



# CoolTShirts:

## Campaign Analysis & Suggestions

Learn SQL from Scratch

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# 1. Get Familiar with CoolTShirts

# 1.1 Campaigns & Sources

- All data used is found within the page\_visits table.
- There are currently 6 different targeting campaigns in use across 6 different source channels. Both google search and email are being used by more than 1 campaign.
- The campaign itself, is the actual advertising strategy being used, while the source, is the medium/website that actually sent the user to the CoolTShirts website.
- In this analysis, all campaign data has been recorded as “utm\_campaign” while sources are “utm\_source”.

```
SELECT COUNT(DISTINCT utm_campaign) AS '# of campaigns'
FROM page_visits;
```

```
SELECT COUNT(DISTINCT utm_source) AS '# of sources'
FROM page_visits;
```

```
SELECT DISTINCT utm_campaign AS 'campaign name', utm_source AS 'source'
FROM page_visits;
```

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

# 1.2 Site Layout

The CoolTShirts’ website is currently using 4 webpages for the campaigns outlined in the table below.  
This was determined by displaying each distinct page name from the entire page\_visits data set.

```
SELECT DISTINCT page_name AS 'page names'  
FROM page_visits;
```

Page 1	Page 2	Page 3	Page 4
1 - landing_page	2 - shopping_cart	3 - checkout	4 - purchase

## 2. What is the user journey?

## 2.1 First Touches

- Data of the recorded “first touch” of the site was analyzed across all users.
- Currently, PR related web articles are driving the most traffic with google web searches performing the worst.
- Data displaying total touches per source/campaign is displayed below, as well as the code that generated the findings.

```
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 'total first touches'  
FROM ft_attr  
GROUP BY 1, 2  
ORDER BY 3 DESC;
```

Source	Campaign	First Touches
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

## 2.2 Last Touches

- Data of the recorded “last touch” of the site was analyzed across all users.
- The weekly newsletter is leading all other campaigns closely followed by facebook retargeting. Users are being shown new items or are being reminded what was left in their cart, very effective.

```
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 AS 'source',  
       lt_attr.utm_campaign AS 'campaign',  
       COUNT(*) AS 'total last touches'  
FROM lt_attr  
GROUP BY 1, 2  
ORDER BY 3 DESC;
```

Source	Campaign	Last Touches
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



## 2.3 User Data

Compiling the total sales data of all users that have reached page 4, “4 – purchase” has resulted in 358 unique customer id’s.

Unique Purchasing Customers
358

```
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 COUNT(DISTINCT lt_attr.user_id) AS 'total  
purchasing visitors'  
FROM lt_attr  
WHERE page_name = '4 - purchase';
```

## 2.4 Last Touches on Purchase Page

- Let's specifically see the last touches that occurred on the purchase page.
- The weekly newsletter and facebook retargeting campaigns are leading to sales at double the rates of the closest campaign.

```
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 AS 'source',  
       lt_attr.utm_campaign AS 'campaign',  
       COUNT(*) AS 'last touches on purchase page'  
FROM lt_attr  
GROUP BY 1, 2  
ORDER BY 3 DESC;
```

Source	Campaign	Last Touches
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-shirts	9
medium	interview-with-cool-tshirts-founder	7
google	cool-tshirts-search	2

## 2.5 What is the typical journey?

- To summarize, customers are reading your PR investments which results in them clicking thru to the site, hitting the landing page.
- Typically we see users browse the store and then navigate away or sign up for the weekly newstetter.
- Users are targeteded with relevant ads or are clicking e-mail links bringing them back to make a purchase.
- We see 18.24% of all last touches taking place on the purchase page resulting in a sale.

# 3. Optimize the Campaign Budget

# 3.1 Budget Optimization

- What 5 campaigns should be reinvested in?
- Looking at all the data, I've outlined the top 5 campaigns you should reinvest with.
- The weekly-newsletter, retargeting-ad, and retargeting-campaign are the top 3 in last touches and purchases. These are your closers and lead to sales, they need to be maintained.
- The other two: getting-to-know-cool-tshirts & ten-crazy-cool-tshirts-facts, while not leading directly to sales, are the highest performing prospecting campaigns. You need to get users on your site and aware of the brand. They also have fair performance in terms of last touch results that double the investments appeal.

Source	Campaign	All Touches
nytimes	getting-to-know-cool-tshirts	844
buzzfeed	ten-crazy-cool-tshirts-facts	766
email	weekly-newsletter	447
facebook	retargeting-ad	443
email	retargeting-campaign	245

## 3.2 Budget Optimization

- I believe with this balanced focus of prospecting and a targeted approach of capturing potential customer interest creates a winning outcome.
- Thank you for the opportunity to review and analyze your business.