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Getting Familiar with CoolTShirts

Understanding Cool Tshirts Marketing Campaigns

How many campaigns and sources does CoolTShirts use and how are they related?

Be sure to explain the difference between utm_campaign and utm_source

CoolTshirts employs **8 campaigns** via **6 sources**.

Sources are the medium by which **campaign** ads are provided to potential customers.

For instance, a customer reading the The New York Times, a source, will encounter an ad campaign called "getting to know cool tshirts."

What pages are on the CoolTShirts website?

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

Getting Familiar with CoolTshirts: The Queries

1. Campaigns
8

2. Sources
6

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

3. Sources	Campaigns
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. To count the distinct types of campaign:

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

2. To count the distinct types of sources:

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

3. To find how campaigns and sources are related:

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

4. To find pages on the CoolTshirts website:

```
select distinct page_name
    from page_visits;
```

How Many First Touches is each Campaign Responsible?

The query includes creating temporary tables called first_touch and ft_attr. The last_touch table involves using the minimum timestamp, or first touch. After creating the temporary tables, a join was made on the existing table called page_visits. This allowed for counting the number each first touch per campaign.

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,
    ft_attr.utm_campaign,
    COUNT(*)
FROM ft_attr
GROUP BY 1, 2
ORDER BY 3 DESC;
```

How Many Last Touches is Each Campaign Responsible?

The query includes creating temporary tables called last_touch and lt_attr. The last_touch table involves using the maximum timestamp, or last touch. After creating the temporary tables, a join was made on the existing table called page_visits. Source and campaign columns were selected and counted. This allowed for counting the number of each last touch by each campaign.

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 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,
       lt_attr.utm_campaign,
       COUNT(*)
FROM lt_attr
GROUP BY 1, 2
ORDER BY 3 DESC;
```

How Many Visitors Make a Purchase?

The query includes counting the distinct number of user id's from the table "page_visits" where "4– purchase" occurs in the "page_name column."

Count Distinct User Id
361

```
select count (distinct user_id)
from page_visits
where page_name = '4 - purchase';
```

# How Many Last Touches on the Purchase Page is Each Campaign Responsible?

The query includes counting the distinct number of user id's from the table "page_visits" where "4– purchase" occurs in the "page_name column."

