



CoolTShirts

Customer Journey & Marketing Campaigns

Learn SQL from Scratch

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3. Optimize the campaign budget

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

1. Get familiar with CoolTShirts

1.1 Get familiar with CoolTShirts

- How many campaigns and sources does CoolTShirts use?
 - Campaigns are a planned set of activities that companies carry out over a period of time in order to attract customers.
 - Sources are the initial things or places that customers get their information from.

```
1  /*Getting the number of campaigns.*/  
2  SELECT COUNT(DISTINCT utm_campaign) AS 'Number of Distinct Campaigns'  
3  FROM page_visits;
```

Number of Distinct Campaigns

8

```
5  /*Getting the number of sources.*/  
6  SELECT COUNT(DISTINCT utm_source) AS 'Number of Distinct Sources'  
7  FROM page_visits;
```

Number of Distinct Sources

6

1.2 Get familiar with CoolTShirts

- How are campaigns and sources related?
 - Customers get the CoolTShirts campaign information from sources such as Facebook, email, Google, etc.

```
/*Getting relationship between sources and campaigns.*/  
SELECT DISTINCT utm_source AS 'Source', utm_campaign AS 'Campaign'  
FROM page_visits  
ORDER BY 1;
```

- What pages are on CoolTShirts website?
 - Customers get the CoolTShirts campaign information from sources such as Facebook, email, Google, etc.

```
/*Getting what pages are on CoolTShirts.com*/  
SELECT DISTINCT page_name AS 'Pages'  
FROM page_visits;
```

Source	Campaign
Buzzfeed	Ten-crazy-cool-tshirts-facts
Email	Weekly-newsletter
Eamil	retargeting-campaign
Facebook	retargeting-ad
Google	Paid-search
Google	Cool-tshirts-search
Medium	Interview-with-cool-tshirts-founder
Nytimes	Getting-to-know-cool-tshirts

Pages
1 – landing_page
2 – shopping_cart
3 – checkout
4 – purchase

2. What is the user journey?

2.1 What is the user journey?

- How many first touches is each campaign responsible for?
 - The first touches for each campaign were found by using the minimum timestamp from the UTM code.
 - Of the campaigns that are currently running, only 50% of them were responsible for first touches.
 - The top 3 campaigns were responsible for 91% of first touches.

```
20 /*Determining number of first touches for each campaign.*/
21 WITH first_touch AS (
22     SELECT user_id,
23            MIN(timestamp) as first_touch_at
24     FROM page_visits
25     GROUP BY user_id),
26 ft_sources AS (
27     SELECT ft.user_id,
28            ft.first_touch_at,
29            pv.utm_source,
30            pv.utm_campaign
31     FROM first_touch ft
32     JOIN page_visits pv
33         ON ft.user_id = pv.user_id
34         AND ft.first_touch_at = pv.timestamp)
35
36 SELECT ft_sources.utm_campaign AS 'Campaign',
37        COUNT(*) AS 'Number of First Touches'
38 FROM ft_sources
39 GROUP BY 1
40 ORDER BY 2 DESC;
```

Campaign	Number of First Touches
Interview-with-cool-tshirt-founder	622
Getting-to-know-cool-tshirts	612
Ten-crazy-cool-tshirts-facts	576
Cool-tshirts-search	169

2.2 What is the user journey?

- How many last touches is each campaign responsible for?
 - The last touches for each campaign were found by using the maximum timestamp from the UTM code.
 - The top 3 campaigns were responsible for 57% of last touches.
 - The 4 first touches campaigns were only responsible for 34% of last touches.

```
43  /*Determining number of last touches for each campaign.*/
44  WITH last_touch AS (
45      SELECT user_id,
46             MAX(timestamp) as last_touch_at
47      FROM page_visits
48      GROUP BY user_id),
49  lt_sources AS (
50      SELECT lt.user_id,
51             lt.last_touch_at,
52             pv.utm_source,
53             pv.utm_campaign
54      FROM last_touch lt
55      JOIN page_visits pv
56            ON lt.user_id = pv.user_id
57            AND lt.last_touch_at = pv.timestamp)
58
59  SELECT lt_sources.utm_campaign AS 'Campaign',
60         COUNT(*) AS 'Number of Last Touches'
61  FROM lt_sources
62  GROUP BY 1
63  ORDER BY 2 DESC;
```

Campaign	Number of Last Touches
weekly-newsletter	447
retargeting-ad	443
retargeting-campaign	245
getting-to-know-cool-tshirts	232
ten-crazy-cool-tshirts-facts	190
interview-with-cool-tshirts-founder	184
paid-search	178
cool-tshirts-search	60

