CoolTShirts

Learn SQL from Scratch
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1. Get Familiar with CoolTShirts

1.1 Understanding the CoolTShirts Company

- How many campaign and sources does CoolTShirts use and how are they related? Be sure to explain the difference between utm_campaign and utm_source.
- What pages are on their website?

Utm_campaign	Utm_source
8	6

The utm_source identifies which touchpoint sent the traffic such as google, email or Facebook.
The utm_campaign identifies the specific ad or email blast such as retargeting-ad or weekly-newsletter.

Pages
1. landing_page
2. shopping_cart
3. checkout
4. purchase

1.2 The Queries

1. Utm_capaign	2. Utm_source
8	6

3. Source	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

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

1. utm_campaign

```
select count (distinct utm_campaign)
    from page_visits;
```

2. utm-source

```
select count (distinct utm_source)
    from page_visits;
```

3. Source and Campaigns names

```
select distinct utm_source, utm_campaign
    from page_visits;
```

4. Page Name

```
select distinct page_name as 'Page Names'
from page_visits;
```

2. User Journey Analysis

2.1 How many first touches is each campaign responsible for?

Source	Campaign	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

```
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 Count
from ft_attr
group by 1, 2
order by 3 desc;
```

2.2 How Many Last Touches is Each Campaign Responsible?

Source	Campaign	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

```
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 Count
    from lt_attr
    group by 1, 2
    order by 3 desc;
```

2.3 How many visitors make a purchase?

Customers that Purchase
361

```sql
select count (distinct user_id) as
'Customers that Purchase'
from page_visits
where page_name = '4 - purchase';
```

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

Source	Campaign	Count
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

```
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),
ft_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 ft_attr.utm_source as Source,
           ft_attr.utm_campaign as
Campaign, count (*) as Count
from ft_attr
group by 1, 2
order by 3 desc;
```
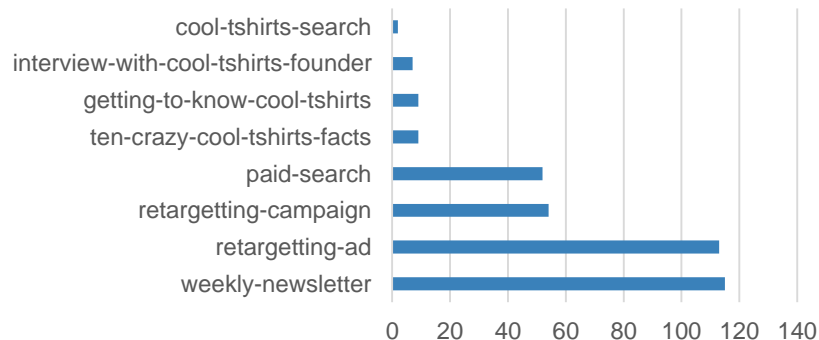
2.5 What is the typical user journey?

First Touch
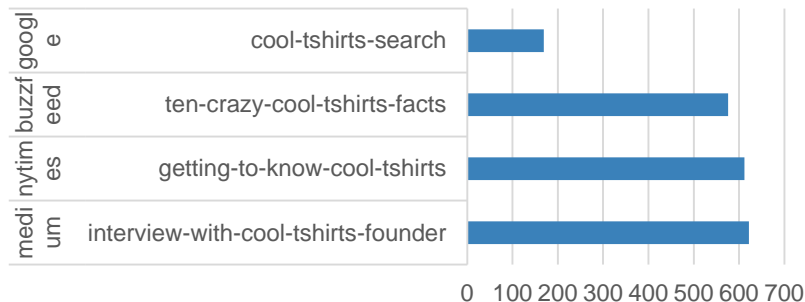
Last Touch

Purchase

The typical user will end up completing the purchase by the last touch source. In this case the top 3 sources were email, Facebook, and google. The top 3 campaigns were weekly-newsletter, retargeting-ad, and retargeting-campaign.

3. Optimize the campaign budget

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

Based on the data presented throughout this Power Point, CoolTShirts should stop funding the cool-tshirts-search campaign which only generated 2 purchases and allocate the extra money to the re-targeting campaigns via email and Facebook.