

Codecademy Capstone Project: Attribution Queries

Learn Sequel from Scratch

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CoolTShirts Outreach Campaign



How CoolTShirts reaches their customers and converts clicks to sales.



COOLTSHIRTS

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Get Familiar with the Company

```
1 SELECT COUNT(DISTINCT(utm_campaign)) AS 'campaign',  
2 COUNT(DISTINCT(utm_source)) AS 'source'  
3 FROM page_visits;  
4  
5 SELECT DISTINCT(utm_campaign) AS 'campaign', utm_source AS  
6 'source'  
7 FROM page_visits;
```



CoolTShirts uses print and electronic marketing to reach it's customers. Let's take a look at their various campaigns and sources.

Campaigns:

- Getting to Know CoolTShirts
- Weekly News Letter
- Ten Crazy CoolTShirts Facts
- Retargeting Campaing
- Interview with CoolTShirts Founder
- Paid Search
- CoolTShirts Search

Sources:

- New York Times
- email
- Buzzfeed
- Facebook
- Medium
- Google

Get Familiar with the Company continued

What is the difference between a Campaign and a Source?

Campaigns are specific marketing materials while sources are the mediums used to distribute the marketing materials.

Each campaign is designed to be delivered in a certain way. Campaigns are intended to pique the viewers interest and tempt them into clicking the link.

Sources are how the campaigns are delivered to customers. A good source has a large and devoted user base that will ensure the campaigns are seen by the most customers possible.



What pages are on the website?

```
7  
8 SELECT DISTINCT(page_name)  
9 FROM page_visits;  
10
```



Web Pages:

**Landing Page
Shopping Cart
Checkout
Purchase**

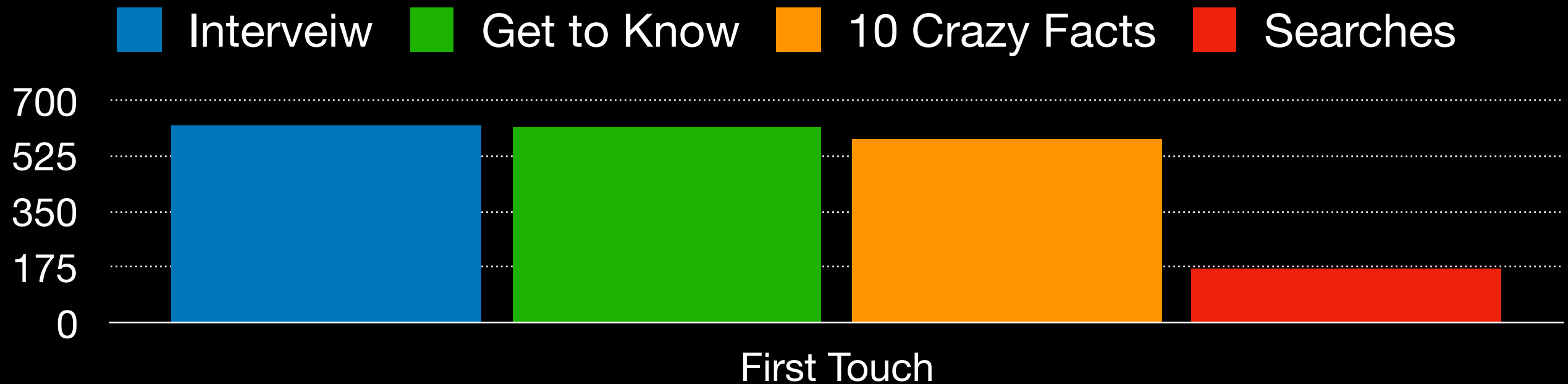
The Customer Journey

Let's take a look at:

