

# First- and Last-Touch Attribution with CoolTShirts.com

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Getting to Know the Company

# How many campaigns and sources does CoolTShirts use?

According to the code to the left, CoolTShirts used eight campaigns and six sources.

The campaigns are “Weekly Newsletter,” “Retargeting Ad,” “Retargeting Campaign,” “Getting To Know CoolTShirts,” “Ten Crazy CoolTShirts Facts,” “Interview With CoolTShirts Founder,” “Paid Search,” and “CoolTShirts Seatch.”

The sources are email, Facebook, the New York Times, BuzzFeed, Medium, and Google.

```
SELECT COUNT(DISTINCT utm_campaign)
FROM page_visits;
```

```
SELECT COUNT(DISTINCT utm_source)
FROM page_visits;
```

```
SELECT DISTINCT utm_campaign, utm_source
FROM page_visits;
```

# How are the campaigns and sources related?

The campaigns are the individual ads used regardless of where the ads are used.

The sources are where the traffic came from, regardless of which ad was followed

# What pages are on their website?

According to the code to the left, CTS has four distinct pages. These pages are “Landing Page,” “Shopping Cart,” “Checkout,” and “Purchase.”

```
SELECT DISTINCT page_name  
FROM page_visits;
```

# What is the User Journey

# For how many first touches is each campaign responsible?

The code on the left reveals that the “Interview With the Founder” campaign generated 622 first touches, the “Getting to Know CoolTShirts” campaign generated 612, the “Ten Crazy CoolTShirts Facts” campaign generated 576, and that google searches for “CoolTShirts” generated only 169 first touches.

The lack of results generated for the remaining four campaigns leads one to believe that they generated no first touches.

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

# For how many last touches is each campaign responsible?

This code reveals that the weekly newsletter generated 447 last touches, the retargeting ad 443, the retargeting campaign 245, the “Getting to Know CoolTShirts” campaign 232, the “Ten Crazy CoolTShirts Facts” 190, the “Interview With the CoolTShirts Founder” campaign 184, the “Paid Google Search” campaign 178, and that Google searches for “CoolTShirts” generated 60 last touches.

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



# How many visitors make a purchase?

The query on the left shows that there were 361 visitors that made a purchase

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

# For how many last touches on the Purchase Page is each campaign responsible?

The query to the left shows that the week newsletter is responsible for 115 last touches, the retargeting ad 113, the retargeting campaign 54, paid searches 52, the “Ten Crazy Facts About CoolTShirts” campaign 9, the “Interview With CooTShirts” 7, and Google searches for “CoolTShirts” is responsible for 2 last touches on the purchase page.

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

# What is the typical user journey?

Based on information gathered using the query that was used to calculate how many first touches for which each campaign was responsible, one finds that the “Interview With the Founder” and “Getting to Know CoolTShirts” campaigns were each responsible for 31% of all first touches. With these two campaigns being responsible for the majority of first touches, we know that the typical user is going to arrive at CoolTShirts’ website through them. However, using the query displayed on the next slide, we see that of the 1,234 that these campaigns brought, of 16 users made a purchase; that is only 1.3%. The stats are barely better! If one were to include all users brought through these campaigns and all purchasing users, in which case one sees that 18% of visiting users made a purchase. The numbers lead one to the conclusion that the typical user is drawn in through campaigns on Medium or the NY Times and leaves before making a purchase.

# What is the typical user journey? (Query Citatoin)

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

Optimize the Campaign Budget

# CoolTShirts can reinvest in 5 campaigns. Which should they pick and why?

They should start by reinvesting in the “Interview With the Founder,” “Getting to Know CoolTShirts,” and “Ten Crazy Facts About CoolTShirts” campaigns as these three campaigns bring in 91% of their users.

They then should finish their reinvestments by enhancing the weekly newsletter and retargeting ad on facebook as these two campaigns responsible for 63% of purchases.

By reinvesting in the five campaigns mentioned above, they can increase the traffic their site receives and the amount of purchases the new users make.