

New Readers: India Report

cps data

2018-06-27

Contents

1	Summary	2
2	Approach and methodology	2
3	Facebook	3
3.1	Video Views by Country	3
3.2	Video Views — paid vs. organic	4
3.3	Facebook Fans by City	5
3.4	Facebook Impressions by Country	6
4	YouTube	8
4.1	Views by Country	8
4.2	Views over Time	10
4.3	Video Views — paid vs. organic	12
4.4	Video Engagement in India	13
4.5	Viewer Demographics	14
5	Clickthroughs	15
6	Pageviews	17
7	Unique devices	20
8	Queries	23
8.1	Facebook	23
8.2	Clickthroughs	23
8.3	Pageviews	23
8.4	Unique Devices	23

1 Summary

The campaign succeeded in increasing the number of Facebook impressions from India and Facebook fans from Madhya Pradesh. 99% of video views were from India and 94% of video views were paid, so the paid promotion successfully generated views for the video. Weekly Facebook impressions from India peaked at 750% of the pre-campaign level, and the number of Facebook Fans in Indore, Madhya Pradesh increased over 500%.

The campaign also led to 1.8 million YouTube views from India, 99.9% of which were paid views through YouTube advertising. Most viewers were male (80%) and between 18 and 24 years old (86%). Despite the large number of views, engagement metrics were low — during all of April and May, the video received only 29 likes, 198 shares, and 10 additional subscribers from India.

There were approximately 9,000 Facebook clickthroughs and 13,000 YouTube clickthroughs from Madhya Pradesh, compared to 1,000 Facebook clickthroughs and 1,500 YouTube clickthroughs from other Indian States.

Unfortunately, the campaign did not result in discernible increases in overall pageviews or unique devices from Madhya Pradesh during the campaign period.

2 Approach and methodology

We analyzed data from Facebook, YouTube, referrer clickthroughs, Wikipedia pageviews, and Wikipedia unique devices to assess the impact of the campaign. The campaign dates we used were April 3, 2018 to May 1, 2018.

There was a change in the caching center on March 29th, 2018, such that traffic for India started being routed through a new caching center in Singapore. This could potentially affect traffic data such as pageviews and unique devices. We compared Madhya Pradesh to other Indian states and Hindi to other languages within India as controls, with the assumption that the change in caching center would affect all comparison groups in the same way.

For Facebook, we looked at video views broken down by country and by paid vs. organic views, as well as Facebook page impressions by country, and Facebook fans by city. Facebook only has data available for the top cities and countries, so we used the most specific level of data available. There was city-level data available for fans in Indore, Madhya Pradesh. Indore was not among the top cities for impressions, so we had to use country-level data here.

For YouTube, we again looked at video views by country and by paid v. organic views. We also looked at views over time in India, viewer engagement (likes, shares, etc.), and viewer demographics. It is important to note that YouTube counts all organic views as views, but it only counts paid views within the view numbers if the viewer watched 30 seconds or more of the video. Because almost all views were paid, almost all view numbers represent paid views of 30 seconds or more.

We calculated clickthroughs from links on Facebook and YouTube to the Wikipedia Hindi Main Page. We also assessed the impact of the campaign on overall pageviews in Madhya Pradesh compared to other Indian States. For both of these queries, we used bucketing to query Hive data and then multiplied by the bucketing parameter to obtain the actual number of pageviews due to the large volume of data needed.

Lastly, we looked at the impact of the campaign on the average number of unique devices visiting Wikipedia from India. We looked at the top 5 languages in India in terms of unique devices. This data set is only calculated at the country level in Hive, so we do not have unique device numbers for Madhya Pradesh compared to other Indian states, as we did for pageviews.

