



CoolTShirts

Learn SQL from Scratch

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Example Table of Contents

1. Get familiar with CoolTShirts
2. What is the user journey?
3. Optimize the campaign budget

1. Get Familiar With Cooltshirts

1 Get Familiar with CoolTshirts

CoolTShirts uses the campaigns and sources listed below in following table.

A source is a form of communication that is shared with a prospective customer.

A campaign is a specific slogan or message that is utilized to encourage a response from a specific group

Campaigns	Sources
Getting-to-know-cooltshirts	Nytimes
Weekly-newsletter	Email
Ten-crazy-cool-tshirts-facts	Buzzfeed
Retargeting-campaign	Email
Retargeting-ad	Facebook
Interview-with-cool-tshirts-founder	Medium
Paid-search	Google
Cool-tshirts-search	Google

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

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

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

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

Source Count

6

Campaign Count

8

1 Get Familiar with CoolTshirts Continued

The following table lists the pages that are found on the CoolTShirts website.

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

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

1. What is the user journey

2. What is the user journey?

The following table lists the campaigns and the number of first touches for each of them.

Source	Campaign	Count
Medium	Interview-with-coo-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_source,  
            COUNT (*) AS COUNT  
FROM ft_attr  
GROUP BY 1,2;
```

2. What is the user journey continued

The following table lists the campaigns and the number of last touches for each of them.

Source	Campaign	Count
buzzfeed	Ten-crazy-cool-tshirt-facts	190
Email	Retargeting-campaign	245
Email	Weekly-newsletter	447
facebook	Retargeting-ad	443
google	Cool-tshirts-search	60
google	Paid-search	178
Medium	interview-with-cool-tshirts-founder	184
nytimes	Getting-to-know-cool-tshirts	232

```
WITH last_touch AS (  
    SELECT user_id,  
           MAX(timestamp) AS last_touch_at  
    FROM page_visits  
    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(*) AS count  
FROM ft_attr  
GROUP BY 1,2;
```


2. What is the user journey continued

The following table displays the number of visitors that make a purchase

Customers that make a purchase
361

```
SELECT COUNT(DISTINCT user_id) AS  
'Customers that Purchase'  
FROM page_visits  
WHERE page_name = '4 - purchase';
```

2. What is the user journey continued

The following table displays how many last touches on the purchase page that each campaign is responsible for.

Source	Campaign	Count
buzzfeed	Ten-crazy-cool-tshirt-facts	9
Email	Retargeting-campaign	54
Email	Weekly-newsletter	115
facebook	Retargeting-ad	113
google	Cool-tshirts-search	2
google	Paid-search	52
Medium	interview-with-cool-tshirts-founder	7
nytimes	Getting-to-know-cool-tshirts	9

```
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(*) AS count  
FROM ft_attr  
GROUP BY 1,2;
```

2. Typical user Journey

The user journey begins on one of the websites story campaigns as these account for 91% of the first touches that take place on the site.

The user then requires an additional campaign in order to make a purchase as only 6% of the purchases made are accredited to the story campaigns.

92% of the purchases that were made on the site were as a result of paid-search, retargeting-campaign, retargeting-ad, and the weekly-newsletter.

3. Optimize the campaign budget

3. Optimizing the campaign budget

The following table displays the percentages of first touch, last touch, and purchases generated by each campaign.

Campaign	First Touch %	Last Touch %	Purchase %
Ten-crazy-cool-tshirt-facts	29%	10%	2%
Retargeting-campaign	0%	12%	15%
Weekly-newsletter	0%	23%	32%
Retargeting-ad	0%	22%	31%
Cool-tshirts-search	9%	3%	1%
Paid-search	0%	9%	14%
interview-with-cool-tshirts-founder	31%	9%	2%
Getting-to-know-cool-tshirts	31%	12%	2%

3. There can be only 5 campaigns

Based on the previous table the campaigns that should be chosen are as follows

Selecting interview-with-cool-tshirts-founder, getting-to-know-cool-tshirts, and ten-crazy-cool-tshirt-facts will allow us to retain 91% of all first touches.

Selecting Weekly-newsletter and retargeting-ad will allow us to retain 55% of last touches and 63% of purchases.

Discontinuing cool-tshirts-search, retargeting-campaign, and paid-search will only eliminate 9% of first touches, 24% of last touches, and 30% of purchases.