

Excelerate

Superhero U: Ad Campaign Performance & Insights

A Strategic Analysis for the Marketing Team

Presented by Team-09



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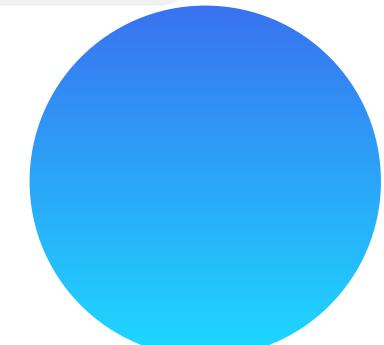
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The Team

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Balakoti





Problem Statement

The core problem is to identify which campaigns truly worked and which were a waste of our valuable budget. Our goal is to analyze the data to find the most efficient campaigns and make a clear recommendation on where to focus our future spending.



Project Objectives

The objective of this project is to analyze the performance of the Superhero U ad campaigns. We will use key metrics to identify which campaigns were most efficient and which were underperforming. Our ultimate goal is to provide a clear, data-backed recommendation on which campaigns to discontinue to optimize future spending and maximize results.



What is Superhero U?

The Superhero U event was an innovative initiative with a clear and inspiring mission:

- Nurture Young Minds: It was designed to foster problem-solving and inventive thinking in youth.
- Align with Global Goals: The core of the event was to have participants create fictional 'superheroes' that could solve real-world social issues, all aligned with the UN Sustainable Development Goals (SDGs).
- A Multi-Stage Journey: The event was run in three distinct phases—preliminary, semi-final, and final—over nine months, from August 2020 to April 2021.
- Promote Equal Opportunity: At its heart, the initiative was focused on providing equal educational opportunities for young people, regardless of their background.

Facebook Ads: An Overview

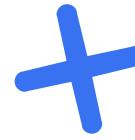
Facebook Ads are a powerful tool for businesses because they allow us to reach specific, targeted groups of people. Here's a quick look at how we used them for Superhero U:

- Targeted Audience: We used Facebook's targeting features to find exactly who we wanted to reach: students, and the teachers & principals who influence them. This precision helps make sure our ads are relevant.
- Visually Engaging: To get their attention, we used visually appealing image ads. The main goal was to get them to click the link and visit the Superhero U page.
- Data-Driven: The campaigns weren't just set and forgotten. We constantly monitored their performance and made adjustments to improve key metrics like reach, click-through rates, and overall effectiveness over time.

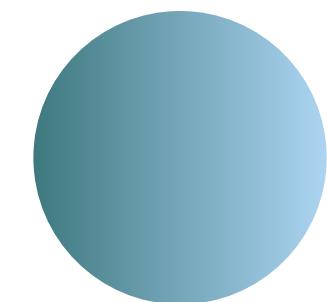
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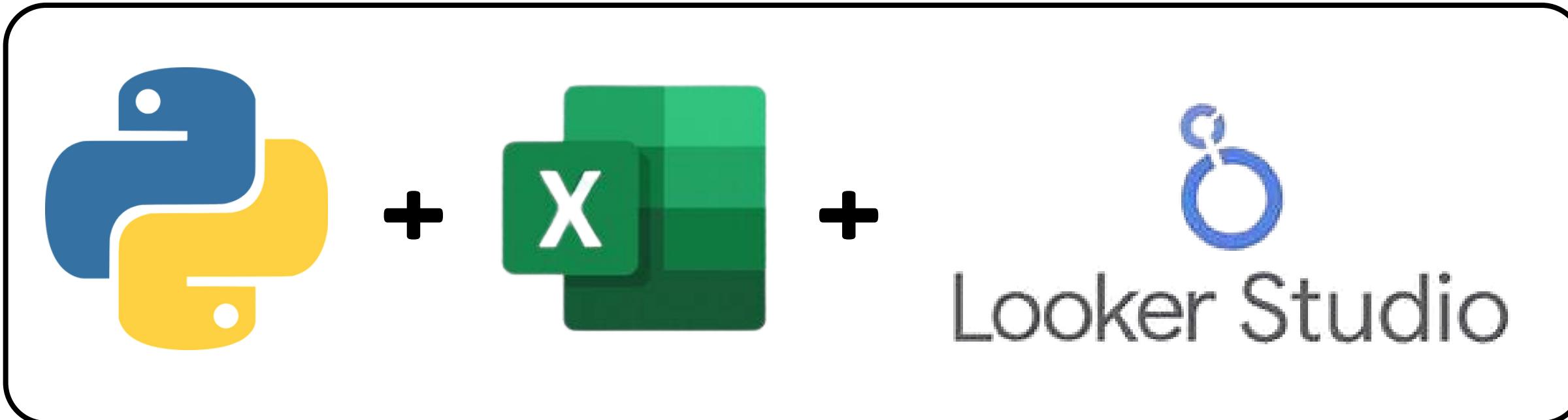
EDA HIGHLIGHT



OVERVIEW OF THE DATASET

- We've analyzed data from the Superhero U Facebook ad campaigns, which is the foundation for all our insights.
 - The data provides a detailed look at campaign performance across different audiences, age groups, and geographies.
 - We've focused on key metrics such as Reach (how many unique people saw our ads) and Impressions (the total number of times our ads were shown).
 - Most importantly, the data tells us about clicks and link clicks, which shows how many people were interested in our ads, and the total cost, which helps us measure efficiency and ROI.
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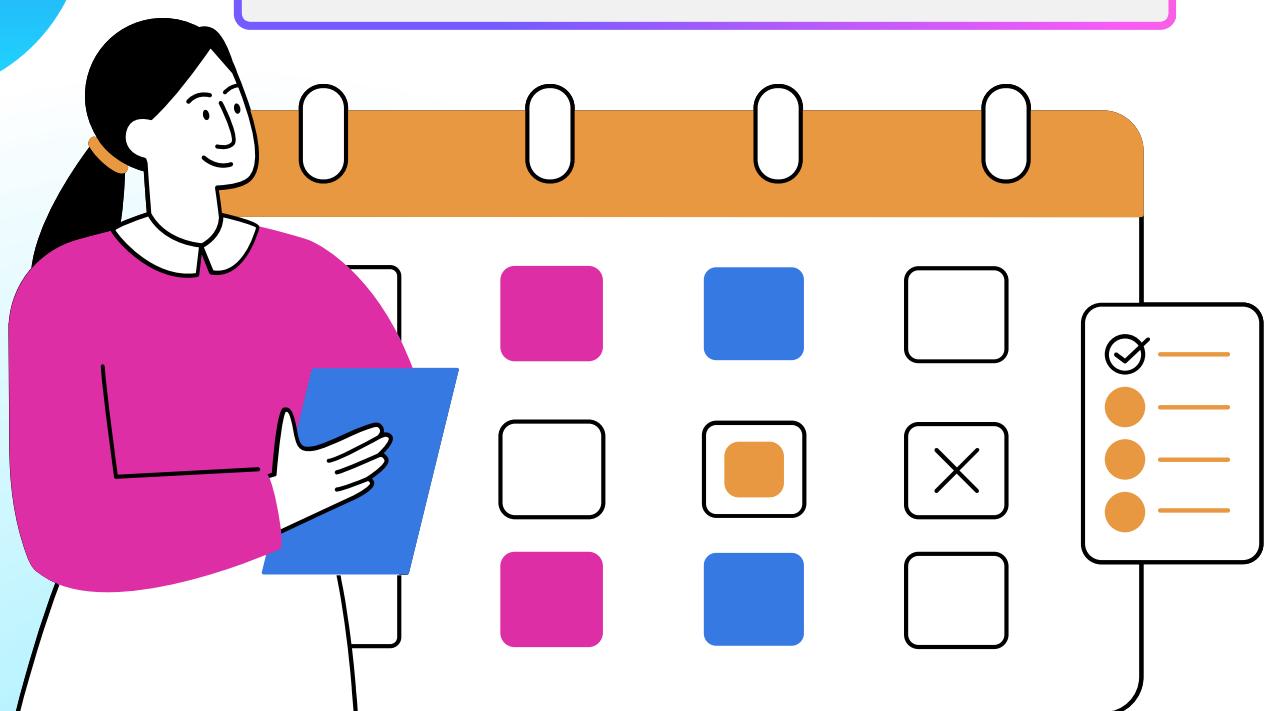
TOOLS USED



ETL & Data Cleaning – Week 2 Execution

1. Master Table Creation

We started by bringing all our campaign information into one organized spreadsheet. This created a single source of truth for all of our analysis, making it much simpler to work with.

