



CoolTShirts Marketing

Learn SQL from Scratch Capstone

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1. Get Familiar with CoolTShirts

1.1 CoolTShirts Campaigns and Sources

- CoolTShirts uses 8 Campaigns and 6 Sources in their touch attribution marketing efforts. The specific campaigns and their sources are in the chart to the right.
- A UTM code is embedded into the messaging of each campaign which can be tracked when a prospective customer clicks through to the CoolTShirts website. In this example, the “getting-to-know-cool-t-shirts’ code is being used on the NY Times website.
- Campaign content could be tailored to target an audience based on the source. For example, the message delivered to a prospective customer through a weekly-newsletter, may be different than that delivered via a google search.
- By using unique UTM code to track its campaigns, CoolTShirts can track the effectiveness of various lead sources, as well as how the same user(s) engage across a variety of sources from first touch to purchase.

Campaign	Source
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 CoolTShirts Pages

The code to the right shows how we can get to know CoolTShirts' marketing campaigns. The last SELECT statement gives us the list of web pages in use by the campaigns below.

Each campaign may send users to one or all of the pages listed below, allowing CoolTShirts to track how far in the user journey toward purchase a user gets through each campaign

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

```
SELECT COUNT (DISTINCT utm_campaign) as  
'distinct_campaigns'  
FROM page_visits;  
SELECT COUNT (DISTINCT utm_source) as  
'distinct_sources'  
FROM page_visits;  
SELECT DISTINCT utm_campaign, utm_source  
FROM page_visits;  
SELECT DISTINCT page_name  
FROM page_visits;
```

2. What is the user journey?

2.1 CoolTShirts User Journey – First Touches

The SQL statement to the right reveals four of the eight campaigns are responsible for all of the first touches, with the Medium interview-with-cool-tshirts-founder campaign garnering the most first touches. This statement looks at the minimum time stamp, or the first date and time each user id visited a CoolTShirts page.

Source	Campaign	First touches
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

```
WITH first_touch AS (  
    SELECT user_id,  
           MIN(timestamp) as first_touch_at  
    FROM page_visits  
    GROUP BY user_id),  
ft_attr AS(  
    SELECT ft.user_id,  
           ft.first_touch_at,  
           pv.utm_source,  
           pv.utm_campaign  
    FROM first_touch ft  
    JOIN page_visits pv  
      ON ft.user_id = pv.user_id  
      AND ft.first_touch_at = pv.timestamp  
    )  
SELECT ft_attr.utm_source as 'source',  
       ft_attr.utm_campaign as 'campaign',  
       COUNT(*) as 'first touches'  
FROM ft_attr  
GROUP BY 1, 2  
ORDER BY 3 DESC;
```

2.2 CoolTShirts User Journey – Last Touches

The SELECT statement to the right looks at the MAX time stamp, or the last date and time each user id visited a CoolTShirts page. This tells us which campaigns generated a user's last visit to the website.

Source	Campaign	Last touches
email	weekly-newsletter	447
facebook	retargeting-ad	443
email	retargeting-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

```
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_source as 'source',  
       lt_attr.utm_campaign as 'campaign',  
       COUNT(*) as 'last touches'  
FROM lt_attr  
GROUP BY 1, 2  
ORDER BY 3 DESC;
```


2.3 CoolTShirts User Journey – Purchases

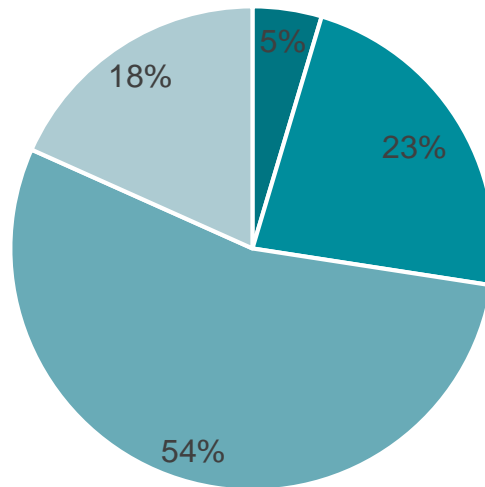
By grouping the number of page visitors by page, we can see that 361 users have made a purchase.

```
SELECT page_name, COUNT (DISTINCT user_id) as  
'visitors'  
FROM page_visits  
GROUP BY 1;
```

Page Name	Number of Visitors
1 - landing_page	1979
2 - shopping_cart	1881
3 - checkout	1431
4 - purchase	361

18% of visitors were converted to customers and completed a purchase.