2.3 What is the user journey?

- How many visitors make a purchase?
 - Of the 1979 unique users, 361 or about 18% of them actually made a purchase from CoolTShirts.
- How many last touches on the purchase page is each campaign responsible for?
 - 4 of the campaigns are responsible for 92% of purchases.

```
65  /*Determining unique users who made a purchase.*/
66  SELECT COUNT(DISTINCT user_id) AS 'Visitors Who Made a Purchase'
67  FROM page_visits
68  WHERE page_name = '4 - purchase';
```

```
71  /*Determining how many last touches were purchase for each campaign.*/
72  WITH last_touch AS (
73  SELECT user_id,
74         MAX(timestamp) AS last_touch_at
75  FROM page_visits
76  WHERE page_name = '4 - purchase'
77  GROUP BY user_id),
78  lt_sources AS (
79  SELECT lt.user_id,
80         lt.last_touch_at,
81         pv.utm_source,
82         pv.utm_campaign
83  FROM last_touch lt
84  JOIN page_visits pv
85  ON lt.user_id = pv.user_id
86  AND lt.last_touch_at = pv.timestamp)
87
88
89  SELECT lt_sources.utm_campaign AS 'Campaign',
90         COUNT(*) AS 'Last Touches On Purchase Page'
91  FROM lt_sources
92  GROUP BY 1
93  ORDER BY 2 DESC;;
```

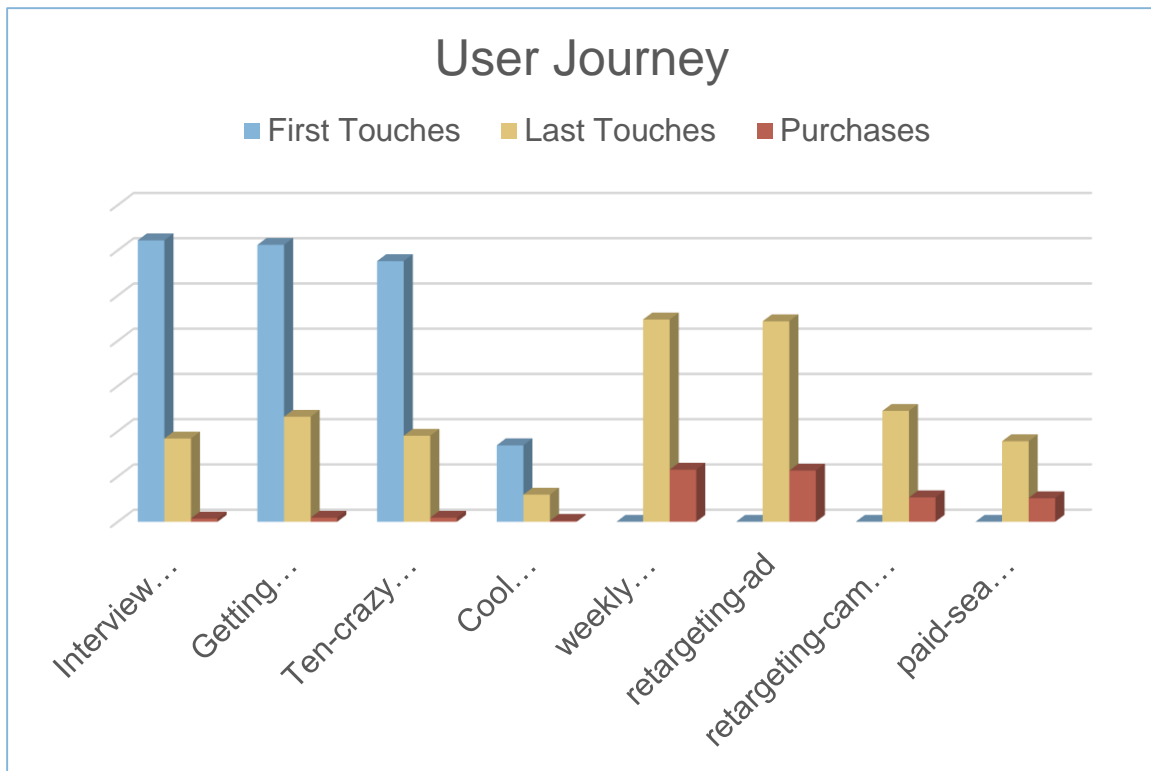
Visitors Who Made a Purchase

361

Campaign	Last Touches On Purchase Page
weekly-newsletter	115
retargeting-ad	113
retargeting-campaign	54
paid-search	52
getting-to-know-cool-tshirts	9
ten-crazy-cool-tshirts-facts	9
interview-with-cool-tshirts-founder	7
cool-tshirts-search	2

2.4 What is the user journey?

- What is the typical user journey?
 - Users are attracted to CoolTShirts by:
 - Interview with CoolTShirts Founder
 - Getting to Know CoolTShirts
 - Ten Crazy CoolTShirts Facts
 - Cool Tshirts Search
 - Most users do not make purchases from these initial contacts. The majority of users need to be reattracted back to CoolTShirts for that.
 - The 4 campaigns not responsible for first touches account for 92.5% of purchases.
 - Weekly Newsletter
 - Retargeting Ad
 - Retargeting Campaign
 - Paid Search



3. Optimize the Campaign Budget

3.1 Optimize the Campaign Budget

- CoolTShirts can re-invest in 5 campaigns. Which should they pick and why?
 - After reviewing the data, the keys to successful campaigns are:
 - Attracting customers to CoolTShirts, aka first touches.
 - Convincing the customer to make a purchase.
 - The 5 campaigns that CoolTShirts should re-invest in are:
 - Interview With Cool Tshirts Founder
 - Getting to Know Cool Tshirts
 - Ten Crazy Cool Tshirts Facts
 - Weekly Newsletter
 - Retargeting Ad
 - This combination of campaigns accounts for 91% of first touches and 69% of purchases.

