



First and Last Touches

Learn SQL from Scratch

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**What does the CoolTShirts
Campaign strategy look
like?**

Active Campaigns and Sources

- Currently CoolTShirts.com has 8 campaigns running
 - Cool-tshirts-search
 - Getting-to-know-cool-tshirts
 - Interview-with-cool-tshirts-founder
 - Paid-search
 - Retargeting-ad
 - Retargeting-campaign
 - Ten-crazy-cool-tshirts-facts
 - Weekly-newsletter
- These campaigns are running on 6 different sources (see right)
- What is utm_campaign?
 - The specific ad or strategy used to connect to the customers
- What is a utm_source?
 - This identifies the touchpoint that sent the traffic to the website

----- SQL query used to determine how many campaigns

```
select count(distinct(utm_campaign)) as 'num_campaigns'
from page_visits;
```

----- SQL query used to determine how many sources

```
select count(distinct(utm_source)) as 'num_sources'
from page_visits;
```

----- SQL query used to determine how the campaigns and sources relate

```
select utm_campaign, utm_source
from page_visits
group by utm_campaign;
```

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

**What does the Customer
Journey look like?**

How is CoolTShirts.com structured?

Once potential customers are attracted via one of the 8 running campaigns, they will see a relatively simple structure for the CoolTShirts website.

There are 4 unique pages the customers can visit during their journey: The Landing page, Shopping Cart, Checkout, and Purchase page.

Simplicity in a website often promotes better user experiences, which in turn, may lead to more purchases!

----- SQL query used to determine pages on the website

```
select count(distinct(utm_source)) as 'num_sources'  
from page_visits;
```

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

Customer Journey: Which Campaign gets the most customer to the website?

- The Interview with the **Cool Tshirts Founder** is the campaign responsible for the most first touches with **622** touches
 - **Getting to know Cool Tshirts** is also very good at **612** touches
 - **Ten Crazy Cool Tshirts Facts** came in third at **576** touches
 - **Cool Tshirts Search** was much lower at fourth with **169** touches
- **Note- 4 of the active 8 campaigns are responsible for 0 touches!**
 - Paid search, Retargeting ad, Weekly newsletter, Retargeting campaign are ***not effective campaigns for first touches***

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

----- SQL query used to determine first_touches by campaign

```
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 as ft  
  JOIN page_visits as 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 first_touches  
from ft_attr  
group by 1, 2  
order by 3 desc;
```

Customer Journey: Which Campaign leads the customer to a purchase?

- The Weekly Newsletter and the Retargeting-Ad are responsible for the most Last Touches (447 and 443 respectively)
 - Neither of these campaigns were responsible for any first touches!

source	campagain	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

----- SQL query used to determine first_touches by campaign

```
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 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 source, lt_attr.utm_campaign as campagain, count(*)  
as last_touches  
from lt_attr  
group by 1, 2  
order by 3 desc;
```


How many visitors to CoolTShirts.com make a purchase?

- Based on the UTM data for CoolTShirts.com, 361 visitors have accessed the purchase page and transacted.
 - Close rate: $(361/1979)*100 = 18.24\%$
- The top 5 campaigns are:
 - Weekly Newsletter
 - Retargeting-Ad
 - Retargeting-Campaign
 - Paid-Search
 - Ten Crazy Cool Tshirts facts*
 - Getting to Know Cool Tshirts*

*The last two campaigns are responsible for the same number of purchases

num_purchases		page_name
361		4 - purchase
source	campagain	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

What does the typical customer's journey look like?

- The typical customer first accesses CoolTShirts.com after viewing a campaign on one of the 4 sources:
 - **Google, NY Times, BuzzFeed, or Medium**
 - Based on first touches query
- Then the customer typically leaves CoolTShirts.com without making a purchase after initially accessing the site
 - Based on last touches query
 - Of the 4 campaigns with the highest last touches, only 1 campaign is responsible for any first touches.
- After some amount of time, the majority of customers return to CoolTShirts.com because they saw a campaign on one of these 4 sources:
 - **Weekly Newsletter**
 - **Retargeting-Ad**
 - **Retargeting-Campaign**
 - **Getting to Know Cool Tshirts**
 - These 4 campaigns are **responsible for 69% of all last touches!**
- Of the customers that returned to the website **18.24% of them (361 of the 1979) made a purchase.**
 - 63% of the customers that made a purchase were brought back to the website either by the Weekly Newsletter or the Retargeting-Ad.

Optimizing the Campaign Budget

Which Campaign/Source is responsible for the most purchases?

- In order to decide which campaigns are most effective, both first and last touches should be considered
- For example, Ten Crazy Cool Tshirt Facts and Getting to Know Cool Tshirts both have the same number of last touches
 - Getting to Know Cool Tshirts attracts 6% more customers

First Touches

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

Last Touches

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-tshirts	9
medium	interview-with-cool-tshirts-founder	7
google	cool-tshirts-search	2

Recommendation

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Based on statistics pulled from the CoolTShirts.com SQL database, it is recommended to fund the following 5 campaigns:

- **Weekly Newsletter**
- **Retargeting Ad**
- **Retargeting Campaign**
- **Paid Search**
- **Getting to Know Cool Tshirts**

Each of these campaigns have either the highest first touches (attracting customers to the website) or the highest last touches that resulted in a purchase.

Note- Perhaps more consideration or work should be put towards adding marketing/making changes to CoolTShirts.com to help retain the 82% of customers that leave initially.

Thank you!

Questions?