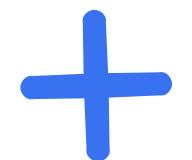


2. ETL Using Stored Procedure

We manually cleaned the data to make it perfect for analysis. This involved removing extra characters from the cost columns (like '\$' and commas), ensuring all numbers were correctly formatted, and getting rid of any unnecessary information.

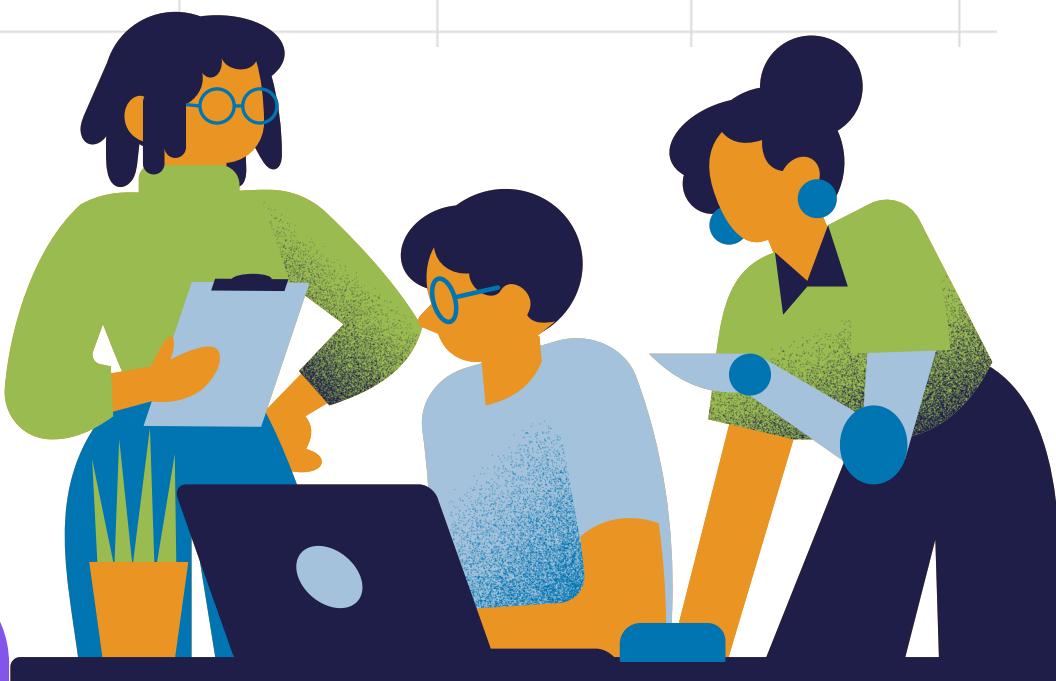
3. Data Quality Report

Before proceeding, we performed checks to ensure the data was complete and reliable. We confirmed there were no missing values and that there were no logical inconsistencies (e.g., Clicks were not less than Unique Clicks).



Mapping Table

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1	Campaign ID	Campaign Name	Audience	Age	Geography	Reach	Impressions	Frequency	Clicks	Unique Clicks	Unique Link Clicks (ULC)	Click-Through Rate (CTR in %)	Unique Click-Through Rate (Unique CTR in %)	Amount Spent in INR	Cost Per Click (CPC)	Cost per Result (CPR)
2	Campaign 1	SHU_6 (Educators)	Educators	25-34	Group 1 (Aust)	11387	23283	2.04	487	406	180	2.09	3.57	₹1,092.24	₹2.24	₹6.07
3	Campaign 1	SHU_6 (Educators)	Educators	35-44	Group 1 (Aust)	8761	15683	1.79	484	376	154	3.09	4.29	₹835.46	₹1.73	₹5.43
4	Campaign 1	SHU_6 (Educators)	Educators	45-54	Group 1 (Aust)	2867	6283	2.19	198	145	65	3.15	5.06	₹319.38	₹1.61	₹4.91
5	Campaign 1	SHU_6 (Educators)	Educators	55-64	Group 1 (Aust)	889	1890	2.13	49	40	21	2.59	4.50	₹86.25	₹1.76	₹4.11
6	Campaign 2	SHU3_(Students)	Ap Students	18-24	Group 2 (Aust)	29675	39161	1.32	2593	1994	1095	6.62	6.72	₹1,193.94	₹0.46	₹1.09
7	Campaign 2	SHU3_(Students)	Ap Students	13-17	Group 2 (Aust)	14753	25705	1.74	969	698	435	3.77	4.73	₹299.51	₹0.31	₹0.69
8	Campaign 2	SHU3_(Students)	Ap Students	25-34	Group 2 (Aust)	2066	2447	1.18	181	141	65	7.40	6.82	₹85.57	₹0.47	₹1.32
9	Campaign 3	SHU_Students(Aust)	Students	13-17	Australia	2271	2616	1.15	61	55	28	2.33	2.42	₹475.85	₹7.80	₹16.99
10	Campaign 3	SHU_Students(Aust)	Students	18-24	Australia	704	734	1.04	49	46	13	6.68	6.53	₹283.17	₹5.78	₹21.78
11	Campaign 3	SHU_Students(Aust)	Students	25-34	Australia	212	222	1.05	9	8	3	4.05	3.77	₹91.66	₹10.18	₹30.55
12	Campaign 4	SHU_Students (Can)	Students	13-17	Canada	2330	3146	1.35	101	84	63	3.21	3.61	₹528.08	₹5.23	₹8.38
13	Campaign 4	SHU_Students (Can)	Students	18-24	Canada	759	878	1.16	52	44	34	5.92	5.80	₹294.82	₹5.67	₹8.67
14	Campaign 4	SHU_Students (Can)	Students	25-34	Canada	218	243	1.11	18	18	15	7.41	8.26	₹101.06	₹5.61	₹6.74
15	Campaign 5	SHU_Students(Ghai)	Students	18-24	Ghana	5952	6943	1.17	284	238	98	4.09	4.00	₹378.10	₹1.33	₹3.86
16	Campaign 5	SHU_Students(Ghai)	Students	25-34	Ghana	3717	4620	1.24	184	160	46	3.98	4.30	₹282.22	₹1.53	₹6.14
17	Campaign 5	SHU_Students(Ghai)	Students	13-17	Ghana	5355	8920	1.67	180	154	93	2.02	2.88	₹177.46	₹0.99	₹1.91
18	Campaign 6	SHU_Students (Indi)	Students	18-24	India	30110	35372	1.17	1308	1162	934	3.70	3.86	₹894.00	₹0.68	₹0.96
19	Campaign 6	SHU_Students (Indi)	Students	25-34	India	1721	1874	1.09	92	76	53	4.91	4.42	₹61.21	₹0.67	₹1.15
20	Campaign 7	SHU_Students(Nep)	Students	18-24	Nepal	18900	36659	1.94	849	688	306	2.32	3.64	₹634.64	₹0.75	₹2.07
21	Campaign 7	SHU_Students(Nep)	Students	13-17	Nepal	6145	19474	3.17	325	246	129	1.67	4.00	₹211.76	₹0.65	₹1.64
22	Campaign 7	SHU_Students(Nep)	Students	25-34	Nepal	4623	9082	1.96	246	212	83	2.71	4.59	₹188.84	₹0.77	₹2.28
23	Campaign 8	SHU_Students (Nige)	Students	18-24	Nigeria	11027	13820	1.25	1491	1132	548	10.79	10.27	₹542.67	₹0.36	₹0.99
24	Campaign 8	SHU_Students (Nige)	Students	13-17	Nigeria	8516	12372	1.45	970	696	408	7.84	8.17	₹282.21	₹0.29	₹0.69
25	Campaign 8	SHU_Students (Nige)	Students	25-34	Nigeria	2386	2782	1.17	304	230	117	10.93	9.64	₹117.90	₹0.39	₹1.01
26	Campaign 9	SHU_Students(UAE)	Students	25-34	UAE	2892	3347	1.16	135	102	41	4.03	3.53	₹455.49	₹3.37	₹11.11
27	Campaign 9	SHU_Students(UAE)	Students	18-24	UAE	2862	3234	1.13	72	60	27	2.23	2.10	₹316.14	₹4.39	₹11.71
28	Campaign 9	SHU_Students(UAE)	Students	13-17	UAE	1579	2079	1.32	35	32	20	1.68	2.03	₹104.63	₹2.99	₹5.23
29	Campaign 10	SHU_Students(UK)	Students	13-17	UK	2557	2941	1.15	69	60	33	2.35	2.35	₹487.52	₹7.07	₹14.77
30	Campaign 10	SHU_Students(UK)	Students	18-24	UK	741	785	1.06	39	34	20	4.97	4.59	₹255.57	₹6.55	₹12.78
31	Campaign 10	SHU_Students(UK)	Students	25-34	UK	338	365	1.08	13	11	4	3.56	3.25	₹113.58	₹8.74	₹28.40
32	Campaign 11	SHU_Students (USA)	Students	13-17	USA	2159	2465	1.14	126	111	95	5.11	5.14	₹691.28	₹5.49	₹7.28
33	Campaign 11	SHU_Students (USA)	Students	18-24	USA	305	332	1.09	43	37	28	12.95	12.13	₹159.14	₹3.70	₹5.68
34	Campaign 11	SHU_Students (USA)	Students	25-34	USA	91	103	1.13	9	8	3	8.74	8.79	₹47.26	₹5.25	₹15.75
35																
36																





