LEARN SQL FROM SCRATCH

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Contents

1. Get familiar with the company

1.1 How many campaigns and sources does CoolTShirts use and how are they related?

I searched for the answer using multiple queries. Firstly I identified the count of the unique values within *'utm_campaign'* and then I repeated for the *'utm_source'*. Once the count of each was established I then created a third query which provided us with a distinct list of *'utm_campaign'* renamed as 'Campaign Name' and also the relating *'utm_source'* renamed as 'Source Name'.

Count of Campaign
8

Count of Source
6

Campaign Name	Source Name
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

1.2 What pages are on their website?

To discover the different pages available on CoolTShirts website I simply used '**SELECT DISTINCT**' to display each page once in the table. I could have also done this using 'SELECT *page_name', '**FROM** page_visits'* and then '**GROUP BY** *page_name'*

Page Name
1 - landing_page
2 - shopping_cart
3 - checkout
4 - purchase

2. What is the user Journey?

2.1 How many **first** touches is each campaign responsible for?

Firstly I created a temporary table selecting the '*user_id*' and then the '**MIN**(*timestamp*)' for each user. Then I created a second temporary table to join in the '*utm_campaign*' from page_visits to obtain which campaign was responsible for each first touch. Then I selected and counted the different '*utm_campaign*' values from that second temporary table.

Source Name	Campaign Name	Count
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

Source Name	Campaign Name	Count
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

2.2 How many **last** touches is each campaign responsible for?

To obtain a count of the last touches for each campaign I used similar logic to the 'first touch' query but focused on the '**MAX**(*timestamp*)' which identified the campaign responsible for the 'last touch' performed by each user visiting the CoolTShirts website.

2.3 How many visitors make a purchase?

Total Purchases
361

Source Name	Campaign Name	Count
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

2.4 How many last touches on the purchase page is each campaign responsible for?

Adding a '**WHERE**' clause to the existing 'last touch' query allowed me to see only the results where the last touch had a '*page_name*' of '*4 – purchase*' and show each '*utm_campaign*' responsible for purchases.

3. Optimize the campaign budget

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

Based on the findings in the table on question **2.4** there are four clear campaigns that CoolTShirts should re-invest in based on total count of purchases. The fifth and six top results share the same value of '9' purchases each. To determine which of these two campaigns to include in the re-investment I must consider other factors that might suggest which is most beneficial to the business.

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email	weekly-newsletter	115
facebook	retargetting-ad	113
email	retargetting-campaign	54
google	paid-search	52
buzzfeed	ten-crazy-cool-tshirts-facts	9
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Based on the findings in the table on question **2.1** that shows the highest performing campaigns responsible for the 'first touch' we can see that the campaign 'getting-to-know-cool-tshirts' was more successful than 'ten-crazy-cool-tshirts-facts' as it drew a higher amount of users to the website. A key factor in any online business is generating more traffic to a website which raises awareness of the brand and more crucially increases the opportunities in terms of online sales.

To summarise I would suggest that the following campaigns are considered for re-investment

1) weekly-newsletter 2) retargeting-ad 3) retargeting-campaign 4) paid-search 5) getting-to-know-cool-tshirts

Thank you ☺

test.sqlite

```
SELECT user_name AS 'User Name',
       user_experience_rating AS 'Rating out of 100',
       emoji_id AS 'Emoji'
  FROM codecademy_feedback
  WHERE user_experience_rating = > 1
  ORDER BY user_experience_rating DESC
  LIMIT 1;
```

Query Results

User Name	Rating out of 100	Emoji
David Shakespeare	100	:)

Database Schema

codecademy_feedback	5692 rows
user_name	TEXT
user_id	INTEGER
user_experience_rating	INTEGER
emoji_id	TEXT