

Case Study

- Advertising Campaign Traffic Data Analysis

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Overview of Data

Campaign Period: 2017/01/01 - 2019/12/31

- 'Date' column data format set to **YYYY-MM-DD**.
- Data on 2017/2/29, which doesn't exist was deleted for **data integrity**.

Total (4) Creatives and (10) Marketing channels with (2) Platforms

- Each Creative was exposed **2,194 times equally** to each Marketing channel.
- Channel 11 data was deleted for **data consistency** and carried out insignificant numbers compared to other channels.

Visit numbers: Number of Visits, Qualified Shoppers, and Bounced Visits

Total Visits	Total Qualified Shoppers	Total Bounced Visits
2,441,606,085	1,136,280,891 (47% of Total Visits)	1,097,602,500 (45% of Total Visits)

Executive Summary

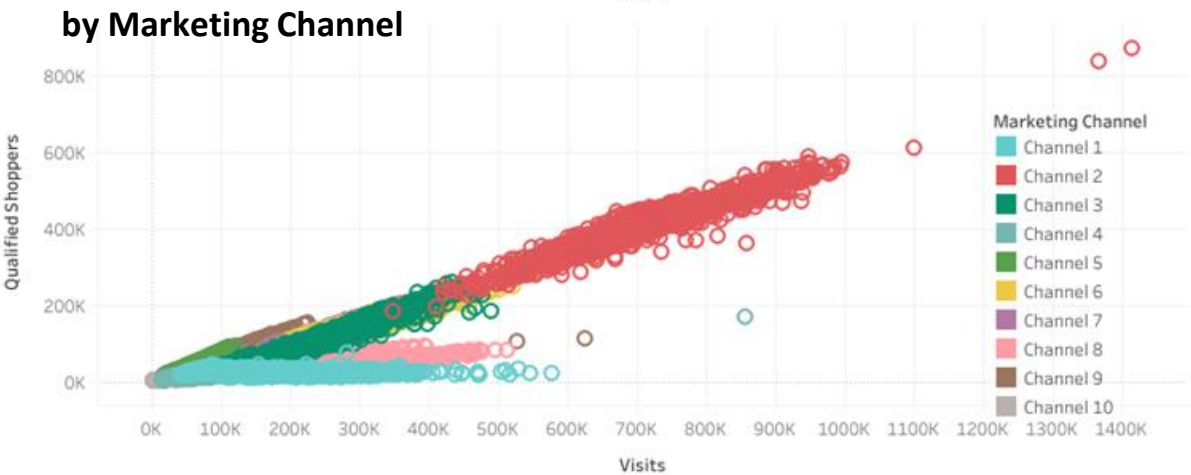
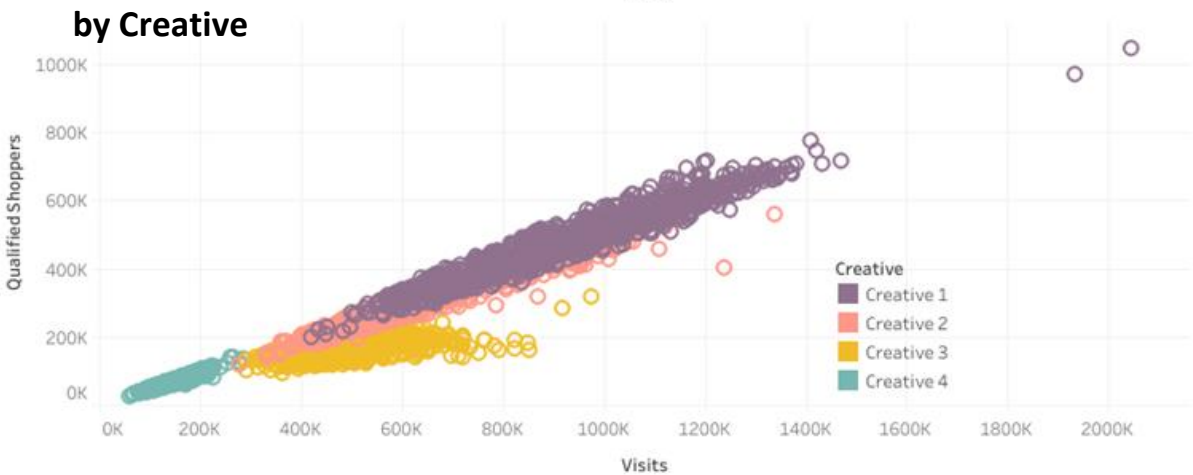
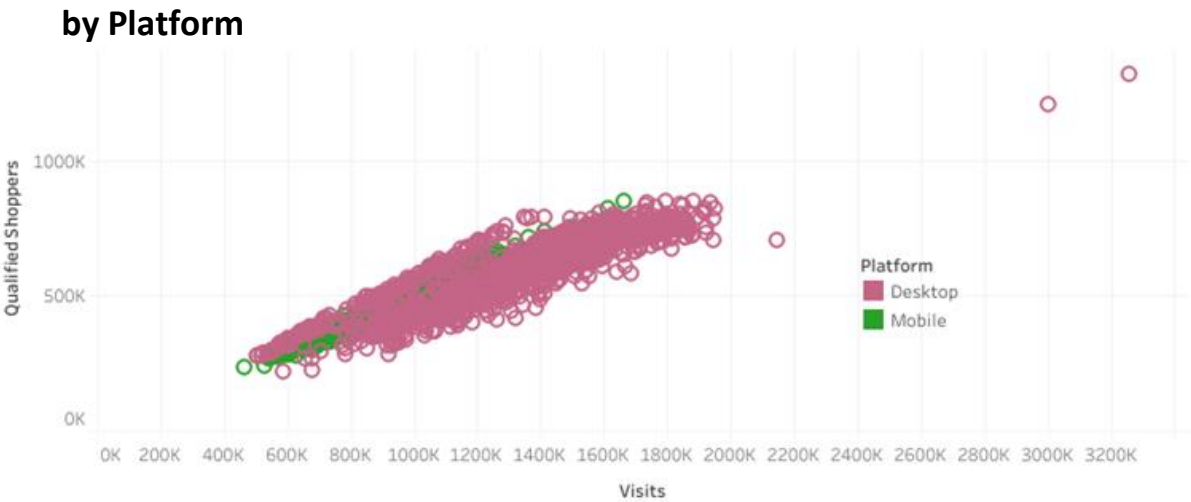
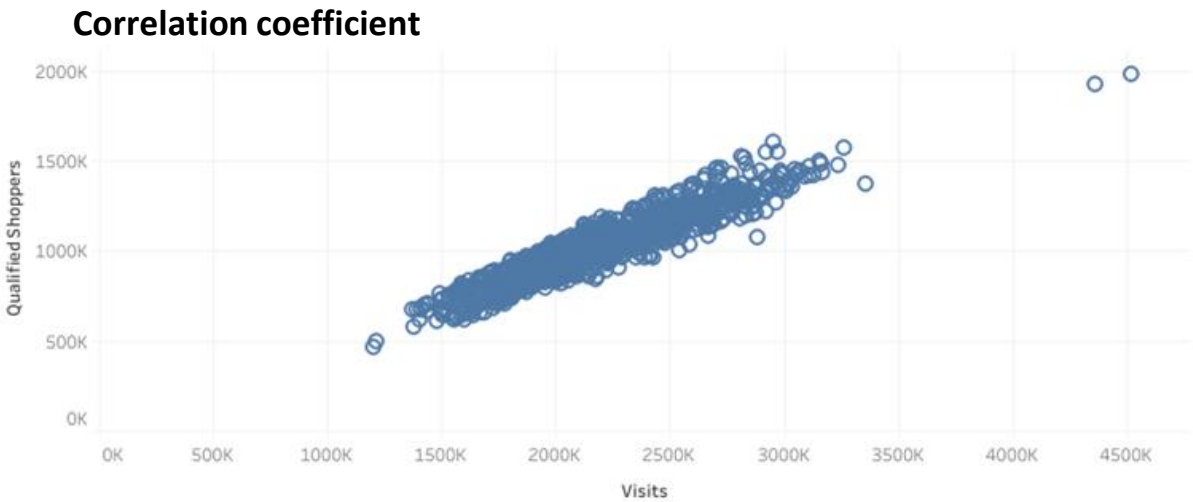
Every element affected the performance in different ways, and we can reveal which elements are most effective for the campaign with data analysis and optimize future campaigns accordingly.