Dashboard Wireframe & Design



WIREFRAME PLANNING

01

Layout drafted with KPIs, charts, and filters.

MAPPING TABLE

02

Mapped columns and applied business transformation logic.

DESIGN DECISIONS

03

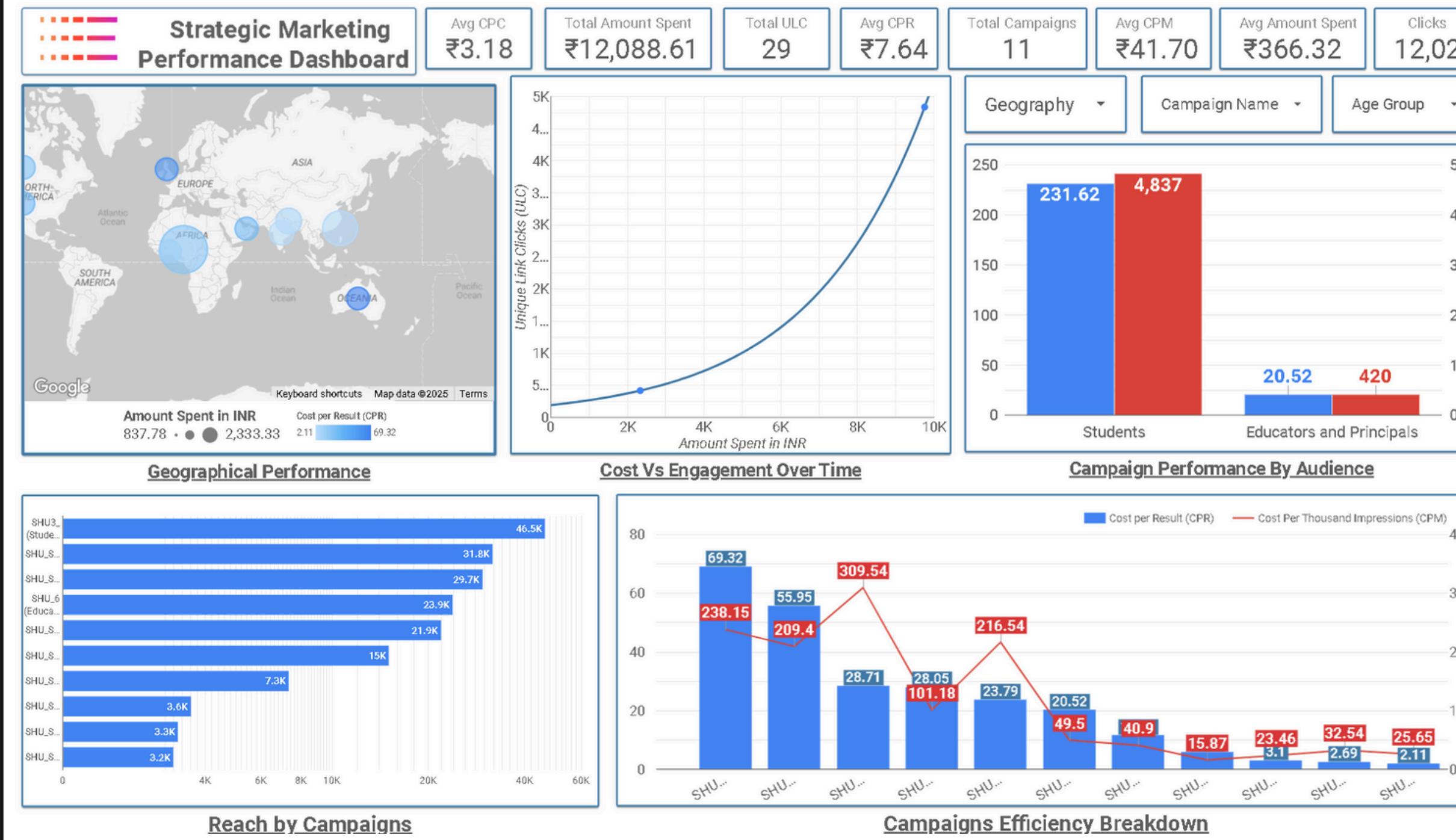
Selected chart types based on data insights.



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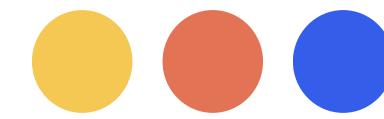
Dashboard Preview



Page 1: The Campaign Performance Summary

This page gives us a high-level overview of how our ad campaigns performed. It's our "What Happened" page. At a glance, we can see our key metrics like total spend and clicks. The charts break down which campaigns, audiences, and age groups drove the most results, helping us quickly identify our top performers and where our efforts paid off.

Dashboard Page 1: Learner & Demographic Insights

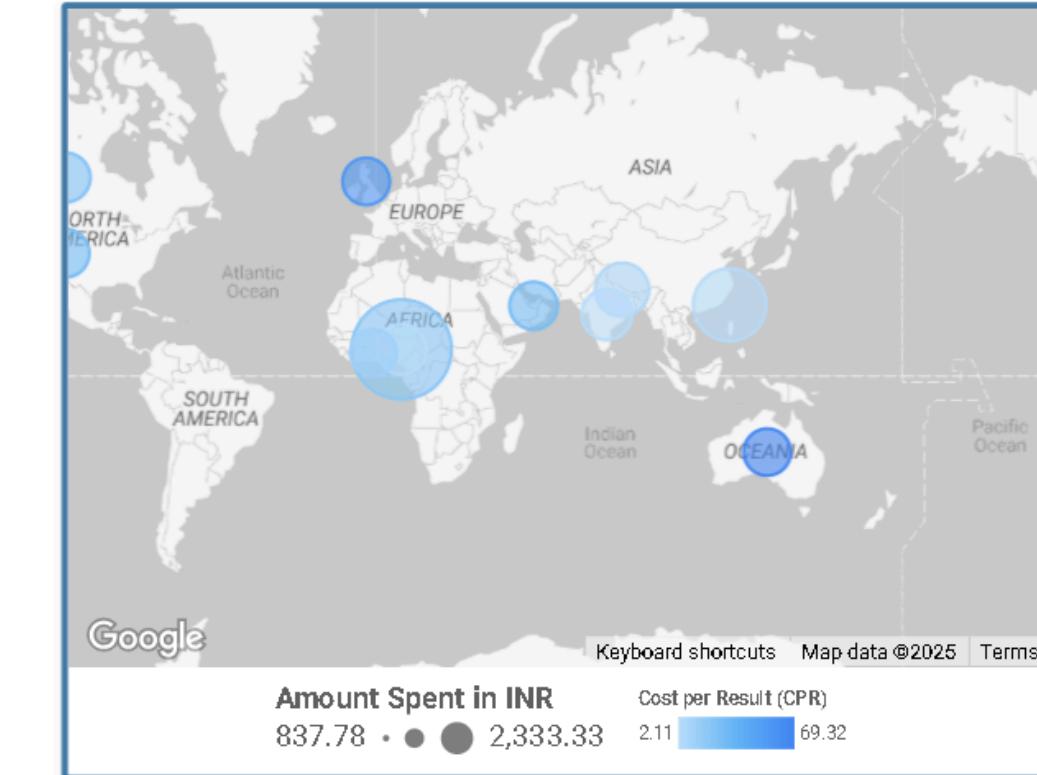


This page is perfectly designed to answer the fundamental questions: Who are our applicants, and what are their success rates?