Last touch by landing page



■ landing page ■ shopping cart ■ check out ■ purchase

2.3 Purchases contd.

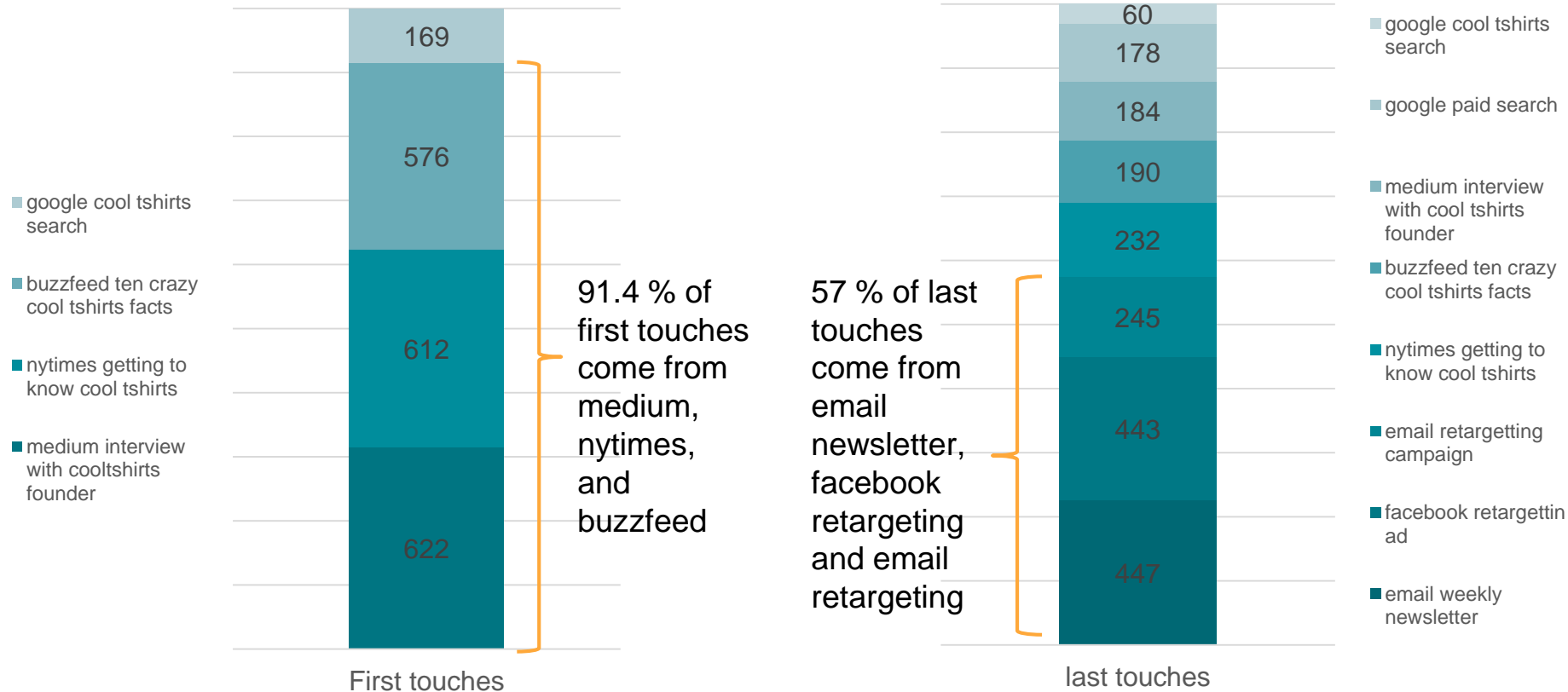
The chart to the right displays the campaigns in order of the number of visitors who completed a purchase as their last touch. The weekly newsletter has the most last touches as a purchase. Interestingly, the 'interview-with-cool-tshirts founder' campaign on Medium is responsible for the least amount of purchases, but had the highest number of first touches.

```
WITH last_touch AS (  
    SELECT user_id,  
           MAX(timestamp) as last_touch_at  
    FROM page_visits  
    WHERE page_name = '4 - purchase'  
    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_source as 'source',  
       lt_attr.utm_campaign as 'campaign',  
       COUNT(*) as 'last touches as purchase'  
FROM lt_attr  
GROUP BY 1, 2  
ORDER BY 3 DESC;
```