3 Facebook

3.1 Video Views by Country

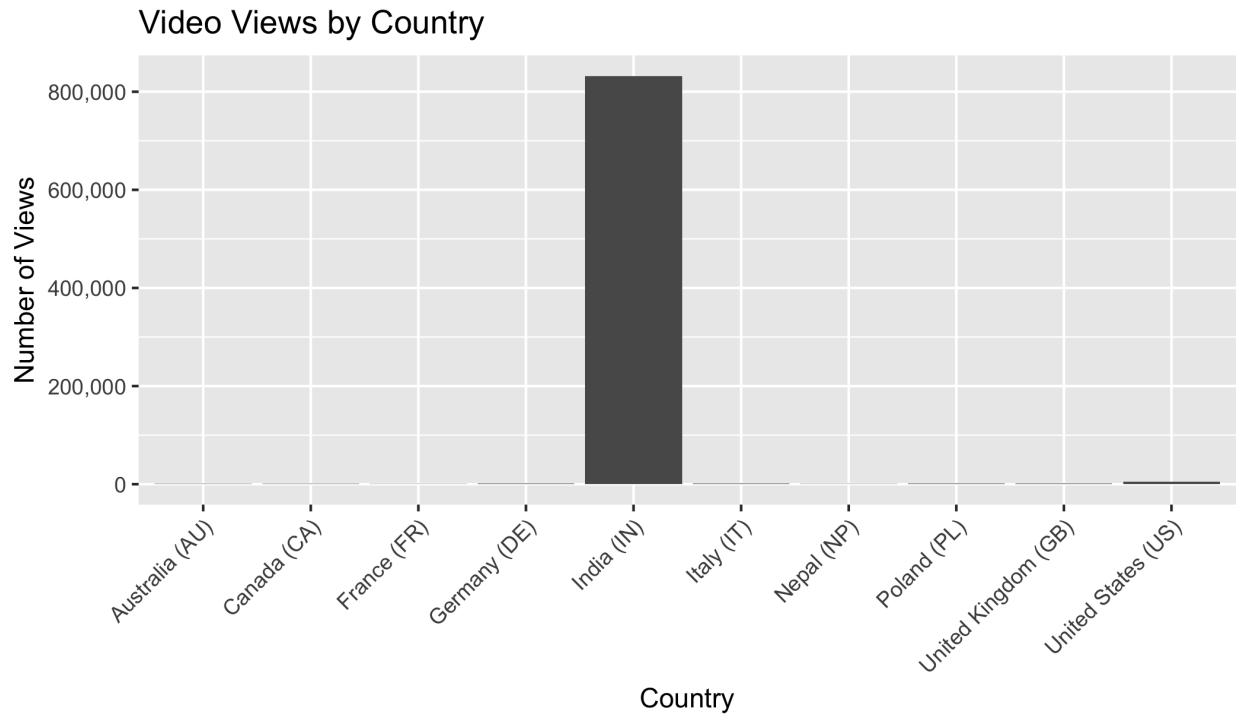


Table 1: Total number of video views by country.

Country	Views
Australia (AU)	697
Canada (CA)	787
France (FR)	460
Germany (DE)	1069
India (IN)	832397
Italy (IT)	901
Nepal (NP)	499
Poland (PL)	888
United Kingdom (GB)	962
United States (US)	4464

- 98.7% of video views were from India.
- 0.5% of video views were from the United States.

3.2 Video Views — paid vs. organic

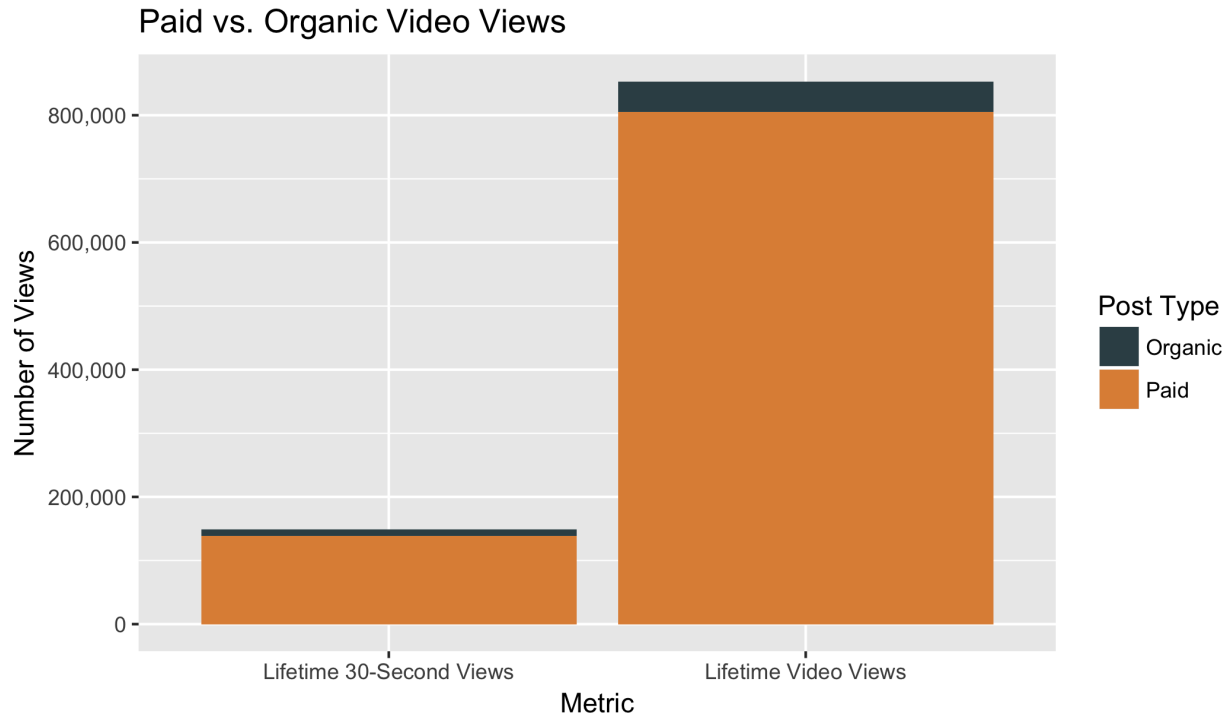


Table 2: Breakdown of paid vs. organic video views.