1. Key Performance Indicators (KPIs)

Avg CPC ₹3.18	Total Amount Spent ₹12,088.61	Total ULC 29	Avg CPR ₹7.64	Total Campaigns 11	Avg CPM ₹41.70	Avg Amount Spent ₹366.32	Total Clicks 12,025
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This KPIs shows a quick overview of insight like **Total Spent, Average Cost Per Click, Average Unique Link Click, Total Campaign, Average CPM (Cost Per 1000 Impressions), Average Amount spent**, etc.



2. Drop Down Filters

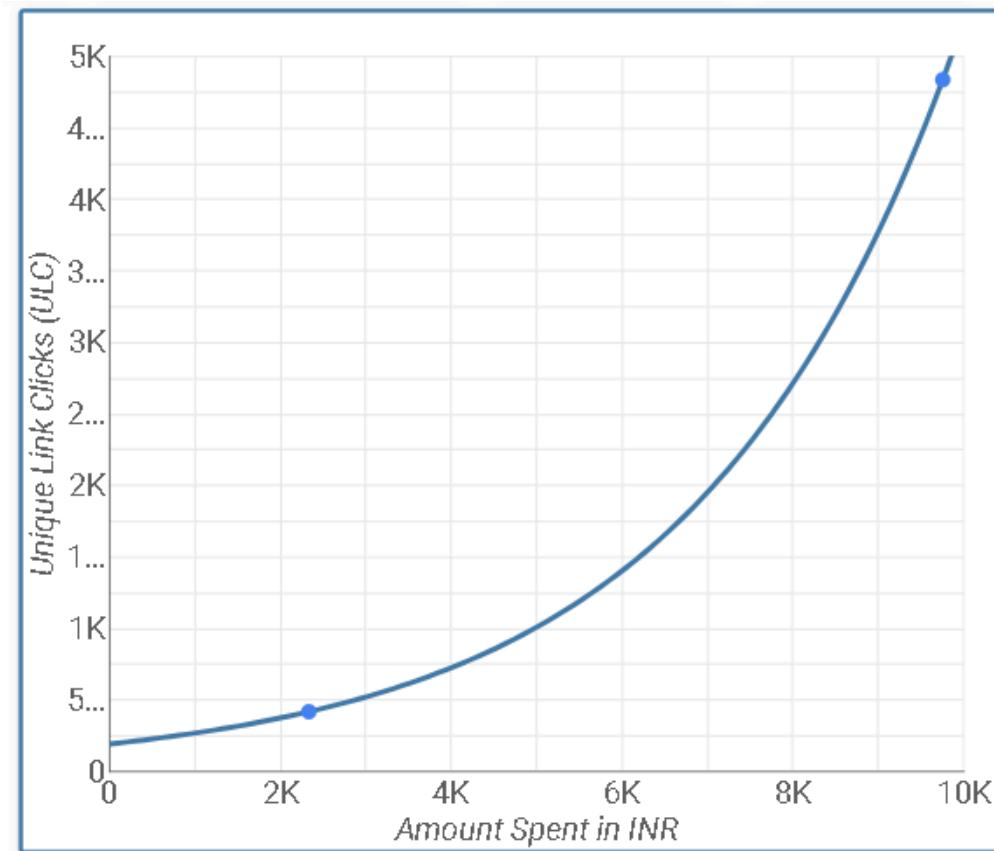
Audience Geography Campaign Name Age

It's allow a user to interact with the data .

- How it Works:** By clicking on a **Audience, Age Group, Geography(Country), Campaign Name** in the slicer, all the charts on the page will change to show only data for that specific group.

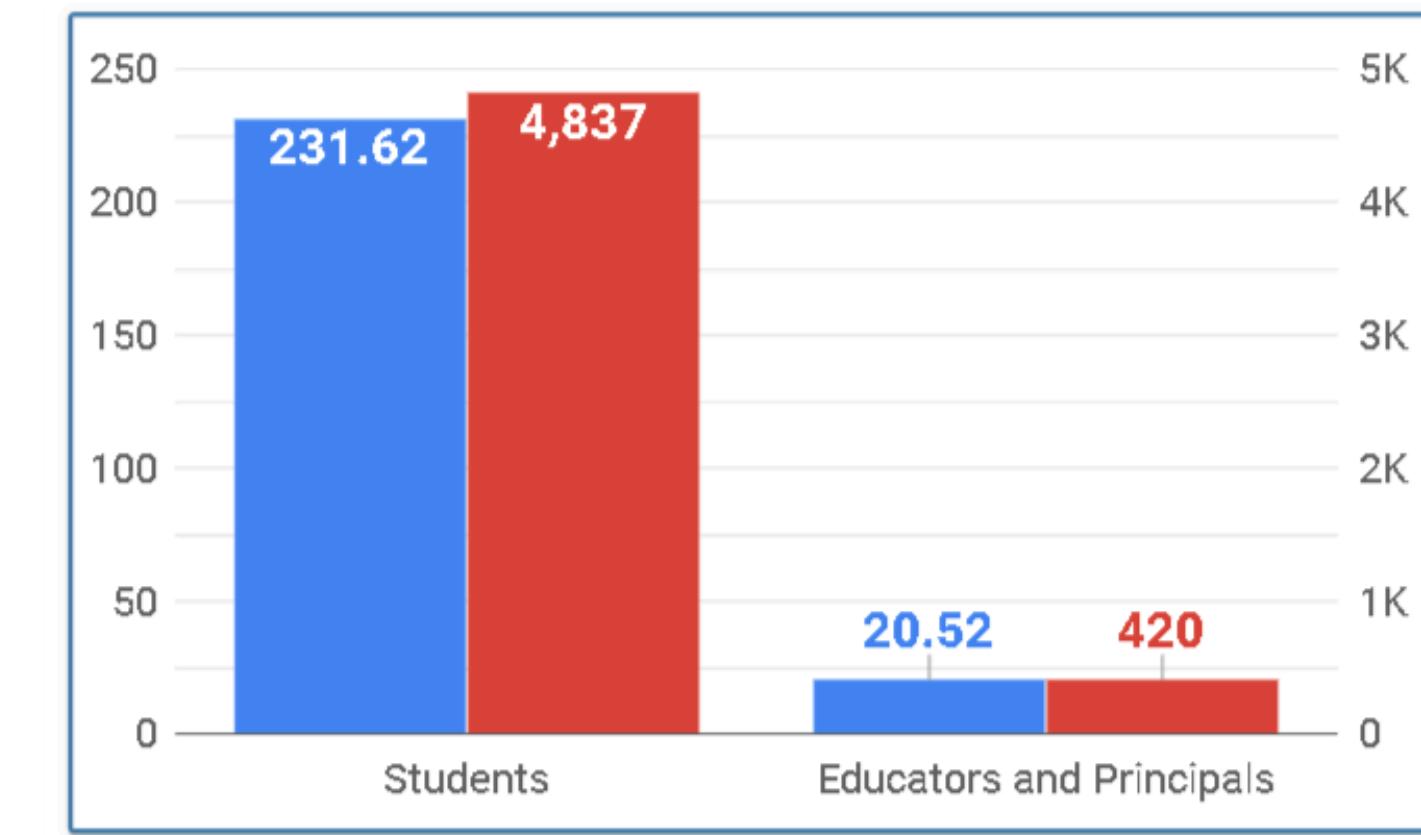
- Insight:** The campaigns were most efficient in **Nigeria(Africa)**, where the Cost per Result (**CPR**) was the **lowest**. Conversely, the most expensive region was the **UAE**, which had the **highest CPR**.
- Conclusion:** The data shows a significant difference in performance across regions. Our future strategy should prioritize our spending in countries like Nigeria where we can get the most results for our money.

