successful campaign for achieving a last touch is the Google “Cool Tshirts Search”campaign

# Total Purchases & Typical User Journey

- A total of **361 purchases** were recorded on the CoolTShirts Website
- The breakdown of purchases by campaign is shown on the next slide
- The most common user journey is as follows:
- Most users first come to the site through 3 campaigns(source): Founder Interview(Medium), Getting to know CoolTShirts(NYTimes), and Ten Crazy Facts(Buzzfeed)
- The last interaction with the website is through the Weekly Newsletter(email) or Retargeting Ad (Facebook)
- These two campaigns are also responsible for the majority of the 361 purchases – approximately 25% of purchases for each campaign

```
SELECT COUNT(DISTINCT user_id) AS 'visitor_purchases'  
FROM page_visits  
WHERE page_name = '4 - purchase'  
;
```

## Purchases by Campaign

lt_attr.utm_source	lt_attr.utm_campaign	COUNT(*)
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

# **Optimizing the Marketing Budget**

# Recommendations

- If CoolTShirts were to continue investing in 5 marketing campaigns, they should invest in the following:
  - 1) Founder Interview: The top contributor to first touch at CoolTShirts.com with 622 first touches. This campaign has greatly increased interest in CoolTShirts product
  - 2) Getting to Know CoolTShirts: The second highest contributor to first touch with 612 site visits
  - 3) Weekly Newsletter: The highest contributor to last touch and to overall purchases, 447 and 115 visits, respectively
  - 4) Retargeting Ad: The second highest contributor to last touch and overall purchases, 443 and 113 visits, respectively
  - 5) Retargeting Campaign: The third highest contributor to last touch and overall purchases, 245 and 54 visits, respectively
- Our goal is to increase total purchases, so the optimal campaigns are weighted towards those that led to actual purchases on the site
- While it is also vital to focus on the primary campaigns that first gave users an awareness of the brand, many users do not purchase on their first touch with the site.
- Effective optimization of the marketing budget will require an effective focus on both the beginning and the end of the customer journey

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