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Capstone: Attribution

Learn SQL from Scratch
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Agenda

The purpose of this presentation is to review key findings based on an analysis of CoolTShirts campaign / marketing data.

Key Questions Answered:

1. Campaign Overview
    a. How many campaigns and sources does CoolTShirts use and how are they related?
    b. What pages are on the CoolTShirts website?

2. User Journey
    a. How many first touches is each campaign responsible for?
    b. How many last touches is each campaign responsible for?
    c. How many visitors make a purchase?
    d. How many last touches on the purchase page is each campaign responsible for?
    e. What is the typical user journey?

3. Campaign Budget Optimization
    a. What 5 campaigns should CoolTShirts re-invest in?

1. Campaign Overview

1a. Total Campaigns & Sources

Campaign = Specific ad or email blast targeted at consumers.
- 8 total campaigns

Source = The outlet (e.g., website, email) that resulted in website traffic; sources contain campaigns.
- 6 total sources

Total Distinct Campaigns	Total Distinct Sources
8 Total Campaigns	**6 Total Sources**
1. getting-to -know-cool-tshirts 2. weekly-newsletter 3. ten-crazy-cool-tshirts-facts 4. retargetting-campaign 5. retargetting-ad 6. Interview-with-cool-tshirts-founder 7. Paid-search 8. cool-tshirts-search	1. nytimes 2. email 3. buzzfeed 4. facebook 5. medium 6. google

→ = Source of Campaign

1b. Website Pages

- There are 4 total pages on the CoolTShirts website that are contained within the evaluated dataset.

    - This is calculated by determining distinct page names from the "page_visits" table.

Website Page Names
1 - landing_page
2 - shopping_cart
3 - checkout
4 - purchase

2. User Journey

2a. First Touches by Campaign

- "First Touch" = Good way of knowing how visitors initially discover a website.

- In total, there are 1,979 "first touches" contained within the evaluated dataset.

- Of note, only 4 of the 8 campaigns generated "first touches".

- "Interview-with-cool-tshirts-founder" generated ~31% of total "first touches".

Campaign	First Touches
interview-with-cool-tshirts-founder	622
getting-to-know-cool-tshirts	612
ten-crazy-cool-tshirts-facts	576
cool-tshirts-search	169

2b. Last Touches by Campaign

- "Last Touch" = Good way of knowing how visitors are drawn back to a website, especially for making a final purchase.

- In total, there are 1,979 "last touches" contained within the evaluated dataset, which matches the total number of "first touches" defined on slide "*2a. First Touches by Campaign*".

- "weekly-newsletter"generated ~23% of total "last touches".

Campaign	Last Touches
weekly-newsletter	447
retargetting-ad	443
retargetting-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

2c. Unique Visitors Making Purchases

- There are **361 unique visitors** who have made a purchase within the CoolTShirt dataset.
  - This is calculated by determining the number of "distinct" user_id's from the "4 - purchase" website page.

Page Name	Distinct Users
1 - landing_page	1978
2 - shopping_cart	1881
3 - checkout	1431
4 - purchase	361

2d. Purchases by Campaign

- To calculate "Purchases by Campaign", the same "Last Touch" query on slide "*2b. Last Touches by Campaign*" is utilized, but filtered for the "4 - purchase" website page.

- The "weekly-newsletter" campaign generated ~32% of total purchases.

Campaign	Purchases
weekly-newsletter	115
retargetting-ad	113
retargetting-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

2e. Typical User Journey

- CoolTShirts utilizes various sources to attract users to the CoolTShirts website. Based on performing a "First Touch" analysis, we can determine the percentage of "First Touches" yielded by each source:
  - Medium (~31%)
  - Nytimes (~31%)
  - Buzzfeed (~29%)
  - Google (~9%)

- Users progress through the following website pages:
  - "1 - landing page"
  - "2 - shopping_cart"
  - "3 - checkout"
  - "4 - purchase"

- Though "email" and "facebook" are not utilized as initial target sources for CoolTShirts, they still generate the highest number of "last touches":
  - Email (~35%) - via both "newsletters" and "retargetting campaigns"
  - Facebook (~22%) - via "retargetting ads"
  - All Other Sources (~43%)

- More importantly, "email" and "facebook" are responsible for the highest number of "last touches" on the "4 - purchase" website page:
  - Email (~47%)
  - Facebook (~31%)
  - All Other Sources (~22%)

3. Campaign Budget Optimization

3a. Campaigns for Reinvestment

- Based upon the various analytics performed within the presentation, I believe that CoolTShirts should reinvest in the following 5 campaigns:
  - Weekly-newsletter (115 / 361)
  - Retargetting-ad (113 / 361)
  - Retargetting-campaign (54 / 361)
  - Paid-search (52 / 361)
  - Getting-to-know-cool-tshirts (9 / 361)

- These campaigns have the highest number of "last touches" on the "4 - purchase" campaign page (see slide "*2d. Purchases by Campaign*"), which indicates that they are directly impacting CoolTShirts revenue generation.
  - *Note: There are many other factors (e.g., website usability) that have the ability to impact a user "journey" throughout the website, which is why for this analysis, I believe it makes sense to focus on page "4-purchase".*