Metric	Views
Lifetime Post Paid Impressions	7445372
Lifetime Post Organic Impressions	191601
Lifetime Paid Video Views	804996
Lifetime Organic Video Views	47980
Lifetime Paid 30-Second Views	138712
Lifetime Organic 30-Second Views	10044
Lifetime Paid watches at 95%	32635
Lifetime Organic watches at 95%	3789

- Most video views were paid, indicating that video promotion effectively increased views.
- 97% of lifetime impressions were paid.
- 94% of lifetime video views were paid.
- 93% of lifetime 30-second video views were paid.
- 90% of lifetime watches of 95% of the video were paid.

3.3 Facebook Fans by City

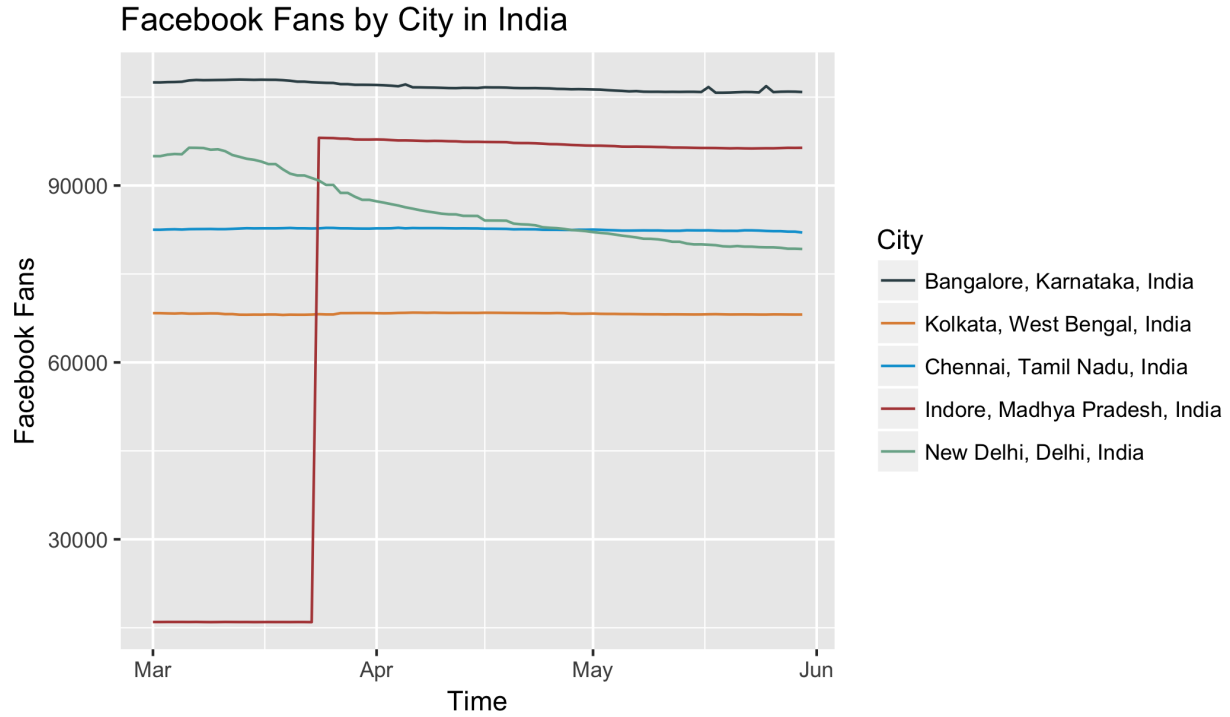
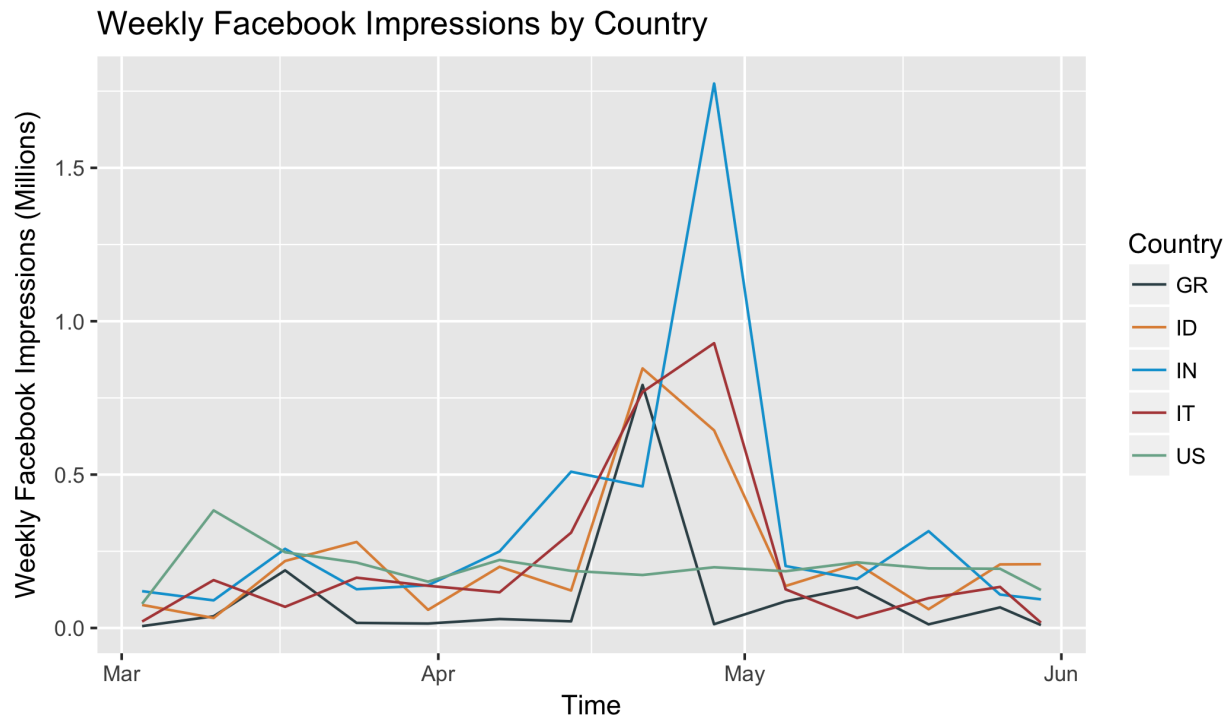