Findings:

- Visit numbers are showing **a seasonal trend**.
- **Creative 1** attracted **the highest number of Visits and Qualified Shoppers**, and shows **the highest conversion rate**, followed by Creative 2.
- **Channel 2** has significantly **highest number of Visits and Qualified Shoppers**, with 10% of budget spent.
- **Channel 5** has the highest conversion rate with the most budget spent (25%), however, absolute **number of Visits and Qualified Shoppers was relatively low**.
- Every channel exposed each Creative **for the same amount of times**. (2,194 each)
- **Platform** data barely affected visitor's qualified actions.

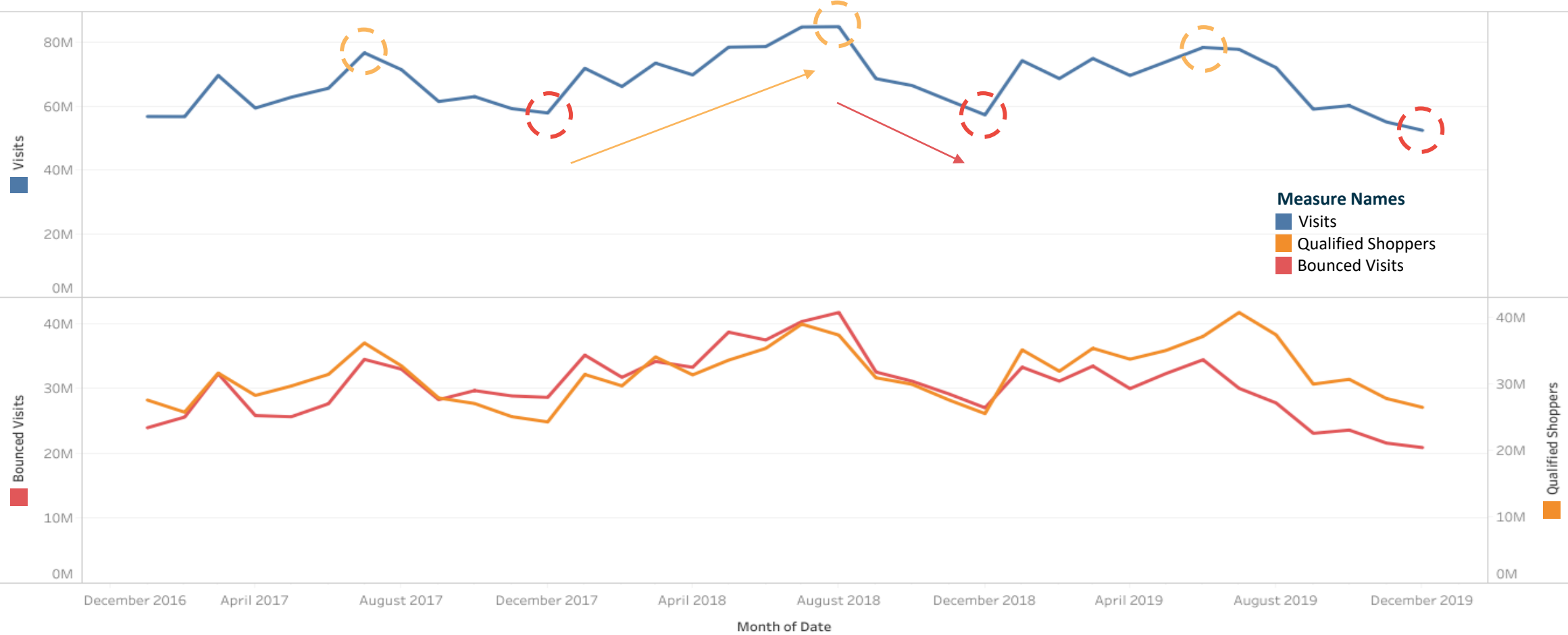
Correlation between Visits and Qualified Shoppers

Correlation coefficient between Visits and Qualified Shoppers is 0.85.
More visits, more qualified shoppers.



