



# First & Last Touch Attribution

A Marketing Campaign Study for CoolTShirts.com

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- CoolTShirts can re-invest in 5 campaigns. Which should they pick and why?

# 1.1 Get Familiar with CoolTShirts – campaigns and sources

How many campaigns and sources does CoolTshirts use?

Which source is used for each campaign?

- ❑ What is a source? A source is a originating website the leads to the initial visit to CoolTShirts website.  
examples: Facebook, Google, BuzzFeed, Medium, NYT
- ❑ What is a campaign? A targeted marketing outreach based on analytics to generate website interest.  
examples: weekly-newsletters, paid-search and retargeting-ad.
- ❑ How are they related? Both sources and campaigns can be used to further mine for effectiveness in getting to revenue.

campaigns	
8	
sources	
6	
campaign_title	source_title
weekly-newsletter	email
ten-crazy-cool-tshirts-facts	buzzfeed
retargetting-campaign	email
retargetting-ad	facebook
paid-search	google
interview-with-cool-tshirts-founder	medium
getting-to-know-cool-tshirts	nytimes
cool-tshirts-search	google

```
2  /* 1 How many campaigns and sources */
3  SELECT COUNT (DISTINCT utm_campaign) AS
   campaigns
4  FROM page_visits
5  ;
6  SELECT COUNT (DISTINCT utm_source) AS sources
7  FROM page_visits
8  ;
9  /* show relationship between sources and
   campaigns */
10 SELECT DISTINCT (utm_campaign ) AS
   campaign_title, (utm_source) AS source_title
11 FROM page_visits
12 GROUP BY 1
13 ORDER BY 1 DESC
14 ;
```

## 1.2 Get Familiar with CoolTShirts – website pages

What pages are on the CoolTShirts website?

The four distinct values in page\_name were found using:

```
SELECT DISTINCT (page_name)
```

```
landing_page  
shopping_cart  
checkout  
purchase
```

### COOLTShirts Unique Pages

1 - landing\_page

2 - shopping\_cart

3 - checkout

4 - purchase

```
15  /* 2. Find distinct values of page_name column*/  
16  /*Find distinct webpages on the website */  
17  SELECT DISTINCT (page_name) AS 'COOLTShirts  
    Unique Pages'  
18  FROM page_visits  
19  ;
```

## 2.1 What is the users journey – first touch attribution

How many first touches is each campaign responsible for?

Found the initial visit logged in the page\_visits table using:

**MIN(timestamp)**

COOLTSsource	COOLTCampaign	First Touch Count
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

```
21  /* Which campaigns attract users */
22  /* Create a subquery block */
23  WITH first_touch AS (
24      SELECT user_id,
25             MIN(timestamp) as first_touch_at
26      FROM page_visits
27      GROUP BY user_id),
28  ft_attr AS (
29      SELECT ft.user_id,
30             ft.first_touch_at,
31             pv.utm_source,
32             pv.utm_campaign
33      FROM first_touch ft
34      JOIN page_visits pv
35            ON ft.user_id = pv.user_id
36            AND ft.first_touch_at = pv.timestamp
37      )
38  /*Group - Source - Campaign - First time touches */
39  SELECT ft_attr.utm_source AS COOLTSsource,
40         ft_attr.utm_campaign AS COOLTCampaign,
41         COUNT(*) AS 'First Touch Count'
42  FROM ft_attr
43  GROUP BY 1, 2
44  ORDER BY 3 DESC;
```

## 2.2 What is the users journey – last touch attribution

How many last touches is each campaign responsible for?

The revisits in the page\_visits table were found using:

**MAX(timestamp)**  
grouped by campaign

COOLTSOURCE	COOLTCampaign	Last Touch Count
email	weekly-newsletter	447
facebook	retargetting-ad	443
email	retargetting-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

```
46  /* How visitors are drawn back to the
    website */
47  WITH last_touch AS (
48    SELECT user_id,
49           MAX (timestamp) as last_touch_at
50    FROM page_visits
51    GROUP BY user_id),
52  lt_attr AS (
53    SELECT lt.user_id,
54           lt.last_touch_at,
55           pv.utm_source,
56           pv.utm_campaign,
57           pv.page_name
58    FROM last_touch lt
59    JOIN page_visits pv
60         ON lt.user_id = pv.user_id
61         AND lt.last_touch_at =
62            pv.timestamp
63    )
64  SELECT lt_attr.utm_source AS
65         COOLTSOURCE,
66         lt_attr.utm_campaign AS
67         COOLTCampaign,
68         COUNT(*) AS 'Last Touch Count'
69  FROM lt_attr
70  GROUP BY 1, 2
71  ORDER BY 3 DESC;
```

## 2.3 What is the users journey – visitor purchases

How many visitors made a purchase?

