



CoolTShirts Web Stats

Learn SQL from Scratch

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Table of Contents

1. Welcome to CoolTShirts!

Get familiar with the company.

2. Statistics Revealed.

What is the user journey?

3. Where to Reinvest?

Optimize the campaign budget

1. Welcome to CoolTShirts !

1.1 Welcome to CoolTShirts!

CoolTShirts has 4 pages which users (customers) visit in order to make purchases:

Page Name	Description
1 - landing_page	All users who visit cooltshirts.com
2 - shopping_cart	Users visit this page to view items they have added to their cart.
3 - checkout	Users visit this page to enter shipping and payment information.
4 - purchase	Users only land on this page after COMPLETING A PURCHASE.

1.2 Welcome to CoolTShirts!

But how did they come to our site anyways?

Basically, we keep a list of our ad campaigns (**utm_campaign**) as well as the location of the link each user clicked on to come to a page at CoolTShirts (**utm_source**).

For example, the only campaign we ran with Buzzfeed was the “ten-crazy-cool-tshirt-facts” campaign. With Google, we bought sponsored results and a keyword campaign we called “cool-tshirts-search”.

Campaign	Source
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

2. Statistics Revealed!

2.1 Statistics Revealed!

Every time a user visits or revisits a page on our site, navigates to another page on our site... or even just clicks 'Refresh', we store another record of their visit.

To really use any of this data, we first narrow it down to when a specific user **FIRST** visits our site and the **LAST** time we see them.

We call these values **first_touch** and **last_touch**, and we find them with a fairly simple query like this (first_touch):

```
17 WITH first_touch AS (  
18     SELECT user_id,  
19           MIN(timestamp) as first_touch_at  
20     FROM page_visits  
21     GROUP BY user_id)  
22 SELECT ft.user_id,  
23        ft.first_touch_at,  
24        pv.utm_source,  
25        pv.utm_campaign  
26 FROM first_touch ft  
27 JOIN page_visits pv  
28     ON ft.user_id = pv.user_id  
29     AND ft.first_touch_at = pv.timestamp;
```

2.2 Statistics Revealed!

Now let's take a look at all of the **first_touch** entries we saw from each Campaign:

622 people visited CoolTShirts.com because of that top campaign! WOW!

Number of FTs	From Campaign
622	interview-with-cool-tshirts-founder
612	getting-to-know-cool-tshirts
576	ten-crazy-cool-tshirts-facts
169	cool-tshirts-search

2.2 Statistics Revealed!

Some people visit the site and leave before purchasing. Later they might be reminded by a different ad to come back to the site.

Let's see which campaigns reminded people to come back and shop:

People may have visited initially from a different ad, but this chart shows the "weekly-newsletter" campaign, for example, which brought 447 people back to the site.

Number of LTs	From Campaign
447	weekly-newsletter
443	retargetting-ad
245	retargetting-campaign
232	getting-to-know-cool-tshirts
190	ten-crazy-cool-tshirts-facts
184	interview-with-cool-tshirts-founder
178	paid-search
60	cool-tshirts-search

2.3 Statistics Revealed!

- 1979 people visited the site.
- 371 people made purchases.
- 0 users made more than one purchase.
- 115 sales were generated from return visits from the Newsletter campaign.
- 113 sales were generated from return visits from the retargeting ad.
- Sales were in the single digits for the four bottom-performing campaigns:

9	getting-to-know-cool-tshirts
9	ten-crazy-cool-tshirts-facts
7	interview-with-cool-tshirts-founder
2	cool-tshirts-search

2.4 Statistics Revealed!

We can also filter `last_touch` by each page for a given user(s). Since the page “4– purchase” is only accessible after completing a purchase, we can how many users’ were last seen on this page. The magic looks like this:

And here’s how they stacked up! How useful is this information?!

Number of Sales	From Campaign
115	weekly-newsletter
113	retargetting-ad
54	retargetting-campaign
52	paid-search
9	getting-to-know-cool-tshirts
9	ten-crazy-cool-tshirts-facts
7	interview-with-cool-tshirts-founder
2	cool-tshirts-search

```
44 WITH last_touch AS (  
45     SELECT user_id,  
46            MAX(timestamp) as last_touch_at  
47     FROM page_visits  
48     WHERE page_name = '4 - purchase'  
49     GROUP BY user_id)  
50 SELECT COUNT (lt.last_touch_at) AS 'Number of Sales',  
51        pv.utm_campaign AS 'From Campaign'  
52 FROM last_touch AS lt  
53 JOIN page_visits AS pv  
54     ON lt.user_id = pv.user_id  
55     AND lt.last_touch_at = pv.timestamp  
56 GROUP BY pv.utm_campaign  
57 ORDER BY 1 DESC;
```

3. Where to Reinvest?

3.1 Where to Reinvest?

The **top 3 campaigns** from this list BY FAR generated the majority of traffic to our site: more than **90%**! They were the best buys to get people to the site.

Number of FTs	From Campaign
622	interview-with-cool-tshirts-founder
612	getting-to-know-cool-tshirts
576	ten-crazy-cool-tshirts-facts
169	cool-tshirts-search

The first three above were more about showcasing our product and getting people to the site. Interestingly, the **emailed “weekly-newsletter”** and **“retargeting -ad” on Facebook** generated **61%** of total sales! I’d put money back into those two!

Number of Sales	From Campaign
115	weekly-newsletter
113	retargeting-ad
54	retargeting-campaign
52	paid-search

3.1 Where to Reinvest?

This is fairly solid investment advice. However, further analysis should be done.

- With pricing and transaction data, we might discover that one of the two sales that came from the “cool-tshirts-search” campaign generated a \$1 Million order from a large company.
- Promotions could be created to follow up with customers to encourage them to make another purchase. Discounts, specials, etc...
- Also, within the data analyzed, it's not known how much each ad campaign cost to run. It's possible to stretch advertising dollars further with in-house ad campaigns that don't draw too heavily on resources.

THANK YOU