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# Learn SQL from Scratch

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#### 1. Get Familiar with COOLTSHIRTS

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

- A campaign is a purposeful message that a company uses to cause a consumer to react favorably to the company.
- A source is the specific channel that a company uses to display their campaigns. It can include any variety of mediums.
- Based off my SQL code, COOLTSHIRTS uses six sources and those sources account for 8 ad campaigns.

utm_source	COUNT(DISTINCT utm_campaign)
buzzfeed	1
email	2
facebook	1
google	2
medium	
nytimes	

#### 1. Get Familiar with COOLTSHIRTS

•What pages are on their website?

page\_name

1 - landing\_page

2 - shopping\_cart

3 - checkout

4 - purchase

According to the code: There are four pages on the COOLTSHIRTS website

- How many first touches is each campaign responsible for?
- How many last touches is each campaign responsible for?
- How many visitors make a purchase?
- •How many last touches *on the purchase page* is each campaign responsible?
- What is the typical user journey?

First Touch Attrition- Reveals how visitors (potential customers) discover and interact with a website.

Last Touch Attrition- Reveals how visitors (potential customers) are drawn back to a website.

Both are powerful mechanisms to learn customer characteristics and how to properly understand how customers are drawn to your webpage. This insight is essential for web creators, marketers, sales personnel, and management to make better and wiser decisions.

How many first touches is each campaign responsible for?

To find the first touches, I aggregated the minimum of my timestamps to uncover the point of first touch interaction. Then, I joined that first touch data with my (page visits) table. Next, I chose to select (pv.utm\_campaign) and (COUNT(utm\_campaign) AS 'specific count'). That enabled me to find the number of first touches. However, that did not answer my question of how those first touches relate to each campaign. To solve that, I chose to group my data by the (utm\_campaign) column and order my data by ('specific count'). The solved data is displayed on the right.

utm_campaign	specific count
cool-tshirts-search	169
getting-to-know-cool-tshirts	612
interview-with-cool-tshirts- founder	622
ten-crazy-cool-tshirts-facts	576

### How many last touches is each campaign responsible for?

Using the same code to find the specific amount of first touches generated from each campaign, I was able to find the specific amount of last touches generated from each campaign. It is interesting to note that more campaigns were responsible for generating last touches and the specific counts varied significantly.

utm_campaign	specific count	
cool-tshirts-search	60	
getting-to-know-cool-tshirts	232	
interview-with-cool-tshirts- founder	184	
paid-search	178	
retargetting-ad	443	
retargetting-campaign	245	
ten-crazy-cool-tshirts-facts	190	
weekly-newsletter	447	

### How many visitors make a purchase?

To solve this problem, I had to ensure that the column (pv.page\_name) was selected in my SELECT statement. In addition, I removed the (utm\_campaign) column as it was irrelevant. Then, I chose to group my data by the page\_name. Lastly, to only show the specific amount of last touches relevant to the purchase page, I added a WHERE (page\_name = '4 – purchase').

page_name	specific count
4 - purchase	358

•How many last touches *on the purchase page* is each campaign responsible?

To solve this problem, I continued my work from the previous question. I chose to add a GROUP BY statement to group my data by the (utm\_campaign) column in addition to the (page\_name). In addition, to only show the specific amount of last touches relevant to the purchase page, the WHERE (page\_name = '4 – purchase') remained.

page_name	utm_campaign	specific count
4 - purchase	cool-tshirts-search	2
4 - purchase	getting-to-know-cool- tshirts	9
4 - purchase	interview-with-cool- tshirts-founder	7
4 - purchase	paid-search	52
4 - purchase	retargetting-ad	112
4 - purchase	retargetting-campaign	53
4 - purchase	ten-crazy-cool-tshirts- facts	9
4 - purchase	weekly-newsletter	114

What is the typical user journey?



As the user makes their way through the website, the chart on the right displays the number of individuals that interact with each level of the purchase journey. It is evident that certain recommendations need to be made to increase traffic to the website's purchase page.

#### Viewer Interaction At Each Page

page_name	COUNT(page_name)
1 - landing_page	2000
2 - shopping_cart	1900
3 - checkout	1431
4 - purchase	361

What is the typical user journey?



#### Percentage of all First Touches

Interview with COOLTSHIRTS founder = 31.4%

Getting to know COOLTSHIRTS = 30.9%

10 crazy COOLTSHIRTS facts = 29.1%

#### Percentage of all Last Touches

Weekly newsletter = 22.6%

Retargeting Ad = 22.4%

Retargeting Campaign = 12.4%

Getting to Know COOLTSHIRTS Founder = 11.7%

What is the typical user journey?



Percentage of Last Touches that Lead to the Purchase Page (358 total)



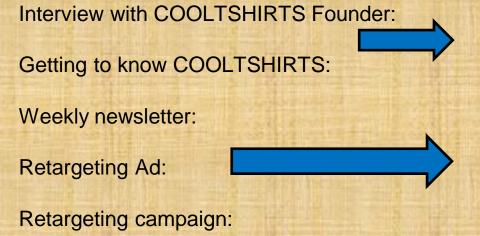
By dividing the data in slide 9 by the data in slide 6, I was able to find an important statistic to help us decide which campaigns would be worthy investments for COOLTSHIRTS. These three campaigns lead users not only back to the company's webpage, but to their purchase page at these percentages.

#### 3. Recommendations

- 1. COOLTSHIRTS should invest in a variety of campaigns that lead to both first and last touch interactions to maximize their viewer coverage.
- 2. COOLTSHIRTS must increase activity within their purchase page. Currently only 18% of viewers view their purchase page, but 99.1% of viewers whom view the purchase page make a purchase.

Using the data from slides 8 and 10.

#### **Five Investable Campaigns**



Both campaigns successfully led people to the website. The future should consists of future campaigns such as these for successful market penetration.

These campaigns should be invested heavily by COOLTSHIRTS to point customers towards the purchase page. Once customers reached the purchase page, 99% of the time they chose to purchase a product. However, only 18% of viewers reached the purchase page. Investing in these campaigns more will quickly increase market share.

#### Conclusion

I now know SQL!!!

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