Completed Purchases
361

Visitor purchases were found using:

WHERE page\_name = '4-purchased'

361 total completed purchases

```
69  /* 5. How Many visitors made Purchases */  
70  SELECT COUNT (DISTINCT user_id) AS 'Completed Purchases'  
71  FROM page_visits  
72  WHERE page_name = '4 - purchase'  
73  ;
```

## 2.4 What is the users journey – last touches at purchase page

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

The last touch page purchase was found using:

MAX (timesptamp) AS 'last\_touch\_at'

COOLTSOURCE	COOLTCampaign	Last Touch Purchases
email	weekly-newsletter	115
facebook	retargetting-ad	113
email	retargetting-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

```
/* 6. last touches that lead to a purchase */
/* Which Campaigns closed the sale */
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 AS lt
  JOIN page_visits AS pv
  ON lt.user_id = pv.user_id
  AND lt.last_touch_at = pv.timestamp
)
SELECT lt_attr.utm_source AS COOLTSOURCE,
       lt_attr.utm_campaign AS COOLTCampaign,
       COUNT (*) AS 'Last Touch Purchases'
FROM lt_attr
GROUP BY 1,2
ORDER BY 3 DESC;
```

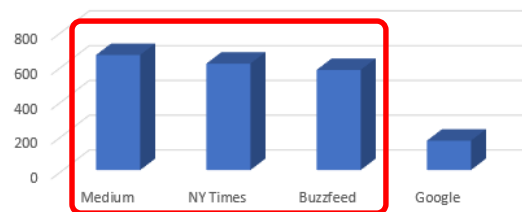


## 2.5 What is the users journey – typical or most common path

What is the typical user journey?

- ❑ The starting point of user exposure begins primarily at websites
- ❑ Return visits are sourced totally elsewhere
- ❑ Purchases are unrelated to initial source

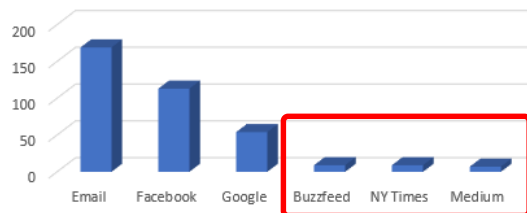
User Initial Entry Point Source



User Last Touch Point Source



User Purchases Source Origin



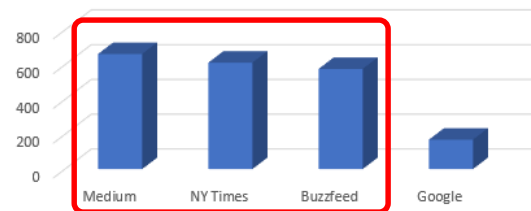
### 3. Optimizing the campaign budget - recommendation

Which 5 campaigns should be re-invested and why?

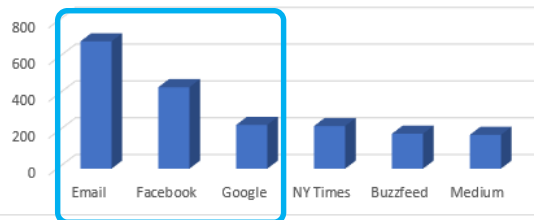
campaign_title	source_title
weekly-newsletter	email
ten-crazy-cool-tshirts-facts	buzzfeed
retargeting-campaign	email
retargeting-ad	facebook
paid-search	google
interview-with-cool-tshirts-founder	medium
getting-to-know-cool-tshirts	nytimes
cool-tshirts-search	google

- ❑ Keep all campaigns associated with highest volume for first touch
- ❑ Keep campaigns associated with highest last touch leading to the most purchases.
- ❑ Consider keeping the retargeting campaign with email.

User Initial Entry Point Source



User Last Touch Point Source



User Purchases Source Origin

