

COOLSHIRTS

Attribution Queries Project

Learn SQL from Scratch

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11/26/2018

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1. Familiarizing with the the Company:

- a. 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`.
- b. What pages are on their website?

2. User Journey

- a. How many first touches is each campaign responsible for?
- b. How many last touches is each campaign responsible for?
- c. How many visitors make a purchase?
- d. How many last touches *on the purchase page* is each campaign responsible for?
- e. What is the typical user journey?

TABLE OF CONTENTS CTD.

3. Optimizing Campaign Budget

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

FAMILIARIZING WITH THE COMPANY

Campaigns: utm_campaign

```
SELECT COUNT(DISTINCT utm_campaign)
FROM page_visits;
```

- Getting-to-know-cool-tshirts
- Weekly-newsletter
- Ten-crazy-cool-tshirts-facts
- Retargeting-campaign
- Retargeting-ad
- Interview-with-cool-tshirts-founder
- Paid-search
- cool-tshirts-search

Sources: utm_source

```
SELECT COUNT(DISTINCT utm_source)
FROM page_visits;
```

- Nytimes
- Email
- BuzzFeed
- Facebook
- Medium
- Google

Campaigns are promoting projects used to achieve a goal

Sources are where the campaigns are being held

→
*campaign and the correlating source

FAMILIARIZING WITH THE COMPANY

utm_campaign	utm_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

Campaign	Source
8	6

- There are 8 Distinct Campaigns
- There are 6 Distinct Sources
- The following table shows matching Campaign to correlating Source

```
SELECT DISTINCT utm_campaign, utm_source  
FROM page_visits;
```

FAMILIARIZING WITH THE COMPANY

There are 4 pages on the CoolTShirts website.

To find this:

```
SELECT DISTINCT page_name  
FROM page_visits;
```

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

USER JOURNEY

A. FIRST TOUCHES

source	campaign	total
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

Table above shows total first touches with corresponding campaign and source.

```
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  
FROM ft_attr  
GROUP BY 1, 2  
ORDER BY 3 DESC;
```

USER JOURNEY

B. LAST TOUCHES

source	campagin	total last touch
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

Table above shows total last touches with corresponding campaign and source.

```
--last touch
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 'campagin',
       COUNT(*) AS 'total last touch'
FROM lt_attr
GROUP BY 1, 2
ORDER BY 3 DESC;
```


USER JOURNEY

C. HOW MANY VISITORS MADE A PURCHASE?

customers who purchased
361

```
--Customers who made a purchase
SELECT COUNT(DISTINCT user_id) AS 'customers who purchased'
FROM page_visits
WHERE page_name = '4 - purchase';
```

There were 361 customers that made a purchase.

D. HOW MANY LAST TOUCHES *ON THE PURCHASE PAGE* IS EACH CAMPAIGN RESPONSIBLE FOR?

source	campagin	total last touch
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

```
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 'campagin',
       COUNT(*) AS 'total last touch'
FROM lt_attr
GROUP BY 1, 2
ORDER BY 3 DESC;
```

USER JOURNEY

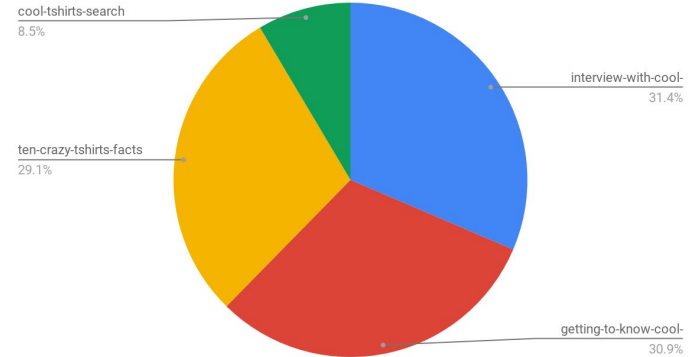
E. WHAT IS THE TYPICAL USER JOURNEY?

source	campaign	total
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

Users are drawn to the ‘interview-with-cool-tshirts-founder’, the ‘getting-to-know-cool-t-shirts’ and the ‘ten-crazy-cool-tshirts-facts’ campaigns which make up 31%, 30%, and 29% of total users first touch respectively

distinct customers
1979

Points scored

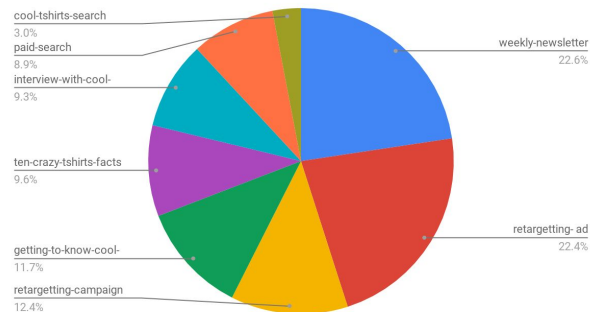


USER JOURNEY

E. WHAT IS THE TYPICAL USER JOURNEY CTD?

source	campagin	total last touch
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facebook	retargetting-ad	443
email	retargetting-campaign	245
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buzzfeed	ten-crazy-cool-tshirts-facts	190
medium	interview-with-cool-tshirts-founder	184
google	paid-search	178
google	cool-tshirts-search	60

