



Capstone: Attribution

Learn SQL from Scratch

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1. Get familiar with the company.

Getting Familiar with CoolTshirts

CoolTShirts currently manages 8 campaigns in which are presented through 6 different Sources.

- These campaigns are organized with a series of content and activities aimed to one particular business goal. (Web Traffic)
- Popular sources are eminent to be able to execute these campaigns and reach the desired market forCoolTshirts.

UTM_CAMPAIGN	UTM_CAMPAIGN'	UTM_SOURCE
getting-to-know-cool-tshirts		Nytimes
weekly-newsletter	emailretargeting-campaign	Email
ten-crazy-cool-tshirts-facts		Buzzfeed
retargeting-ad		Facebook
interview-with-cool-tshirts-founder		Medium
Paid-search	cool-shirts-search	Google

```
Select count(Distinct utm_campaign) as 'Different type of Campaigns'
from page_visits;
```

```
Select count (distinct utm_source) as 'Different Source Types'
from page_visits;
```

```
Select distinct utm_campaign, utm_source
from page_visits;
```

Relations

NY Times: Article about CoolTShirts.

Email: Newsletters and email chain promotion.

Buzzfeed: Article on 10 Crazy facts about CoolTshirts.

Facebook: Paid ads for users to click on.

Medium: Cool interview with owner to get to know cool facts about the company.

Google: Paid Search to come out first before competition.

Getting Familiar with CoolTshirts

CoolTShirts currently manages 6 different pages which can be seen below.

Page Names
1. Landing Page
2. Shopping Cart
3. Checkout
4. Purchase

```
Select distinct page_name as "Page Names"  
from page_visits;
```

2. What is the user
journey?

User Journey

First Touch is the analysis of users that have visited the website for the first time.

We can see that our most popular FT is through Medium at 622 users and our least popular FT is through Google at 169 users.. This can give us an idea of how users initially get on our website through each Campaign and Source.

First Touch Source	Campaign	# Users
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;
```

User Journey

Last Touch is the analysis of how users are drawn back to visit CoolTshirt website. We can see here that our most popular LT is Email newsletter of 447 users and out least popular is google paid search of 60 users.

Last Touch Source	Campaign	# Users
Email	Weekly-Newsletter	447
Facebook	Retargetting-ad	443
Email	Retargetting Campaign	245
NY TIMES	Getting-to-know-cool-shirts	232
buzzfeed	ten-crazy-cool-tshirts-facts	190
medium	interview-with-cool-tshirts-founder	184
google	paid-search	178
google	cool-tshirts-search	60

```
WITH last_touch AS (SELECT user_id,
                        MAX(timestamp) as last_touch_at
                    FROM page_visits
                    GROUP BY user_id),
lt_attr AS (
    SELECT lt.user_id,
           lt.last_touch_at,
           pv.utm_source,
           pv.utm_campaign,
           pv.page_name
    FROM last_touch lt
    JOIN page_visits pv
      ON lt.user_id = pv.user_id
      AND lt.last_touch_at = pv.timestamp
)
SELECT lt_attr.utm_source,
       lt_attr.utm_campaign,
       COUNT(*)
FROM lt_attr
GROUP BY 1, 2
ORDER BY 3 DESC;
```


User Journey

How many visitors make a purchase?

We can see here that 361 users have actually made a purchase.

Analyzing an extra query I consulted on the data base, I determined the amount of users that go on each page below.

Count (Users)	Page Names
1979	1. Landing Page
1881	2. Shopping Cart
1431	3. Checkout
361	4. Purchase

```
Select Count(distinct user_id) as 'Visitors that have  
made purchases'  
from page_visits  
where page_name = '4 - purchase';
```

```
Select count (distinct user_id), page_name as "Page  
Names"  
from page_visits  
group by 2  
order by 2;
```

User Journey

Last Touches on purchase page each campaign is responsible for:

Last Touch Source	Campaign	# Users
Email	Weekly-Newsletter	115
Facebook	Retargetting-ad	113
Email	Retargetting Campaign	54
Google	Paid-Search	52
buzzfeed	ten-crazy-cool-tshirts-facts	9
NY TIMES	Getting-to-know-cool-shirts	9
Medium	interview-with-cool-tshirts-founder	7
Google	cool-tshirts-search	2

```
WITH last_touch AS (SELECT user_id,
                           MAX(timestamp) as last_touch_at
                     FROM page_visits
                           where page_name = '4 - purchase'
                     GROUP BY user_id),
lt_attr AS (
  SELECT lt.user_id,
         lt.last_touch_at,
         pv.utm_source,
         pv.utm_campaign,
         pv.page_name
  FROM last_touch lt
  JOIN page_visits pv
    ON lt.user_id = pv.user_id
    AND lt.last_touch_at = pv.timestamp
)
SELECT lt_attr.utm_source,
       lt_attr.utm_campaign,
       COUNT(*)
FROM lt_attr
GROUP BY 1, 2
ORDER BY 3 DESC;
```

User Journey

Through all the campaigns and sources combined, We reached 1979 users. This can tell us that out of those 1979 users, 95% actually get to shopping cart page. We should offer email list signup to those users that have gotten to page 2 and 3 to offer a 15 % first order discount to motivate them and raise the 18% sale mark to at least 38%.

In the table below, We can see how the users interacted on each page giving us an Idea how the user journey is distributed throughout each page.

Count (Users)	Page Names	%
1979	1. Landing Page	100%
1881	2. Shopping Cart	95%
1431	3. Checkout	72%
361	4. Purchase	18%

3. Optimize the campaign budget.

CoolTshirts Re-Investment Plan

1. Email: Low cost marketing campaigns delivered to new, existing and returning customers. We can also include great promotion deals for returning customers. 46% LT Users purchased through email campaign.
2. Facebook: Social Media has long time been very effective to provide cool ads and promote our Tshirts focused on peoples needs. According to data found on my queres, Facebook had a good LT for customers that made purchases. 31% LT Users purchased through Facebook campaign.
3. Google: Google paid search is an effective way to promote our shirts because it is the most popular search engine on the planet. Anyone that wants to find out who makes tshirts would search on Google. 14% LT Users purchased through Facebook campaign.
4. Buzzfeed: Buzfeed attracted 576 FT users in which for this next campaign we can implement 10 Summer dayTshirts for July and provide 10% off first order.
5. Medium: Our most popular FT source of 622 users tells us that many people like articles regarding interviews about a company CEO. Our next medium campaign can be about supporting students rallying against gun violence.



THANK YOU FOR YOUR TIME!

GO COOL TSHIRTS!!!