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,
          ft_attr.utm_campaign,
               count (*)
from ft_attr
group by 1, 2
order by 3 desc;
```

What is the Typical User Journey?

The top 3 campaigns as demonstrated through last touches show no overlap with the top 3 campaigns associated with the top 3 first touches. The top 3 last touch campaigns also earned the top 3 in purchases.
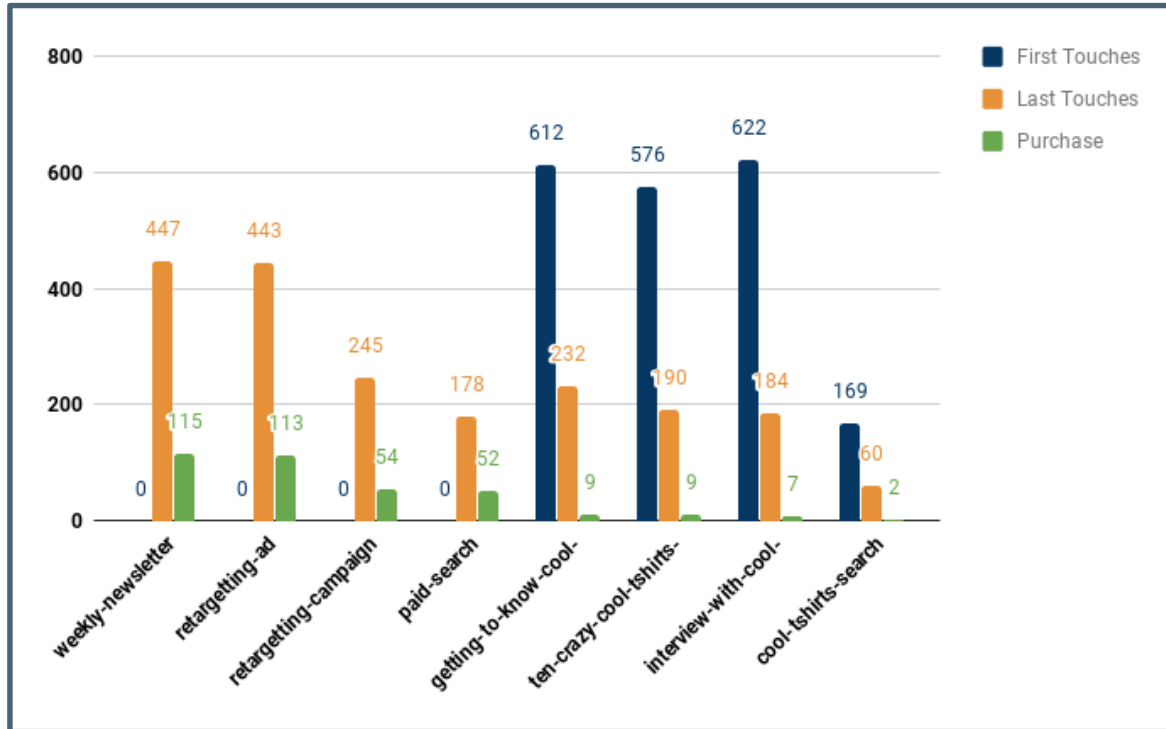
All users first encounter 1 of 4 different ad campaigns (their first touch) via Google, The New York Times, Buzzfeed, and Medium. Those users' last touch is spread across 8 campaigns, however. While some users may "last touch" the same campaign they encountered the first time, many more encounter new ads targeting toward them in email, Facebook, and Google. All of these latter mentioned campaigns appear much more effective in instigating an actual purchase. These campaigns account for 92.5% of all purchases.