Points scored



This last touches table shows that users needed a 2nd campaign to prompt them to purchase as the ‘interview-with-cool-tshirts-founder’, the ‘getting-to-know-cool-t-shirts’ and the ‘ten-crazy-cool-tshirts-facts’ campaigns only garner 30.6% of total last touches

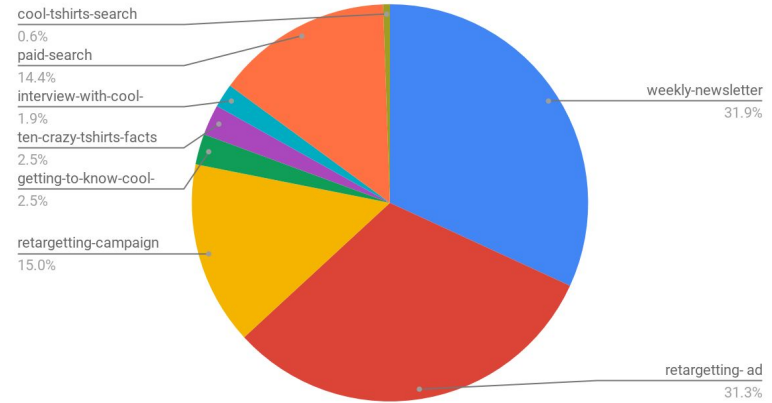
USER JOURNEY

E. WHAT IS THE TYPICAL USER JOURNEY CTD?

source	campagin	total last touch
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

Above table shows the total last touches that lead to purchasing. The campaigns that led to purchasing were 'weekly-newsletter' and 'retargetting-ad'. These generate 63% of total purchasing.

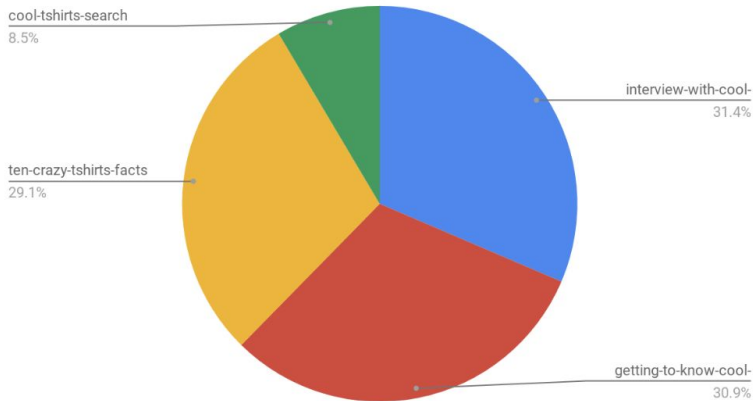
Points scored



OPTIMIZE CAMPAIGN BUDGET

CoolTShirts should stick with the interview and facts campaigns as they garner the most first touches to the website.

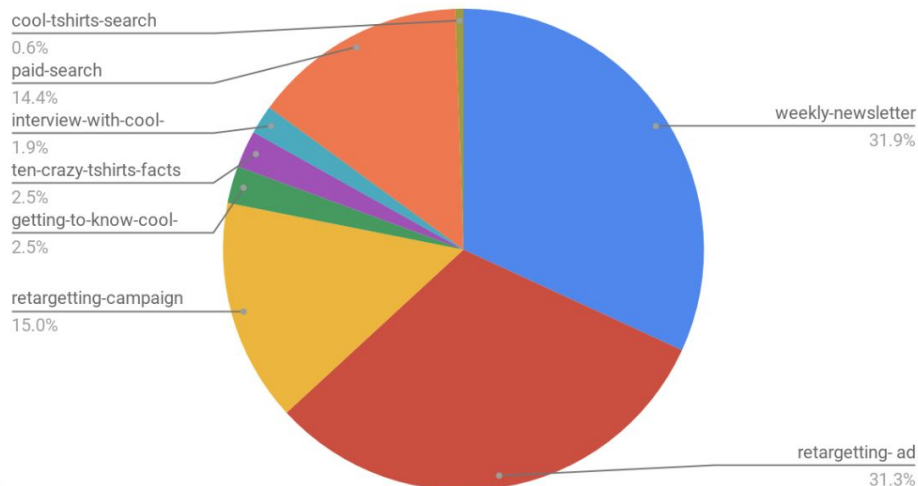
Points scored



OPTIMIZE CAMPAIGN BUDGET

CoolTShirts should also focus on their weekly newsletter and both retargeting campaigns as they led to the most % purchased.

Points scored



OPTIMIZE CAMPAIGN BUDGET

To Conclude, the 5 campaigns CoolTShirts should re-invest in:

1. Interview With Cool TShirts Founder
2. Getting to Know Cool TShirts
3. Ten Crazy Cool TShirts Facts
4. Weekly Newsletter
5. Retargeting AD