



# First & Last Touch: CoolTShirts

Learn SQL from Scratch

Cady Lancaster

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# 1. CoolTShirts Summary

## “Get Familiar”

# 1.1 Campaign and Source Summary

- CoolTShirts utilizes 8 campaigns from 6 sources.
- There are eight unique combinations of campaign-to-sources as summarized on the right.

Distinct UTM  
Campaigns

8

Distinct UTM  
Sources

6

```
SELECT count(DISTINCT utm_campaign) AS 'UTM Campaign',  
count(distinct utm_source) as 'UTM Source'  
FROM page_visits;
```

```
SELECT DISTINCT utm_source AS 'UTM Source',  
utm_campaign AS 'UTM Campaign'  
FROM page_visits;
```

UTM Source	UTM Campaign
nytimes	getting-to-know-cool-tshirts
email	weekly-newsletter
buzzfeed	ten-crazy-cool-tshirts-facts
email	retargetting-campaign
facebook	retargetting-ad
medium	interview-with-cool-tshirts-founder
google	paid-search
google	cool-tshirts-search

## 1.2 CoolTShirts Web Build Summary

There are four pages of theCoolTShirts build:

- Landing Page
- Shopping Cart
- Checkout
- Purchase

```
SELECT DISTINCT page_name AS  
'CoolTShirts Webpages'  
FROM page_visits;
```

### CoolTShirts Webpages

1 - landing\_page

2 - shopping\_cart

3 - checkout

4 - purchase

## 2. User Journey

## 2.1 How many first touches is each campaign responsible for?

- Of the 8 campaigns, only 4 are responsible for first touches
- Medium “Interview With CoolTShirts Founder” is the most successful campaign to bring *new users* to the website

source	campaign	ft per campaign
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

```
--User Journey
--How many first touches is each campaign responsible for?
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 AS 'source',
       ft_attr.utm_campaign as 'campaign',
       COUNT(*) AS ft_per_campaign
FROM ft_attr
GROUP BY 1, 2
ORDER BY 3 DESC;
```

## 2.2 How many *last touches* is each campaign responsible for?

- Each campaign generates visits
- The weekly newsletter brings in more last touches than those using Google search “CoolTshirts”

source	campaign	lt per campaign
email	weekly-newsletter	447
facebook	retargeting-ad	443
email	retargeting-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

```
-- How many last touches is each campaign responsible for?
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
    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 AS 'source',
       lt_attr.utm_campaign as 'campaign',
       COUNT(*) AS lt_per_campaign'
FROM lt_attr
GROUP BY 1, 2
ORDER BY 3 DESC;
```



## 2.3 How many visitors make a purchase? Which campaign has the most impact on purchases?

- Of the site visits, 361 yielded purchases (count not shown)
- Email and targeted ads yielded more purchases than media-based campaigns

Source	Campaign	Last touch = purchase
email	weekly-newsletter	115
facebook	retargeting-ad	113
email	retargeting-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

-- How many visitors make a purchase?

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

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

```
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
  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 AS 'source',
       lt_attr.utm_campaign AS 'campaign',
       COUNT(*) AS 'last touch = purchase'
FROM lt_attr
GROUP BY 1, 2
ORDER BY 1 DESC;
```

# 3. Campaign Optimization

# Campaign optimization (5/8 Campaigns)

- While the Google “Paid Search generates the highest conversion of purchases, it has the lowest number of purchases  
**ELIMINATE**
- Google “Cool-Tshirts-Search” campaign has the lowest first touch and purchase conversion – **ELIMINATE**
- The email “retargeting campaign” has a large number of purchases but only half as many as the top performers. To focus on increased traffic, **eliminate** the email “retargeting campaign” and **reinvest in high traffic and high -conversion campaigns**

source	campaign	First Touch Per Campaign	% FT	Last Touch per Campaign	%LT	Last Touch = purchase	%Purch.	purchases per last visit (%)
google	paid-search	0	0%	178	9%	52	14%	29%
email	weekly-newsletter	0	0%	447	23%	115	32%	26%
facebook	retargeting-ad	0	0%	443	22%	113	31%	26%
email	retargeting-campaign	0	0%	245	12%	54	15%	22%
buzzfeed	ten-crazy-cool-tshirts-facts	576	29%	190	10%	9	2%	5%
nytimes	getting-to-know-cool-tshirts	612	31%	232	12%	9	2%	4%
medium	interview-with-cool-tshirts-founder	622	31%	184	9%	7	2%	4%
google	cool-tshirts-search	169	9%	60	3%	2	1%	3%