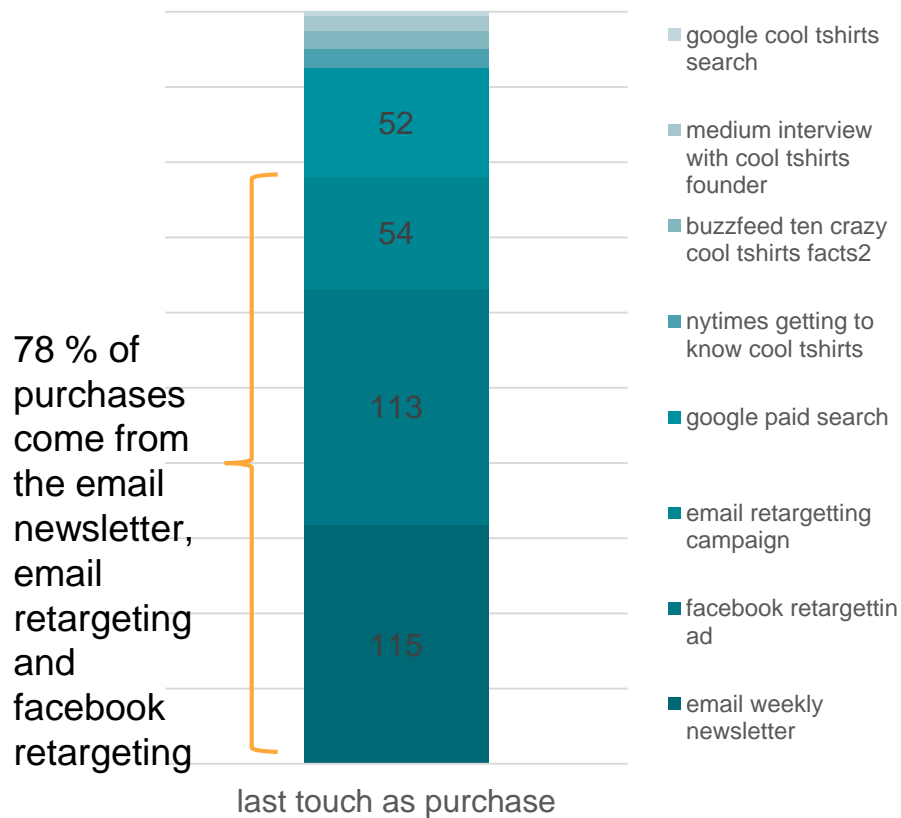
source	campaign	last touches as purchase
email	weekly-newsletter	115
facebook	retargetting-ad	113
email	retargetting-campaign	54
google	paid-search	52
buzzfeed	ten-crazy-cool-tshirts-facts	9
nytimes	getting-to-know-cool-tshirts	9
medium	interview-with-cool-tshirts-founder	7
google	cool-tshirts-search	2

2.4 Typical users

By examining first and last touches by campaign, we see that most users engage through a medium with longform content, such as articles, and re-engage through a re-targeting or newsletter campaign.



2.4 Typical users purchasing



78% of all purchases are made through the last touch via re-targeting campaigns or newsletter.

This suggests that if a user is reminded of their initial interest, they can be nudged toward making a purchase.

3. Optimize Campaign Budget

3. Optimizing campaign budget

To continue to peak interest of prospective customers and widen the market, it is recommended long-form content campaigns, such as Medium, NYTimes and BuzzFeed continue as the primary first touch engagement campaigns.

After the first touch, the data has shown that re-engaging prospective customers is a crucial step in converting visitors to purchasers. For this reason, it is recommended the campaign continue with the weekly email newsletter and facebook re-targeting campaign. The e-mail retargeting campaign is left out of the recommendation as it produces 50% less yield than either of the other retargeting campaigns, and re-utilizes the email source. CoolTShirts may benefit from keeping their retargeting campaign sources diverse, to re-engage a wider audience.

Deeper analysis of touchpoints in between first and last touches may provide more insight into the user journey and if more retargeting efforts are necessary to convert visitors to purchasers.

Source	Campaign
medium	interview-with-cool-tshirts-founder
nytimes	getting-to-know-cool-tshirts
buzzfeed	ten-crazy-cool-tshirts-facts
email	weekly-newsletter
facebook	retargeting-ad