Dashboard Page 1: Learner & Demographic Insights



Cost Vs Engagement Over Time

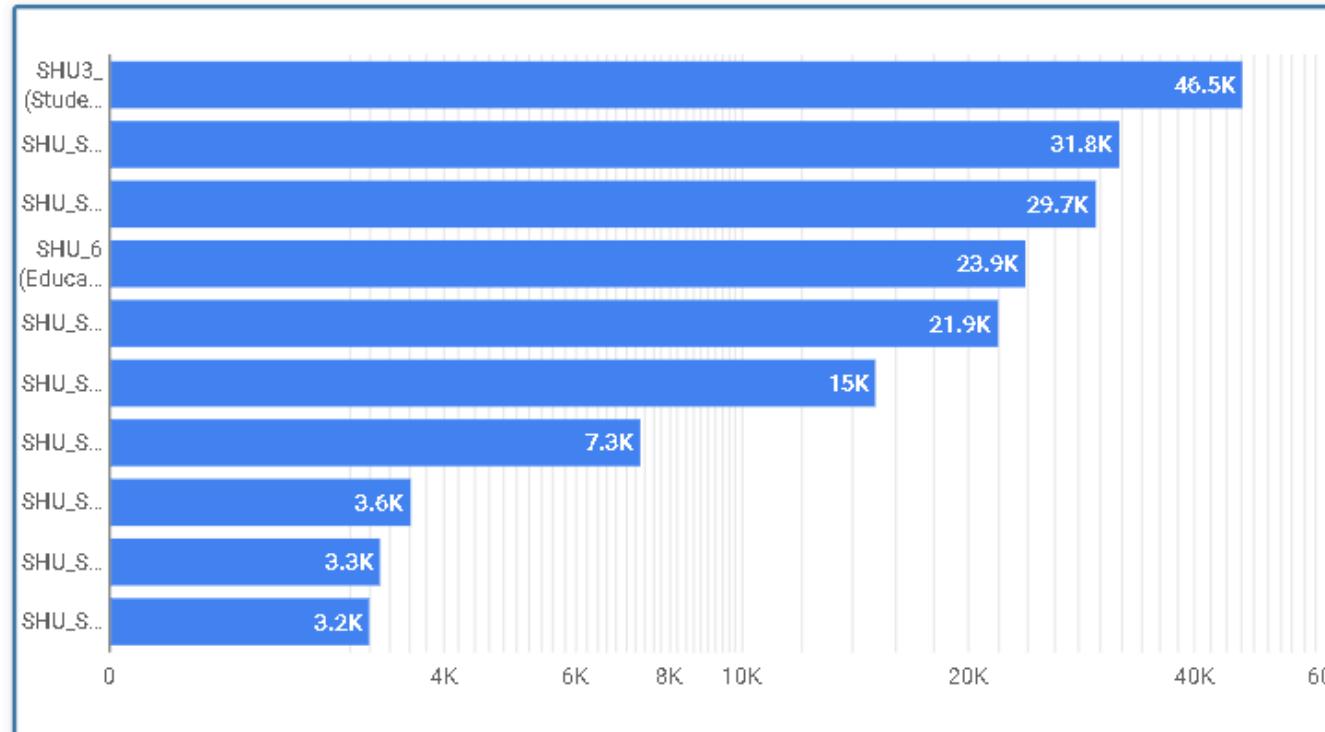
- Insight:** There is a huge difference in cost efficiency between campaigns. Campaign 8 delivered results for an incredibly **low ₹0.99 per result**, making it our most efficient campaign.
- Conclusion:** Campaigns like **Campaign 8** are the most valuable. We should reallocate budget from high-cost campaigns, like **Campaign 11 (₹21.57 per result)**, to these top performers.



Campaign Performance By Audience

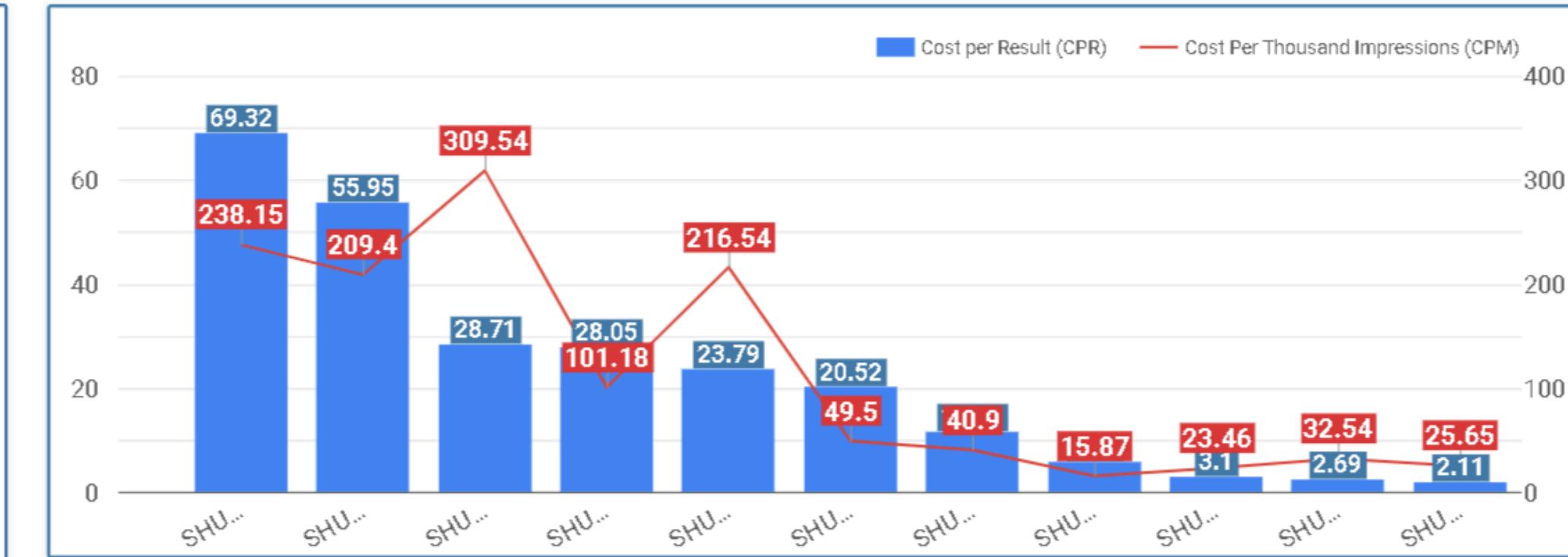
- Insight:** The "**Students**" audience was overwhelmingly our most successful group, delivering **4,379** unique link clicks. This confirms our core targeting was effective.
- Conclusion:** The vast majority of our results came from the **student audience**. We should focus our future efforts on this segment for maximum impact.

