



CoolTShirts.com Attribution

Learn SQL from Scratch

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1. Get Familiar with CoolTShirts.com

1.1 CoolTShirts Campaigns and Sources

- CoolTShirts is running 8 distinct campaigns utilizing 6 sources
- There can be multiple campaigns per source, in particular email and google both have 2 campaigns
- The source is the general site or location that the user came from to CoolTShirts
- The campaign is the specific article, ad, search or email that the user interacted with on the source that got the user to go to CoolTShirts

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

1.2 CoolTShirts Pages

- Users interact with 4 web pages on CoolTShirts.com

```
-- distinct web pages  
SELECT DISTINCT page_name  
from page_visits;
```

Site Pages

1

landing_page

2

shopping_cart

3

checkout

4

purchase

2. What is the user journey?

2.1 CoolTShirts Campaigns and Sources

- Of the 8 campaigns that CoolTShirts is running, 4 of them are responsible for the initial visits to the site
- Interview-with-cool-tshirts-founder has the most first touches with 622, followed closely by getting-to-know-cool-tshirts with 612
- All 8 campaigns are responsible for generating some last touches
- The weekly-newsletter is the best campaign for last touches with 447 last touches, followed closely by retargeting-ad with 443 last touches

Campaigns	First Touches	Last Touches
interview-with-cool-tshirts-founder	622	184
getting-to-know-cool-tshirts	612	232
ten-crazy-cool-tshirts-facts	576	190
cool-tshirts-search	169	60
weekly-newsletter	0	447
retargeting-ad	0	443
retargeting-campaign	0	245
paid-search	0	178

2.2 Visitors

- 361 visitors made a purchase, having visited the “purchase” web page following the “checkout” page
- As shown on the next page 358 visitors had a last touch on the purchase page
- The delta of 3 visitors is due to those visitors continuing back to the website and continuing to shop post making a purchase

```
--count of visitors who made a purchase
SELECT page_name, COUNT(DISTINCT user_id)
FROM page_visits
WHERE page_name = '4 - purchase'
GROUP BY 1;
```


2.3 Last Touches Purchase Page by Campaign

```
-- last touch at purchase with campaign counts
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_campaign,
       COUNT(*)
FROM lt_attr
WHERE page_name = '4 - purchase'
GROUP BY 1
ORDER BY 2 DESC;
```

Campaigns	Last Touches on the Purchase Page
weekly-newsletter	114
retargeting-ad	112
retargeting-campaign	53
paid-search	52
getting-to-know-cool-tshirts	9
ten-crazy-cool-tshirts-facts	9
interview-with-cool-tshirts-founder	7
cool-tshirts-search	2

2.4 Typical User Journey

- The typical user journey starts with the user finding out about CoolTShirts via an article or post such as "Interview with Cool Tshirts Founder", "Getting to know Cool Tshirts" or "Ten Crazy Cool Tshirts facts"
- After their initial touch users explore the site then typically leave before making a purchase – only 27 out of the 358 purchases came from the campaigns that generated first touches
- After leaving the site without making purchase, users are reengaged via the weekly-newsletter, retargeting-ad, retargeting-campaign and paid-search
- Once reengaged users come back to the site, explore more and have an increased likelihood to make a purchase – 331 out of the 1,313 users reengaged (25%) made a purchase

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3. Optimize the campaign budget

3.1 CoolTShirts Campaigns to Reinvest In

- The top 2 campaigns for first touches that CoolTShirts should reinvest in are:
- Interview-with-cool-tshirts-founder and getting-to-know-cool-tshirts
- These campaigns created a combined 1,234 first touches, the top two first touch producing campaigns, and 18 purchases
- The top 3 campaigns for purchases that CoolTShirts should reinvest in are:
- Weekly-newsletter, retargeting-ad, retargeting-campaign
- These campaigns generated a combined 279 purchases
- The combination of these 5 campaigns would generate 1,234 first touches and 297 purchases, the pareto optimal combination of all the possible campaigns

Campaigns	Sources
interview-with-cool-tshirts-founder	medium
getting-to-know-cool-tshirts	nytimes
weekly-newsletter	email
retargeting-ad	facebook
retargeting-campaign	email