



CoolTShirts.com Attribution

Learn SQL from Scratch

Rena Elion

Table of Contents

1. Getting to Know CoolTShirts
2. What is the user journey?
3. Optimize the campaign budget

1. Getting to Know CoolTShirts

1.1 Campaigns

- CoolTShirts has 8 different campaigns. The campaign identifies the specific ad or email that is sent to their customers.

```
--How many campaigns--
select count(distinct utm_campaign)
from page_visits;

--What are the campaigns--
select distinct utm_campaign
from page_visits;
```

Campaigns
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

1.2 Sources

- CoolTShirts.com has 6 different sources. The source identifies which site sent the traffic to CoolTShirts.com.

```
--How many sources--
select count(distinct utm_source)
from page_visits;

--What are the sources--
select distinct utm_source
from page_visits;
```

Sources
nytimes
email
buzzfeed
facebook
medium
google

1.3 Pages

- CoolTShirts.com has 4 pages.

```
--How many pages--  
select count(distinct page_name)  
from page_visits;  
  
--What are the pages--  
select distinct page_name  
from page_visits;
```

Pages

1 - landing_page

2 - shopping_cart

3 - checkout

4 - purchase

2. User Journey

2.1 First Touch Analysis

How many first touches is each campaign responsible for?

Campaign	First Touch
Cool-tshirts-search	169
Getting-to-know-cool-tshirts	612
Interview-with-cool-tshirts-founder	622
Ten-crazy-cool-tshirts-facts	576

```
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_campaign  
    from first_touch ft  
join page_visits pv  
    on ft.user_id = pv.user_id  
   and ft.first_touch_at = pv.timestamp)  
SELECT count(distinct ft.first_touch_at),  
       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  
group by utm_campaign;
```


2.2 Last Touch Analysis

How many last touches is each campaign responsible for?

Campaign	Last Touch
Cool-tshirts-search	60
Getting-to-know-cool-tshirts	232
Interview-with-cool-tshirts-founder	184
Paid-search	178
Retargeting-ad	443
Retargeting-campaign	245
Ten-crazy-cool-tshirt-facts	190
Weekly-newsletter	447

```
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_campaign  
    from last_touch lt  
join page_visits pv  
    on lt.user_id = pv.user_id  
    and lt.last_touch_at = pv.timestamp)  
SELECT count(distinct lt.last_touch_at),  
       pv.utm_campaign  
FROM last_touch lt  
JOIN page_visits pv  
    ON lt.user_id = pv.user_id  
    AND lt.last_touch_at = pv.timestamp  
group by utm_campaign;
```

2.3 Total Purchases

How many visitors made a purchase?
- 361 visitors made a purchase.

```
select count(distinct user_id)
from page_visits
where page_name = '4 - purchase';
```

2.4 Last Touch Purchase Analysis

How many last touches on the purchase page is each campaign responsible for?

Campaign	Last Touch
Cool-tshirts-search	2
Getting-to-know-cool-tshirts	9
Interview-with-cool-tshirts-founder	7
Paid-search	52
Retargeting-ad	113
Retargeting-campaign	54
Ten-crazy=cool-tshirts-facts	9
Weekly-newsletter	115

```
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_campaign  
    from last_touch lt  
join page_visits pv  
    on lt.user_id = pv.user_id  
    and lt.last_touch_at = pv.timestamp)  
SELECT count(distinct lt.last_touch_at),  
       pv.utm_campaign  
FROM last_touch lt  
JOIN page_visits pv  
    ON lt.user_id = pv.user_id  
    AND lt.last_touch_at = pv.timestamp  
   group by utm_campaign;  
  
select count(distinct user_id)  
from page_visits  
where page_name = '4 - purchase';
```

2.5 Typical User Journey

The typical user journey starts from the interview with the founder. From there the customer makes their way from the landing page, to the shopping cart, to the checkout page and finally the purchase page. If a customer leaves the site before reaching the shopping cart, they typically reenter the site from the weekly newsletter email.

3. Optimize Campaign Budget

3.1 Campaigns to Reinvest in*

1. Getting to know Cool T-Shirts article in the NY Times – This article proved to be the campaign with the most touch points. Although the purchases that resulted from customers visiting the site from this campaign was low, it sets up the opportunity to retarget customers.
2. Interview with Cool T-Shirts founder – This campaign did not result in a lot of customers reaching the purchase page but it did bring a lot of customers to the site. This campaign was both a first and last touch point for visitors and provides the opportunity to retarget customers.
3. Weekly Newsletter via email – This campaign resulted in the most purchases. Although it was not the most commonly touched campaign, it proved to have the most visitors reach the purchase page. The only downside to this is that it will never be a first touch campaign as it requires customers to already be on the mailing list. This is a better option over the email retargeting ad because it had more customers reach the purchase page.
4. Facebook Retargeting Ad – This campaign had the second most visitors reach the purchase page. It appears that customers are more likely to make a purchase when the campaign targets or reaches out to them. It was not as common for customers to make a purchase after the first touch.
5. BuzzFeed Ten Crazy Cool T-Shirt Facts article – This campaign had above average touch points but did not result in many customers reaching the purchase page. As with other campaigns that have both first and last touch points, there is the opportunity to retarget these customers.

* These are listed in no particular order. The strategy to combine all of these campaigns together would result in the most number of touch points and the highest number of visitors to reach the purchase page.