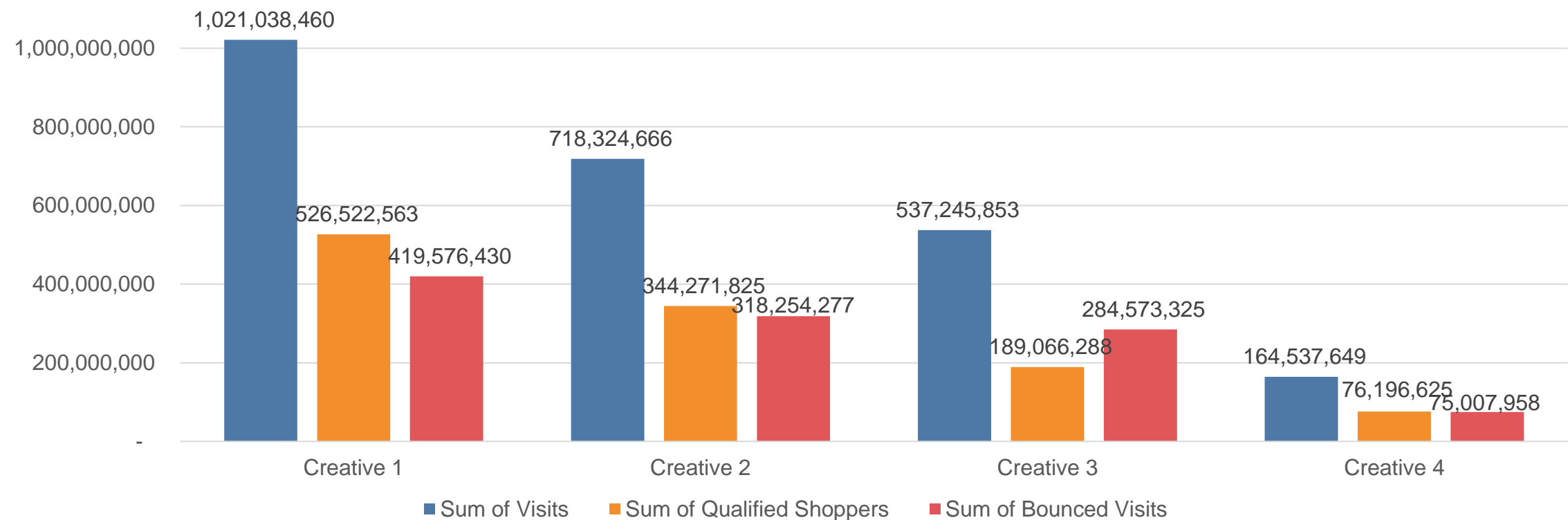
Visit Numbers by Monthly Trend

Visit numbers are showing a repeating pattern.
Increase in Summer, decrease in December.