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



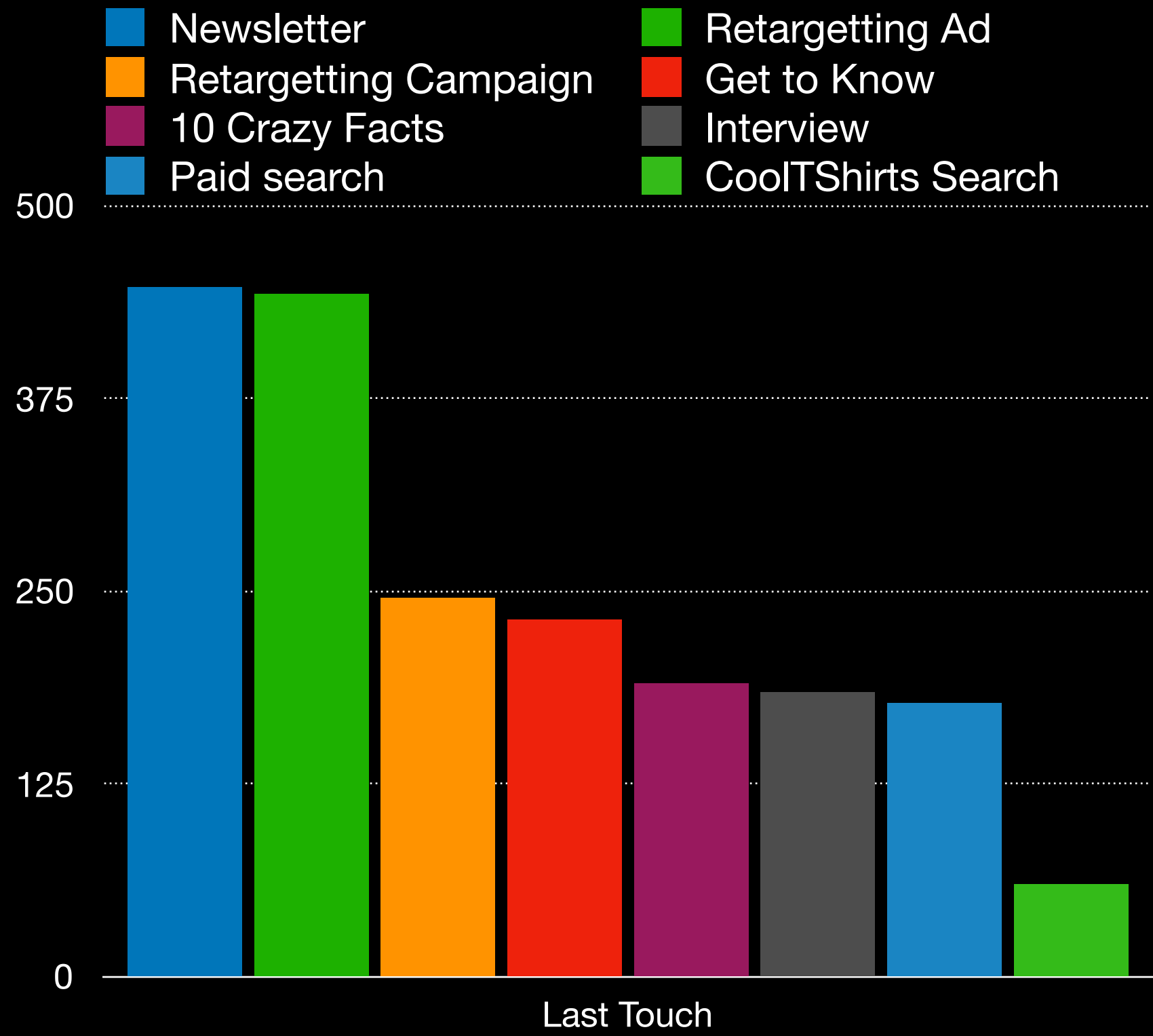
How many first touches is each campaign responsible for?



Interview	622
Get to Know	612
10 Crazy Facts	576
Searches	169

```
11 WITH first_touch AS (  
12     SELECT user_id,  
13            MIN(timestamp) as first_touch_at  
14     FROM page_visits  
15     GROUP BY user_id),  
16  
17     ft_attr AS (  
18     SELECT ft.user_id,  
19            ft.first_touch_at,  
20            pv.utm_source,  
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     )  
27     SELECT ft_attr.utm_source,  
28            ft_attr.utm_campaign,  
29            COUNT(*)  
30     FROM ft_attr  
31     GROUP BY 1, 2  
32     ORDER BY 3 DESC;
```


How many last touches is each campaign responsible for?



```
40 lt_attr AS (  
41 SELECT lt.user_id,  
42        lt.last_touch_at,  
43        pv.utm_source,  
44        pv.utm_campaign,  
45        pv.page_name  
46 FROM last_touch lt  
47 JOIN page_visits pv  
48 ON lt.user_id = pv.user_id  
49 AND lt.last_touch_at = pv.timestamp  
50 )  
51 SELECT lt_attr.utm_source,  
52        lt_attr.utm_campaign,  
53        COUNT(*)  
54 FROM lt_attr  
55 GROUP BY 2  
56 ORDER BY 3 DESC;  
57  
58 SELECT COUNT(*)  
59 FROM page_visits  
60 WHERE page_name LIKE '%purchase';  
61
```

Weekly Newsletter	Retargeting Ad	Retargeting Campaign	Get to Know	10 Crazy Facts	Interview	Paid Search	CoolTShirts Search
447	443	245	232	190	184	178	60

The background of the entire slide is a dense, overlapping pattern of US dollar bills, including \$100 and \$20 bills, scattered across a light background.

How many visitors made a purchase?