Dashboard Page 1: Learner & Demographic Insights



Reach by Campaigns

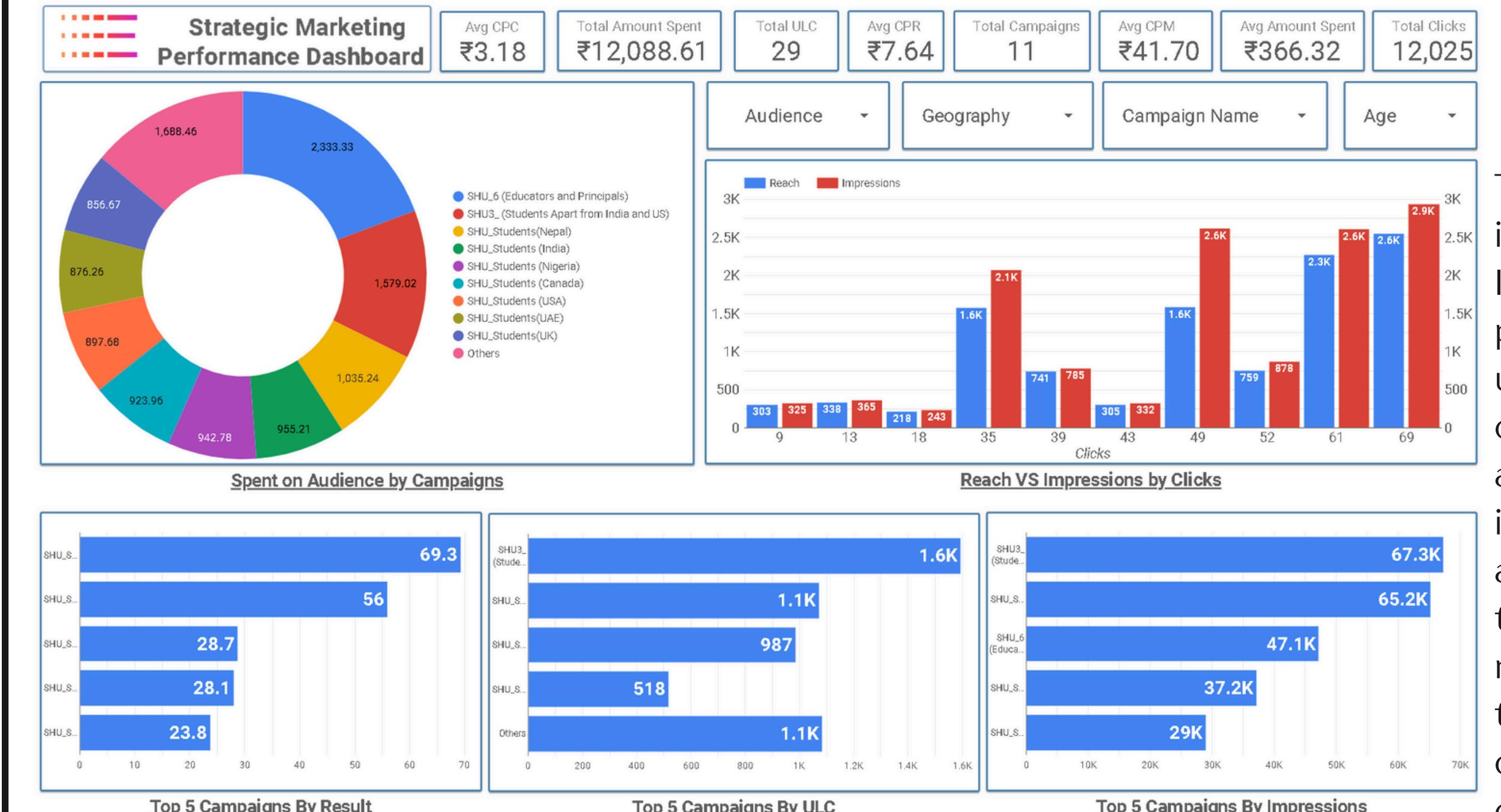
- Insight:** The campaigns varied significantly in their ability to reach a large, unique audience. Campaigns like Campaign 2, Campaign 6, and Campaign 8 had the widest "footprint," reaching the most unique individuals.
- Conclusion:** These campaigns were highly effective at building brand awareness by getting the message in front of the largest number of new eyes.



Campaigns Efficiency Breakdown

- Insight:** This chart shows a strong relationship between the cost of showing an ad (**CPM**) and the cost of getting a result (**CPR**).
- Conclusion:** The most efficient campaigns (**low CPR**) are also the ones that are cheapest to display (**low CPM**). For instance, Campaigns like Campaign 8 are not only cheap to be seen but also incredibly cheap to generate a result. This confirms that our most cost-effective campaigns are efficient from start to finish.