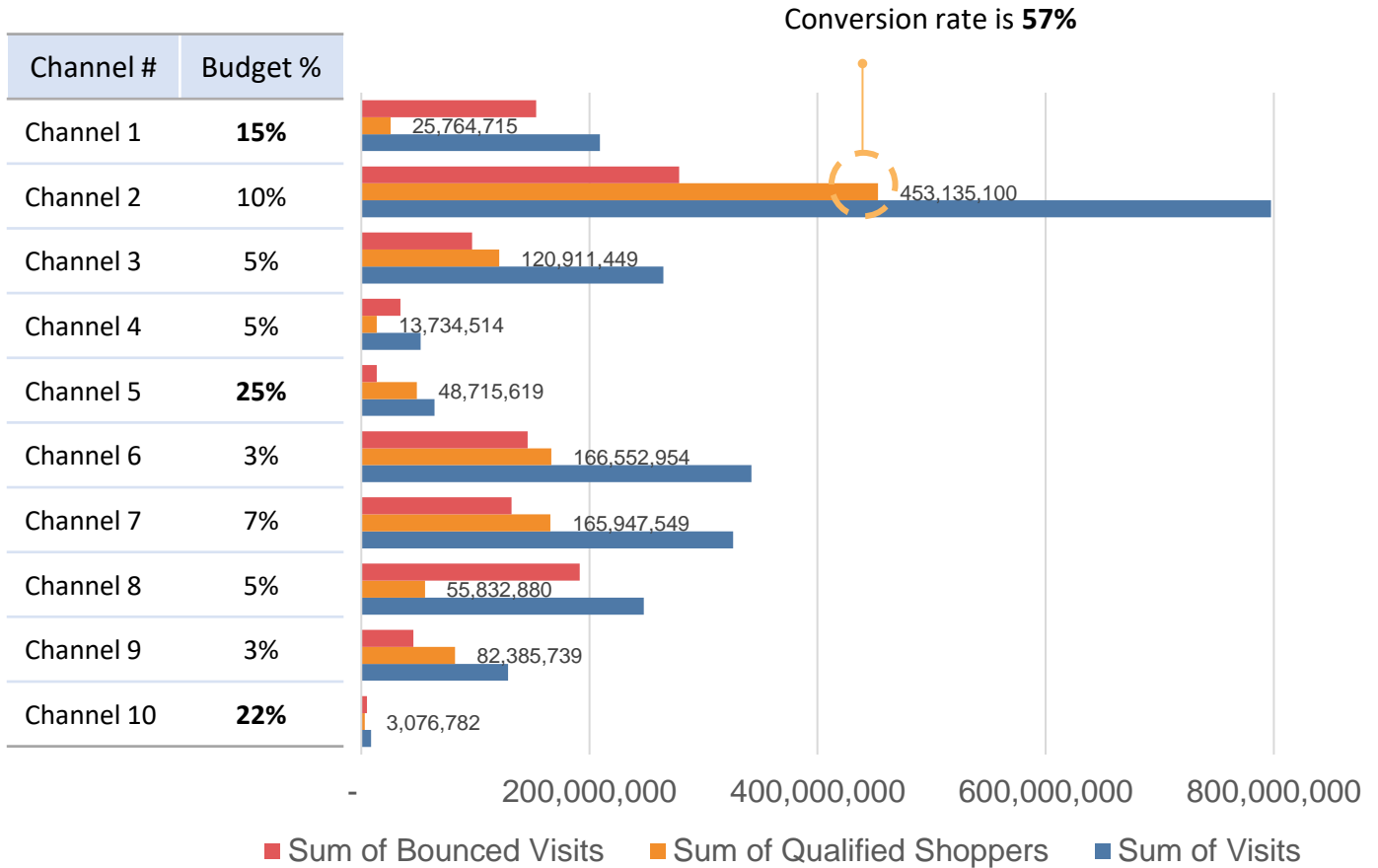
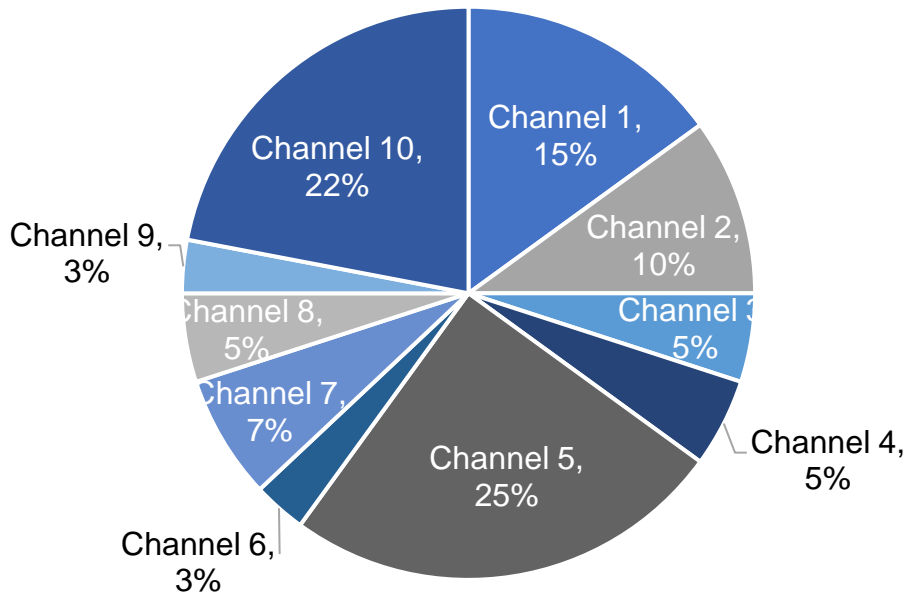
Visit Numbers by Creative

Creative 1 & 2 attracted the most Visits as well as Qualified Shoppers in order.
Creative 3 shows that number of Bounced Visits can be greater than the Qualified Shoppers’.