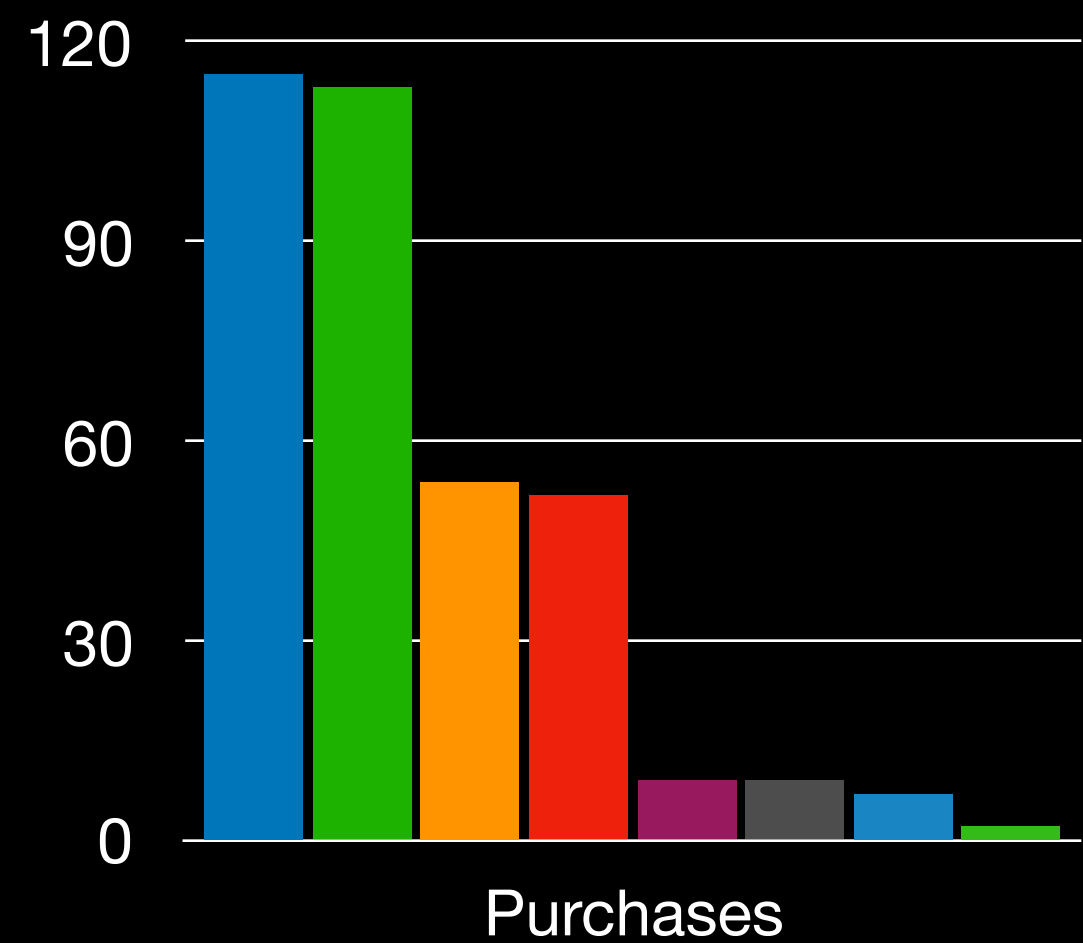
```
58     SELECT COUNT(*)  
59     FROM page_visits  
60     WHERE page_name LIKE '%purchase';  
61
```

361 Customers elected to buy

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

```
65
66     WITH last_touch AS (
67     SELECT user_id,
68           MAX(timestamp) as last_touch_at
69     FROM page_visits
70     WHERE page_name = '4 - purchase'
71     GROUP BY user_id),
72
73     lt_attr AS (
74     SELECT lt.user_id,
75           lt.last_touch_at,
76           pv.utm_source,
77           pv.utm_campaign,
78           pv.page_name
79     FROM last_touch lt
80     JOIN page_visits pv
81     ON lt.user_id = pv.user_id
82     AND lt.last_touch_at = pv.timestamp
83     )
84     SELECT lt_attr.utm_source,
85           lt_attr.utm_campaign,
86           COUNT(*)
87     FROM lt_attr
88     GROUP BY 2
89     ORDER BY 3 DESC;
90
```

- Weekly Newsletter
- Retargeting Ad
- Retargeting Campaign
- Paid Search
- Getting to Know
- 10 Crazy Facts
- Interview
- CoolTShirts Search



Weekly Newsletter	Retargeting Ad	Retargeting Campaign	Paid Search	Getting to Know	10 Crazy Facts	Interview	CoolTShirts Search
115	113	54	52	9	9	7	2

What is the typical user journey?

- Most users first came to know CoolTShirts by reading an article.
- Most users last touch was attributed to repeated targeted ads such as email campaigns and Facebook ads
- These reoccurring ads are the campaigns that were responsible for the majority of purchases.

Customer Journey



Optimize the Budget

Which 5 Campaigns should CoolTShirts reinvest their marketing dollars?

Because most new customers are introduced to the company via an article, CoolTShirts should seek to reinvest in the following Campaigns:

- Interview with CoolTShirts Founder via Medium
- Getting to Know CoolTShirts via the New York Times
- 10 Crazy CoolTShirts Facts

Because most purchases were made after clicking on reoccurring ads via email and on Facebook, CoolTShirts should also put more money into the following Campaigns:

- Weekly newsletter via email
- Retargeting ads on Facebook