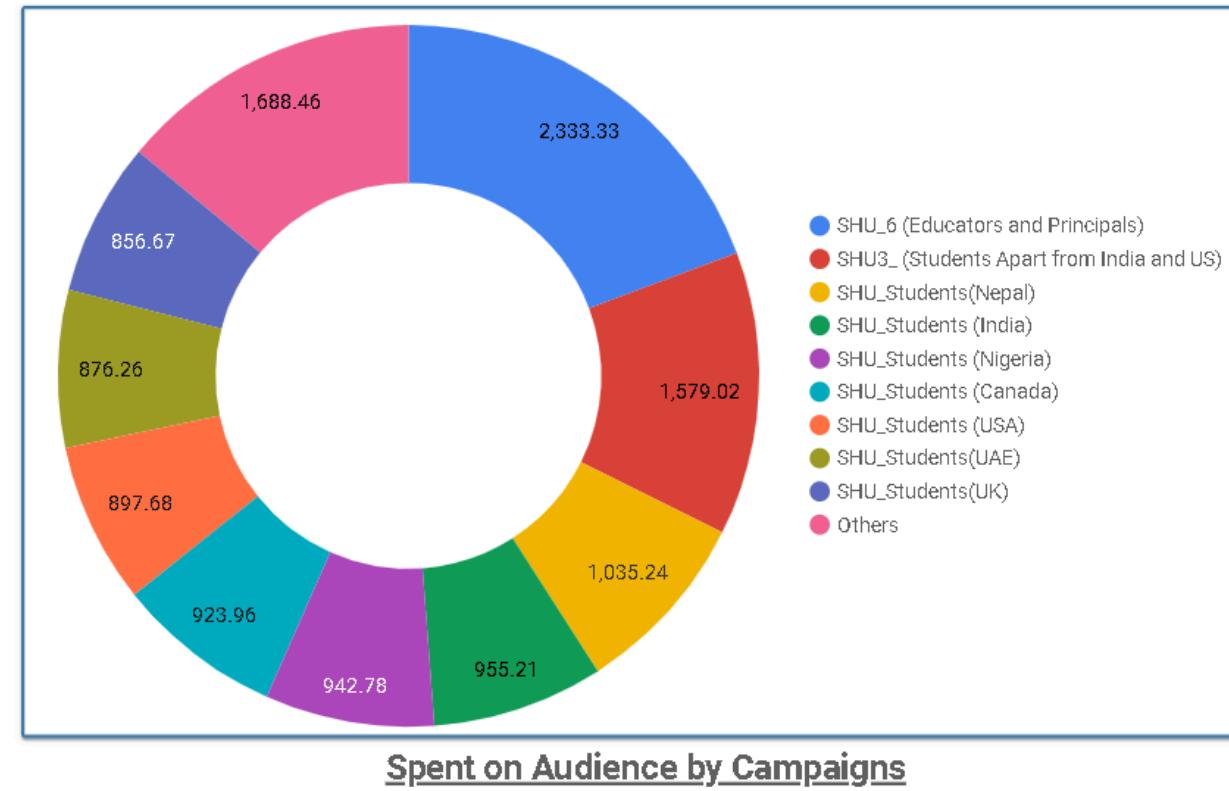
Dashboard Preview



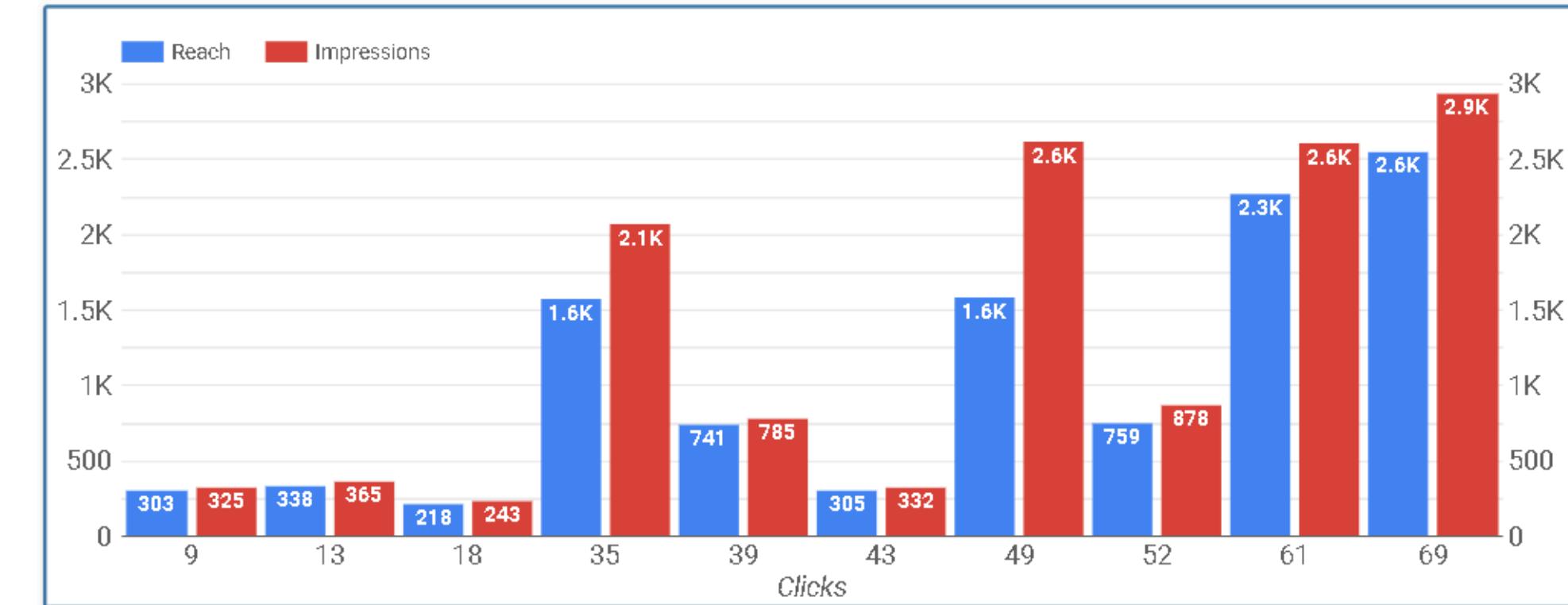
Page 2: The Strategic Insights & Optimization Deep Dive

This page is where we get into the strategic analysis. It's our "Why it Happened" page. The visuals here show us crucial relationships in the data, such as whether higher ad frequency leads to a drop in engagement (ad fatigue) and if our spending is truly translating into valuable results. This page is all about the data behind the decisions, helping us figure out where to reallocate our budget for better efficiency."

Dashboard Preview

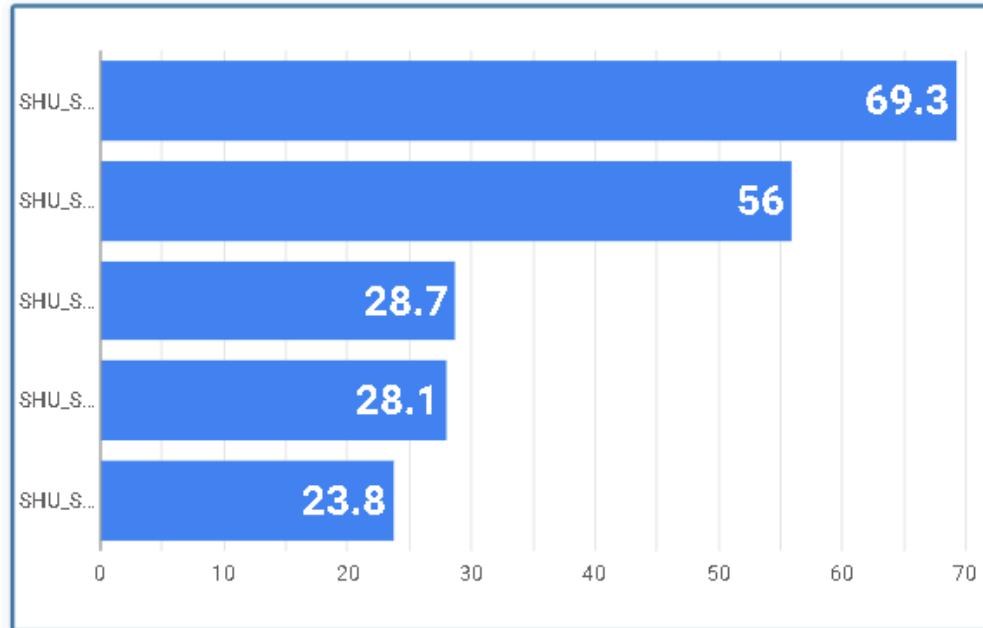
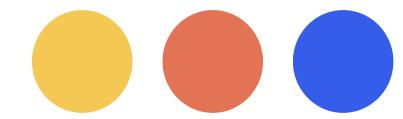


- Insight:** This visual clearly shows how much money was spent on each audience segment for every campaign. It reveals that the **Students audience was our main investment**, with **Campaigns 2 and 6** receiving the highest ad spend for this group.
- Conclusion:** Our budget allocation was heavily focused on the **student audience**, which aligns with our key finding that this segment generated the most results. This confirms our spending was strategically aligned with our performance goals.



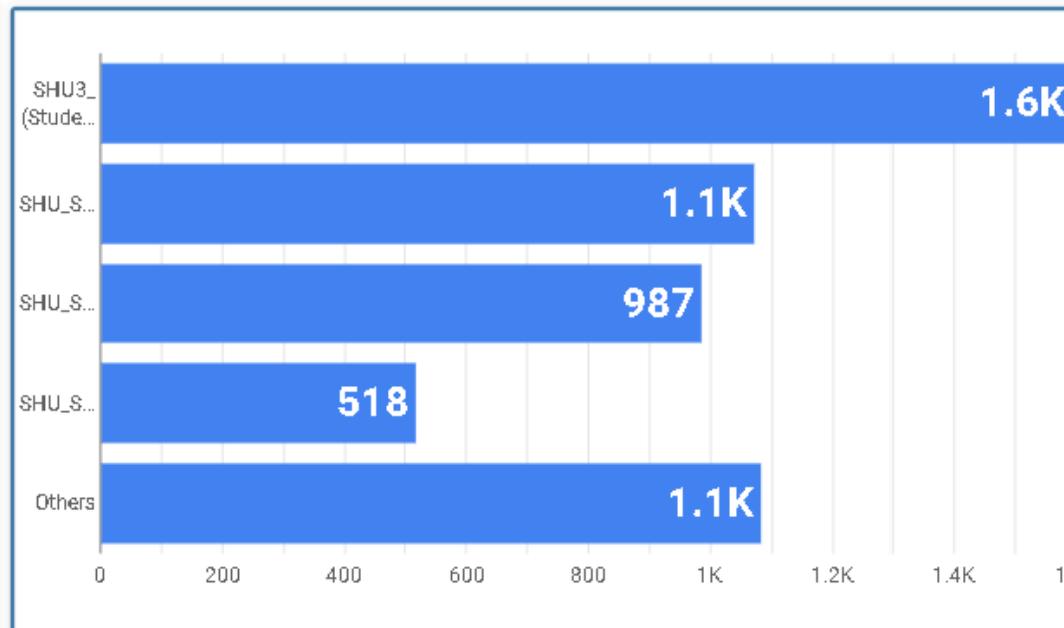
- Insight:** This bar chart shows the total **Reach** (the unique people we touched) versus the total **Impressions** (how many times they saw our ads) for each campaign. It highlights that the campaigns that reached the most people, like **Campaign 2 and Campaign 6**, also had the **highest number of impressions**.
- Conclusion:** These campaigns had the largest advertising footprint. They were highly effective at both expanding our unique audience and ensuring our message was seen multiple times, a crucial factor for building brand awareness.