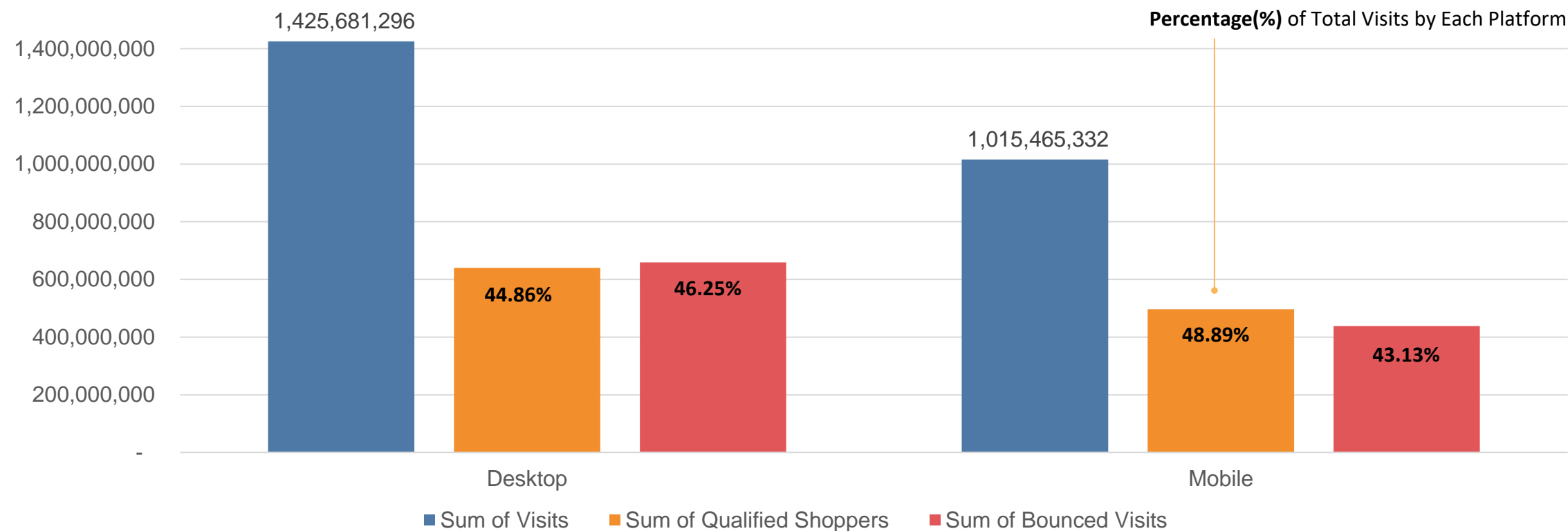
Budget Allocation & Visit Numbers by Marketing Channel

Channel 2 shows the best cost-efficient performance with the most Visits and Qualified Shoppers.
Budget spending didn't guarantee the performance, and top 3 budget spent channels performed poorly.



Visit Numbers by Platform

Desktop brought the absolute highest number of Visits, but doesn't have a higher conversion rate. **Platform doesn't affect visitor's qualified actions**, either almost half of visits make qualified actions or not.



Key Takeaways and Suggestions

Key Takeaways

- The more people visit, the more qualified actions can be made.
- However, considering other factors to drive qualified actions can also benefit the campaign.

Suggestions

- Utilize various factors that can lead to qualified actions.
 - Date: push the campaign more **during Summer** when campaigns perform well.
 - Creative: **Creative 1** brings the most *Visits* and *Qualified shoppers*. Expose Creative 1 more than the other creatives.
 - Marketing Channel: **Channel 2** has noticeably higher *Visits* with 10% budget spending. Consider increasing the budget to gain more visits.

Further Research Needs

- Understand campaign and marketing channel's characteristics and define the target audience.
- Identify visitor's IP address or ID number to analyze visitor's behavior and see whether the same visitor might have visited multiple times and how this could affect the campaign.

