

# SQL Project

Learn SQL from Scratch Zachary Holland 08-05-2018

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CoolTShirts uses 6 sources and 8 campaigns. A source (utm\_source) is the page or email that the traffic originated. A campaign (utm\_campaign) is the specific ad or email that was shown on or through the source to initiate traffic.

Source	Campaign	
6	8	

Select Count(Distinct utm\_source) as 'Source', count(Distinct utm\_campaign) as 'Campaign' from page\_visits;

CoolTShirts uses 6 sources.

A source (utm\_source) is the page or email that the traffic originated.

Select Distinct utm\_source as Source From page\_visits;

Source	
nytimes	
email	
buzzfeed	
facebook	
medium	
google	



6

Select Distinct utm\_source as Source From page\_visits;

CoolTShirts uses 6 sources and 8 campaigns.

A campaign (utm\_campaign) is the specific ad or email that was shown on or through the source to initiate traffic.

Select Distinct utm\_campaign as 'Campaign' From page\_visits;

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

Campaign

8

Select Count(Distinct utm\_campaign) as 'Campaign' From pagevisits;

We have 4 different pages featured on our website: Landing Page, Shopping Cart, Checkout, Purchase.

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

Select Distinct page\_name from page\_visits;

CoolTShirts currently has 4 different campaigns running. Each of our campaigns is responsible for several first touches. The first time a person visits our site as a result of the selected campaign is recorded as their "first touch". Below is a chart listing the 4 campaigns we are currently running and the corresponding first touches that we have gained from each campaign.

Campaign	first_touches
interview-with-cool-tshirts-founder	622
getting-to-know-cool-tshirts	612
ten-crazy-cool-tshirts-facts	576
cool-tshirts-search	169

WITH first\_touch AS (
SELECT user\_id,
MIN(timestamp) as first\_touch\_at
FROM page\_visits
GROUP BY user\_id)
SELECT pv.utm\_campaign AS 'Campaign'
,Count(first\_touch\_at) first\_touches
FROM first\_touch ft
JOIN page\_visits pv
ON ft.user\_id = pv.user\_id
AND ft.first\_touch\_at = pv.timestamp
Group By pv.utm\_campaign
Order By first\_touches desc;

Equally as important as tracking first touches, we like to record the last touches associated with each campaign. Opposite of the first touch we just talked about, a last touch refers to the last page a customer visits before leaving the website. This can give us insight as to why the campaign was or was not successful. On the next slide you will see a few of our previous campaigns that we have run and the last touches associated with each campaign.

At CoolTShirts it is very pertinent that we capture how many visitors make purchases and where the customer came from so we know where to better focus our marketing efforts.

Source	Last_Touch	Page
email	167	4 - purchase
facebook	112	4 - purchase
google	54	4 - purchase
buzzfeed	9	4 - purchase
nytimes	9	4 - purchase
medium	7	4 - purchase

```
WITH last_touch AS (
  SELECT user id.
    MAX(timestamp) as last_touch_at
  FROM page_visits
  GROUP BY user id)
SELECT pv.utm_source AS 'Source'
,Count(last_touch_at) 'Last_Touch'
,pv.page_name as 'Page'
FROM last touch It
JOIN page_visits pv
  ON lt.user_id = pv.user_id
  AND It.last_touch_at = pv.timestamp
  Where pv.page_name='4 - purchase'
  Group By pv.utm_source
  Order By Count(last_touch_at) desc;
```

Capturing the last touches on the purchase page drives our marketing efforts just as much as the first touch information does, so we capture that as well.

Campaign	Last_Touch	Page
weekly-newsletter	114	4 - purchase
retargetting-ad	112	4 - purchase
retargetting-campaign	53	4 - purchase
paid-search	52	4 - purchase
getting-to-know-cool-tshirts	9	4 - purchase
ten-crazy-cool-tshirts-facts	9	4 - purchase
interview-with-cool-tshirts- founder	7	4 - purchase
cool-tshirts-search	2	4 - purchase

WITH last\_touch AS ( SELECT user id, MAX(timestamp) as last\_touch\_at FROM page\_visits GROUP BY user id) SELECT pv.utm\_campaign AS 'Campaign' ,Count(last\_touch\_at) 'Last\_Touch' ,pv.page\_name as 'Page' FROM last touch It JOIN page\_visits pv ON It.user\_id = pv.user\_id AND lt.last\_touch\_at = pv.timestamp Where pv.page\_name='4 - purchase' Group By pv.utm\_campaign Order By Count(last touch at) desc;

# Optimize the Campaign Budget

### Optimize our budget...by Optimizing our campaigns

An important part of any business is working within a budget. By seeing which Campaigns generate the most sales we can determine which should get the most of our budget.

Campaign	Last_Touch	Page
weekly-newsletter	114	4 - purchase
retargetting-ad	112	4 - purchase
retargetting-campaign	53	4 - purchase
paid-search	52	4 - purchase
getting-to-know-cool-tshirts	9	4 - purchase
ten-crazy-cool-tshirts-facts	9	4 - purchase
interview-with-cool-tshirts- founder	7	4 - purchase
cool-tshirts-search	2	4 - purchase

```
WITH last_touch AS (
  SELECT user id.
    MAX(timestamp) as last_touch_at
  FROM page_visits
  GROUP BY user_id)
SELECT pv.utm_campaign AS 'Campaign'
,Count(last_touch_at) 'Last_Touch'
,pv.page_name as 'Page'
FROM last touch It
JOIN page_visits pv
  ON It.user id = pv.user id
  AND It.last touch at = pv.timestamp
  Where pv.page_name='4 - purchase'
  Group By pv.utm_campaign
  Order By Count(last touch at) desc;
```

### **Optimize our budget...by Optimizing our campaigns**

Likewise we want to know which of these campaigns is bringing the most visitors to the site. Getting that first visit is crucial to the success of our retargeting campaigns.

Campaign	First_Touches
interview-with-cool-tshirts-founder	622
getting-to-know-cool-tshirts	612
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WITH first\_touch AS (
SELECT user\_id,
MIN(timestamp) as first\_touch\_at
FROM page\_visits
GROUP BY user\_id)
SELECT pv.utm\_campaign AS 'Campaign'
,Count(first\_touch\_at) 'First\_Touches'
FROM first\_touch ft
JOIN page\_visits pv
ON ft.user\_id = pv.user\_id
AND ft.first\_touch\_at = pv.timestamp
Group By pv.utm\_campaign
Order By Count(first\_touch\_at) desc;

## **Optimize our budget...by Optimizing our campaigns**

Given the information provided we recommend investing more into the following 5 campaigns

The first 3 because they generate the most first visits to the site

Campaign	First_Touches
interview-with-cool-tshirts-founder	622
getting-to-know-cool-tshirts	612
ten-crazy-cool-tshirts-facts	576

While the Weekly newsletter and retargeting ads generate the most purchases

Campaign	Last_Touch	Page
weekly-newsletter	114	4 - purchase
retargetting-ad	112	4 - purchase