Dashboard Preview



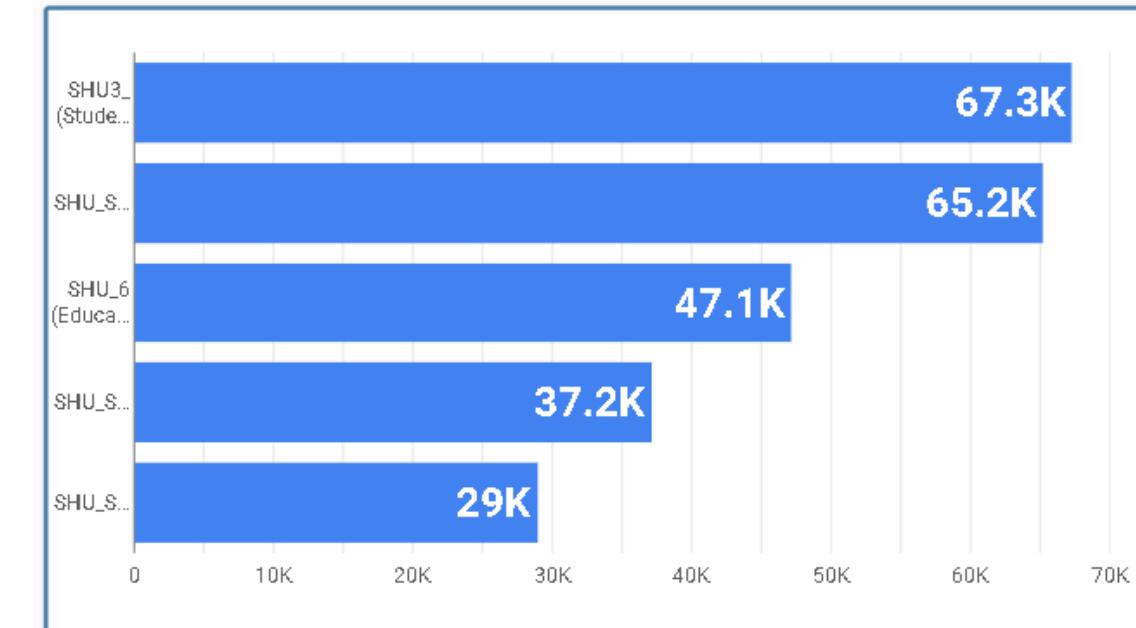
Top 5 Campaigns By Result

- Insight:** This chart is all about cost efficiency. It shows which campaigns delivered results for the **lowest cost per result (CPR)**.
- Conclusion:** **Campaign SHU_Canada** is our most efficient campaign by far, with a CPR of just ₹23.8. On the other hand, we should reconsider campaigns with a high CPR, as they are not cost-effective.



Top 5 Campaigns By ULC

- Insight:** This visual highlights our most successful campaigns in terms of conversions. It's clear that **Campaign 2** and **Campaign 6** were the top performers, generating 1,095 and 1,008 unique link clicks, respectively.
- Conclusion:** These two campaigns were the most effective at driving direct, valuable results for the business. They should be considered our most successful efforts.

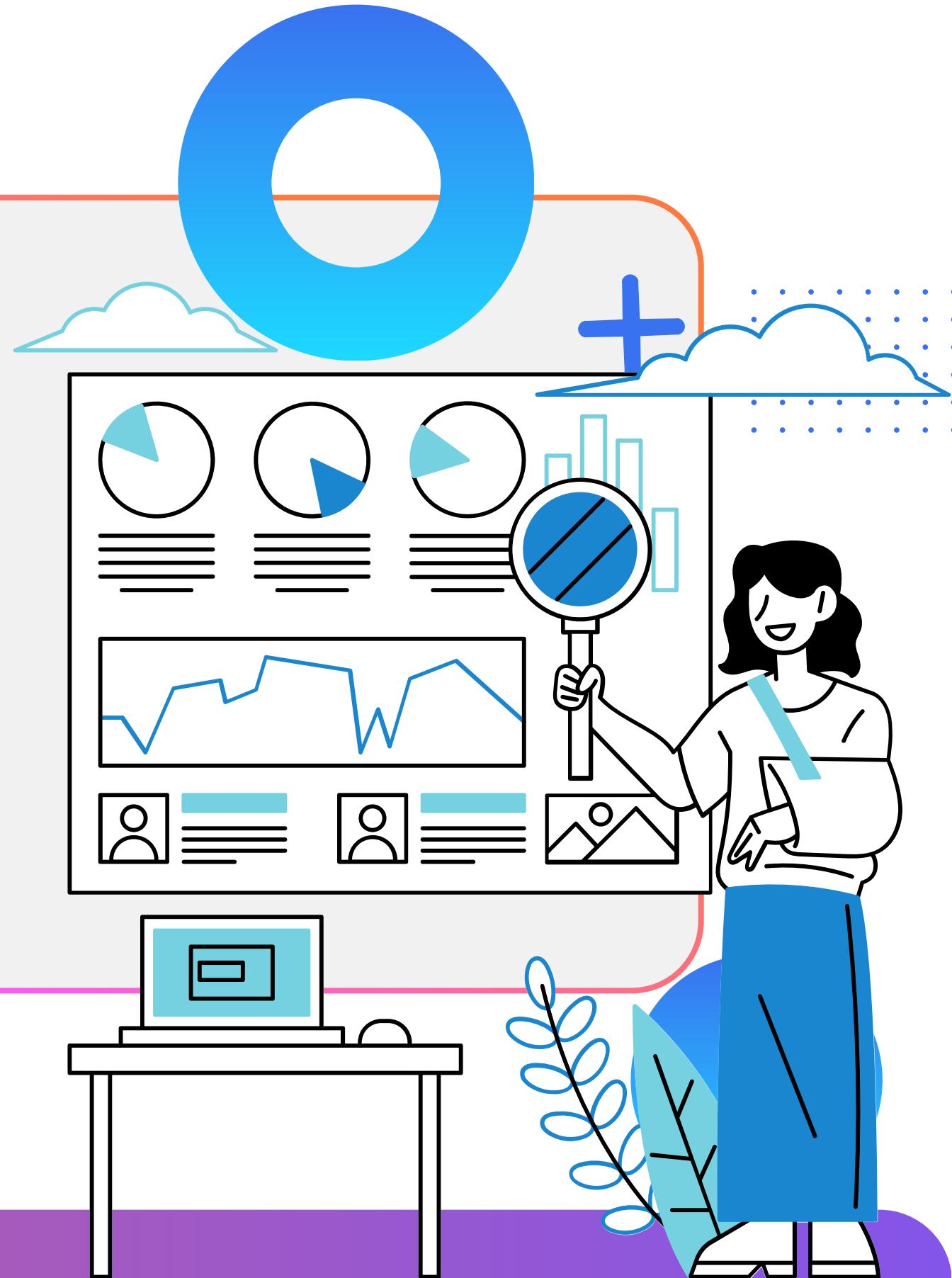


Top 5 Campaigns By Impressions

- Insight:** This chart shows which campaigns had the most brand exposure. **Campaign 2** generated the **highest number of impressions** with **over 39,000**, followed by **Campaign 1**.
- Conclusion:** **Campaigns 2 and 1** were highly effective at getting the brand's message in front of the largest audience, which is crucial for building brand awareness.

Conclusion

- Our analysis confirms the campaign was successful in its primary goal: engaging the student audience. The majority of our results and budget were correctly aligned with this segment.
- We've identified significant differences in campaign efficiency. While some campaigns delivered results at a low cost, others were far less effective despite considerable spending.
- By focusing on key metrics like ULC, CPR, and CPM, we can confidently identify which campaigns truly worked and which were not worth the investment. This data provides a clear path forward for optimizing future ad spend.



Final Recommendations

- Based on our data analysis and the strategic insights we've uncovered, here are our final recommendations for optimizing future ad spend:
- Discontinue Underperforming Campaigns:** We recommend immediately discontinuing the campaigns with the highest Cost per Result (CPR). Specifically, Campaign 11 (\$21.57 CPR) and Campaign 5 (\$19.01 CPR) are highly inefficient and are draining the budget without providing a strong return.
- Reallocate Budget to Top Performers:** We should reallocate the budget from the discontinued campaigns to our most efficient ones. Our data shows Campaign 8 (\$0.99 CPR), Campaign 7 (**\$2.28 CPR**), and Campaign 3 (\$2.49 CPR) are our most cost-effective campaigns and should receive increased investment.
- Focus on the Student Audience:** Our analysis clearly shows that the Students audience delivered the most results and was the most cost-effective. Future campaigns should be heavily weighted toward this demographic to maximize results.
- Monitor for Ad Fatigue:** Continuously monitor the Frequency and CTR for top-performing campaigns. If CTR starts to decline as Frequency rises, consider a new creative to prevent ad fatigue and maintain high engagement.



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