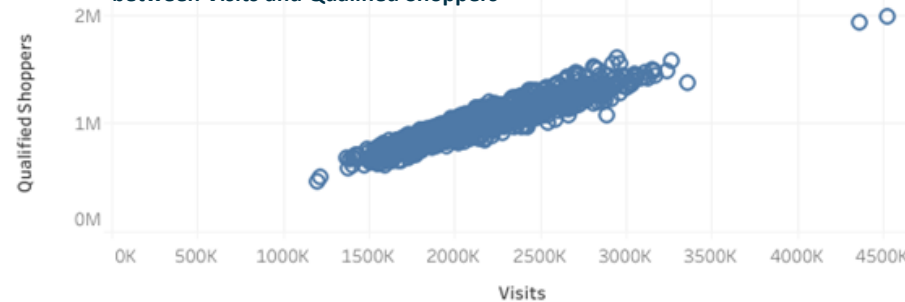
Appendix

Snapshot of Tableau Dashboard

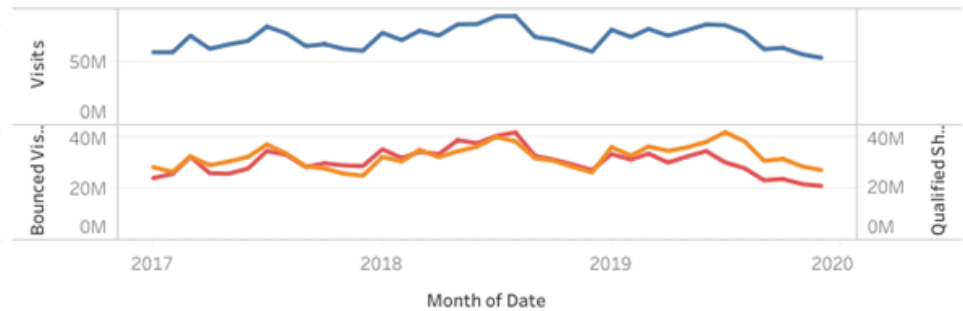
Count of Creative by each Marketing Channel

Marketing ..	Creative			
	Creative 1	Creative 2	Creative 3	Creative 4
Channel 1	2,194	2,194	2,194	2,194
Channel 2	2,194	2,194	2,194	2,194
Channel 3	2,194	2,194	2,194	2,194
Channel 4	2,194	2,194	2,194	2,194
Channel 5	2,194	2,194	2,194	2,194
Channel 6	2,194	2,194	2,194	2,194
Channel 7	2,194	2,194	2,194	2,194
Channel 8	2,194	2,194	2,194	2,194
Channel 9	2,194	2,194	2,194	2,194

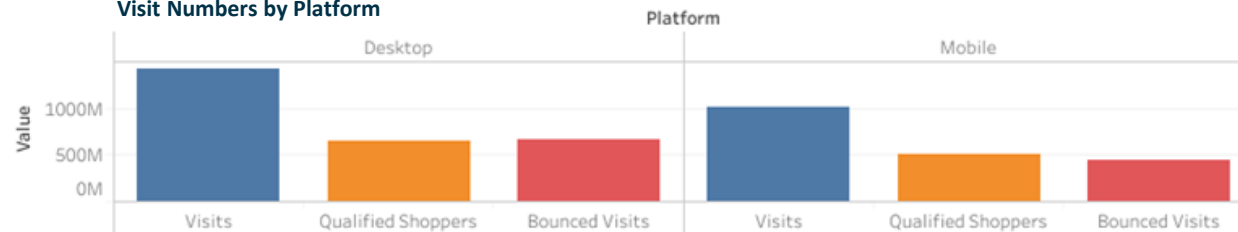
Correlation Coefficient between Visits and Qualified Shoppers



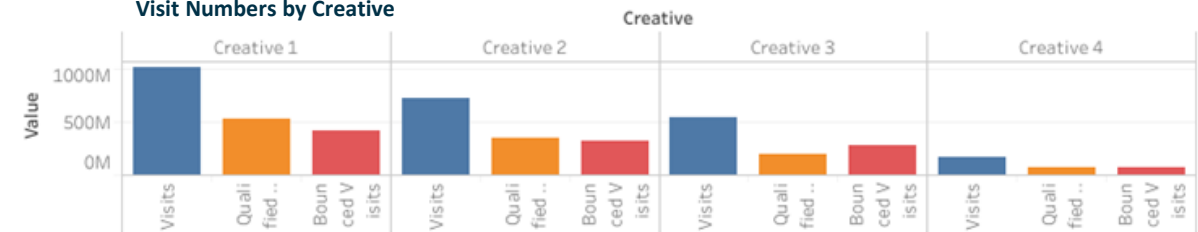
Visit Numbers by Monthly Trend



Visit Numbers by Platform



Visit Numbers by Creative



Visit Numbers by Marketing Channel