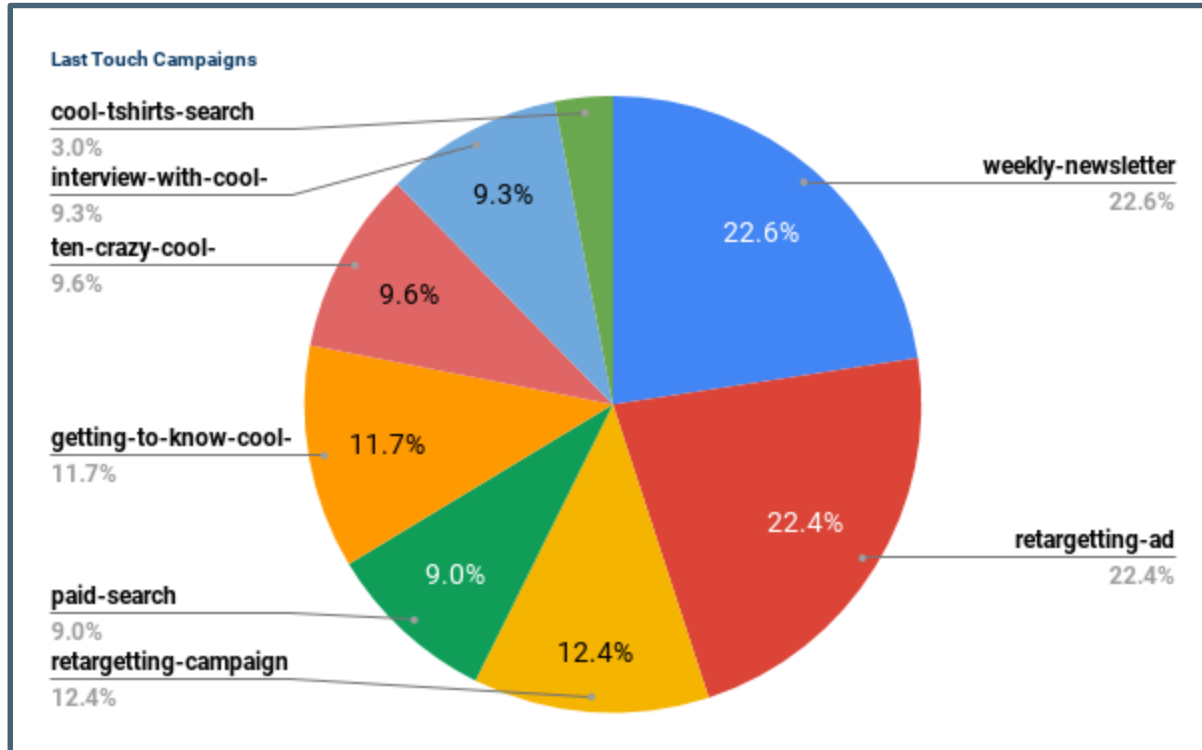
First Touch Campaigns

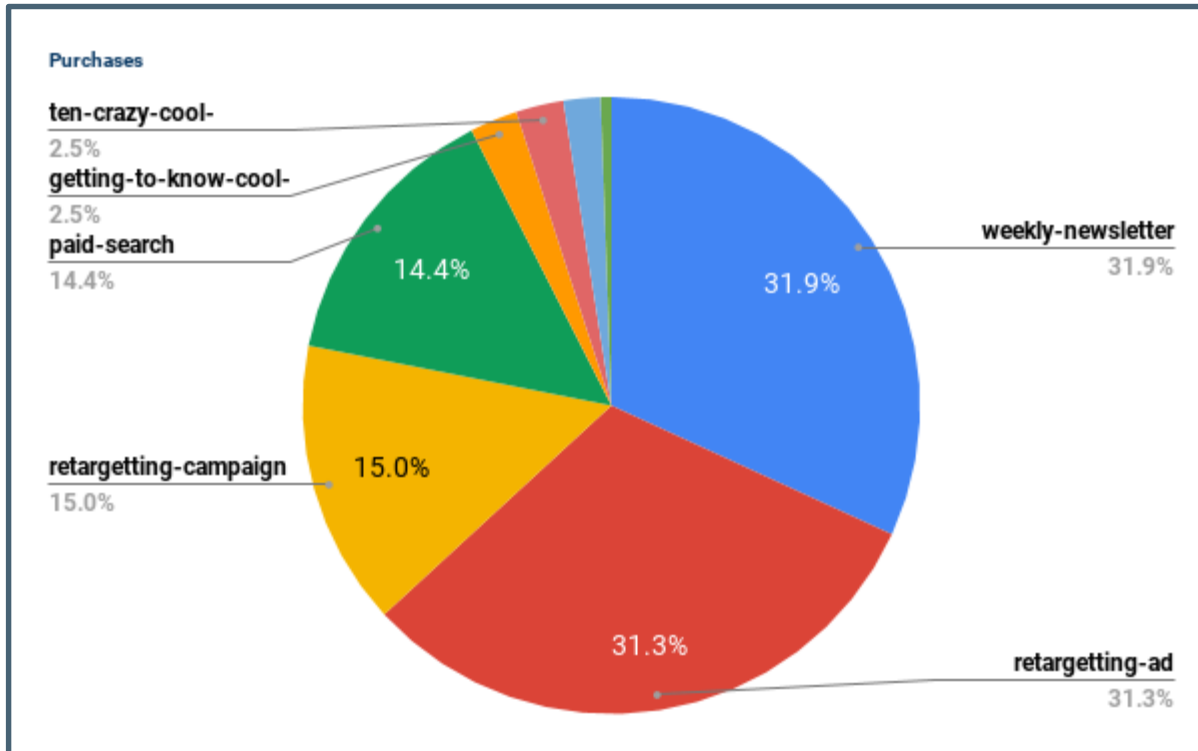All first touches occurred through just 4 campaigns. Sources were NY Times, BuzzFeed, Medium, and Google.
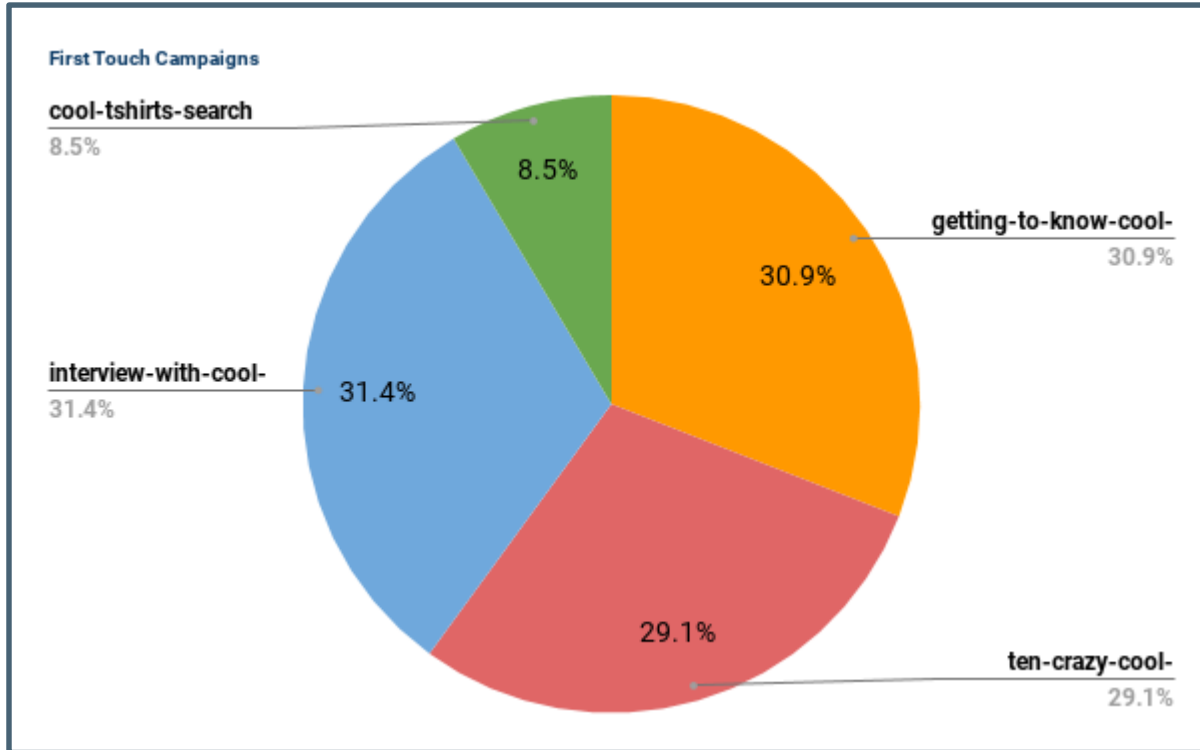
Last Touch Campaigns

The top 4 campaigns with last touches account for 57.4% of all last touches. Only 1 of these campaigns saw first touches: Getting to Know CoolTshirts from the NY Times.

Campaigns Associated with Purchases

The top 4 campaigns associated with purchases account for 92.5% of all purchases. Almost half, 46.8% derived from email sources.

Purchases

ten-crazy-cool-
2.5%

getting-to-know-cool-
2.5%

paid-search
14.4%

14.4%

retargetting-campaign
15.0%

15.0%

weekly-newsletter
31.9%

31.9%

retargetting-ad
31.3%

31.3%

Campaign Budget Optimization

Optimize the Campaign Budget

❖ Cease funding for the following campaign: CoolTshirts Search.

❖ Reallocate funds from that campaign to more re-targeting campaigns via email and social media.

❖ Could be beneficial to create re-targeting campaigns specifically to Medium and NY Times Campaigns because both incur a large share of first touches.

Sources	Campaign	First Touches	% FT	Last Touches	% LT	Purchase	% Purchase
email	weekly-newsletter	0	0.0%	447	22.6%	115	31.9%
facebook	retargetting-ad	0	0.0%	443	22.4%	113	31.3%
email	retargetting-campaign	0	0.0%	245	12.4%	54	15.0%
google	paid-search	0	0.0%	178	9.0%	52	14.4%
nytimes	getting-to-know-cool-tshirts	612	30.9%	232	11.7%	9	2.5%
buzzfeed	ten-crazy-cool-tshirts-facts	576	29.1%	190	9.6%	9	2.5%
medium	interview-with-cool-tshirts-founder	622	31.4%	184	9.3%	7	1.9%
google	cool-tshirts-search	169	8.5%	60	3.0%	2	0.6%