CoolTShirts - Capstone

Learn SQL from Scratch

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CoolTShirt - Capstone

1. The company

2. The user journey

3. The campaign budget

CoolTShirts (CTS) is an innovative apparel shop that sells shirts of all kinds, as long as they are T-shaped and cool.

We will be review the companies UTM parameters data to identify the proficiency of their various marketing campaigns.

UTM parameters are a way of tracking visits to a website.

Getting familiar with the company

Recently, CTS started 8 marketing campaigns to increase website visits and purchases.

- cool-tshirts-search
- getting-to-know-cool-tshirts
- interview-with-cool-tshirts-founder
- paid-search
- retargetting-ad
- retargetting-campaign
- ten-crazy-cool-tshirts-facts
- weekly-newsletter

test.sqlite

```
1  SELECT COUNT(DISTINCT utm_campaign) AS 'campaign    count'
2  FROM page_visits;
3
```

Query Results
campaign count
8

Identified by the utm_campaign which identifies the specific ad or email blast that caught the users attention

Getting familiar with the company

The marketing campaigns were shown on 6 different sources

- Google
- Nytimes
- Medium
- Facebook
- Email
- buzzfeed

```
    test.sqlite
4   SELECT COUNT(DISTINCT utm_source) AS 'source        count'
5   FROM page_visits;
6
```

Query Results

source count
6

Identified by the utm_source which identifies which site sent the traffic to the website

Getting familiar with the company

The marketing campaigns were linked to specific sources.

The table on the right shows which campaign was administered through which source.

Looking at the site and campaign combination shows us where and how users interest was generated.

```
     test.sqlite
 6
 7   SELECT utm_campaign,
 8     utm_source
 9   FROM page_visits
10   GROUP BY 1;
11
```

Query Results	
utm_campaign	utm_source
cool-tshirts-search	google
getting-to-know-cool-tshirts	nytimes
interview-with-cool-tshirts-founder	medium
paid-search	google
retargetting-ad	facebook
retargetting-campaign	email
ten-crazy-cool-tshirts-facts	buzzfeed
weekly-newsletter	email

Getting familiar with the company

CTS has 4 separate web pages – listed right

These web pages can be used to monitor users progress through the site

A users journey is typically from the landing page to the shopping cart, to check out and finally purchase.

```
      test.sqlite
11
12    SELECT DISTINCT page_name
13    FROM page_visits;
14
```

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

The user journey

First touch identifies when a user first visit the website and where they came from i.e. what advertising campaign and source caught their interest and how they initially discovered the website.

On the right are the number of first touches each campaign elicited

The first page users see is the landing page.

The most successful campaign for introducing users appears to be interview with cool tshirts founder.

```
15  WITH first_touch AS (
16      SELECT user_id,
17          MIN(timestamp) AS first_touch_at
18      FROM page_visits
19      GROUP BY 1)
20  SELECT COUNT (DISTINCT ft.user_id) AS 'number of        first
    touch users',
21          pv.utm_campaign
22  FROM first_touch ft
23  JOIN page_visits pv
24      ON ft.user_id = pv.user_id
25      AND ft.first_touch_at = pv.timestamp
26  GROUP BY 2
27  ORDER BY 1 DESC;
```

Query Results	
number of first touch users	utm_campaign
622	interview-with-cool-tshirts-founder
612	getting-to-know-cool-tshirts
576	ten-crazy-cool-tshirts-facts
169	cool-tshirts-search

The user journey

Last touch identifies when a user finishes their visit the website and confirms the campaign that they came from. This is a good way of knowing how visitors are drawn back to the website, especially when making a final purchase.

On the right are the number of last touches each campaign elicited.

The last page users see is the purchase page.

The most successful campaign for last touches appear to be the weekly newsletter

```
test.sqlite

29  WITH last_touch AS (
30      SELECT user_id,
31          MAX(timestamp) AS last_touch_at
32      FROM page_visits
33      GROUP BY 1)
34  SELECT COUNT (DISTINCT lt.user_id) AS 'number of          last
    touch users',
35          pv.utm_campaign
36  FROM last_touch lt
37  JOIN page_visits pv
38      ON lt.user_id = pv.user_id
39      AND lt.last_touch_at = pv.timestamp
40  GROUP BY 2
41  ORDER BY 1 DESC;
```

Query Results

number of last touch users	utm_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

The user journey

It appears that 361 users made a purchase out of the sample of 1979 users that started the journey with a visit to the landing page.

The largest drop in user progression appears to be between the checkout and the purchase pages.

```
     test.sqlite
43   SELECT page_name,
44       COUNT (DISTINCT user_id)
45   FROM page_visits
46   GROUP BY 1;
```

Query Results

page_name	COUNT (DISTINCT user_id)
1 - landing_page	1979
2 - shopping_cart	1881
3 - checkout	1431
4 - purchase	361

The user journey

The table on the right shows how many last touches on the purchase page each campaign was responsible for.

The weekly newsletter appear to have been the most successful in driving last touches on the purchase page.

```
48   WITH last_touch AS (
49       SELECT user_id,
50           MAX(timestamp) AS last_touch_at
51       FROM page_visits
52       WHERE page_name = '4 - purchase'
53       GROUP BY 1)
54   SELECT count (DISTINCT lt.user_id) AS 'number of      last
     touch users',
55           pv.utm_campaign,
56         page_name
57   FROM last_touch lt
58   JOIN page_visits pv
59       ON lt.user_id = pv.user_id
60       AND lt.last_touch_at = pv.timestamp
61   GROUP BY 2
62   ORDER BY 1 DESC;
```

Query Results

number of last touch users	utm_campaign	page_name
115	weekly-newsletter	4 - purchase
113	retargetting-ad	4 - purchase
54	retargetting-campaign	4 - purchase
52	paid-search	4 - purchase
9	getting-to-know-cool-tshirts	4 - purchase
9	ten-crazy-cool-tshirts-facts	4 - purchase
7	interview-with-cool-tshirts-founder	4 - purchase
2	cool-tshirts-search	4 - purchase

The campaign budget

Advertising campaigns cost money so it is good business to run with the most successful campaigns and drop the ones with poor performance.

The 'interview with cool tshirts founder' was the most successful at bringing new users.

The weekly newsletter and retargeting ad were most successful at attaining last touches at purchases.

The weekly newsletter and retargeting campaign are reliant on the users having already found the website and registered.

I would suggest retaining
- Interview with cool tshirts founder – to bring footfall although it doesn't result in many sales
- Getting to know cool tshirts – to also bring footfall
- Weekly newsletter and retargeting ad to remind existing users to make purchases

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2	cool-tshirts-search	4 - purchase

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