Table 3: Total number of Facebook fans by Indian city.

Date	Bangalore	Kolkata	Chennai	Indore	New Delhi
2018-03-01	107493	68361	82508	15978	94987
2018-03-08	107868	68296	82622	15970	96361
2018-03-15	107925	68108	82735	15961	94363
2018-03-22	107616	68085	82747	15971	91703
2018-03-29	107085	68374	82710	97814	88100
2018-04-05	107147	68412	82744	97653	86303
2018-04-12	106519	68400	82734	97496	85109
2018-04-19	106610	68394	82646	97356	84039
2018-04-26	106397	68378	82489	97008	82777
2018-05-03	106180	68228	82446	96724	81874
2018-05-10	105905	68166	82379	96528	80875
2018-05-17	106706	68167	82400	96370	79956
2018-05-24	105793	68118	82362	96305	79555

- Facebook fans in Indore, Madhya Pradesh increased over 500% between March 22nd and March 29th, 2018
- The number of Facebook fans in New Delhi decreased 16% over the campaign period.
- The number of Facebook fans in other Indian Cities remained the same.

3.4 Facebook Impressions by Country



- There was a spike in Facebook impressions from India in late April. Weekly impressions from India peaked at 750% of the pre-campaign level.
- The number of weekly Facebook impressions from India surpassed impressions from any of the other top 5 countries with the highest number of impressions.

Table 4: Weekly Facebook impressions by country (in millions) for the top 5 countries with the highest Facebook impressions.

Week start	Week end	GR	ID	IN	IT	US
2018-03-01	2018-03-03	0.01	0.08	0.12	0.02	0.08
2018-03-04	2018-03-10	0.04	0.03	0.09	0.16	0.38
2018-03-11	2018-03-17	0.19	0.22	0.26	0.07	0.25
2018-03-18	2018-03-24	0.02	0.28	0.13	0.16	0.21
2018-03-25	2018-03-31	0.01	0.06	0.14	0.14	0.15
2018-04-01	2018-04-07	0.03	0.20	0.25	0.12	0.22
2018-04-08	2018-04-14	0.02	0.12	0.51	0.31	0.19
2018-04-15	2018-04-21	0.79	0.85	0.46	0.77	0.17
2018-04-22	2018-04-28	0.01	0.64	1.77	0.93	0.20
2018-04-29	2018-05-05	0.09	0.14	0.20	0.13	0.19
2018-05-06	2018-05-12	0.13	0.21	0.16	0.03	0.21
2018-05-13	2018-05-19	0.01	0.06	0.32	0.10	0.19
2018-05-20	2018-05-26	0.07	0.21	0.11	0.13	0.19
2018-05-27	2018-05-30	0.01	0.21	0.09	0.02	0.12

4 YouTube

4.1 Views by Country

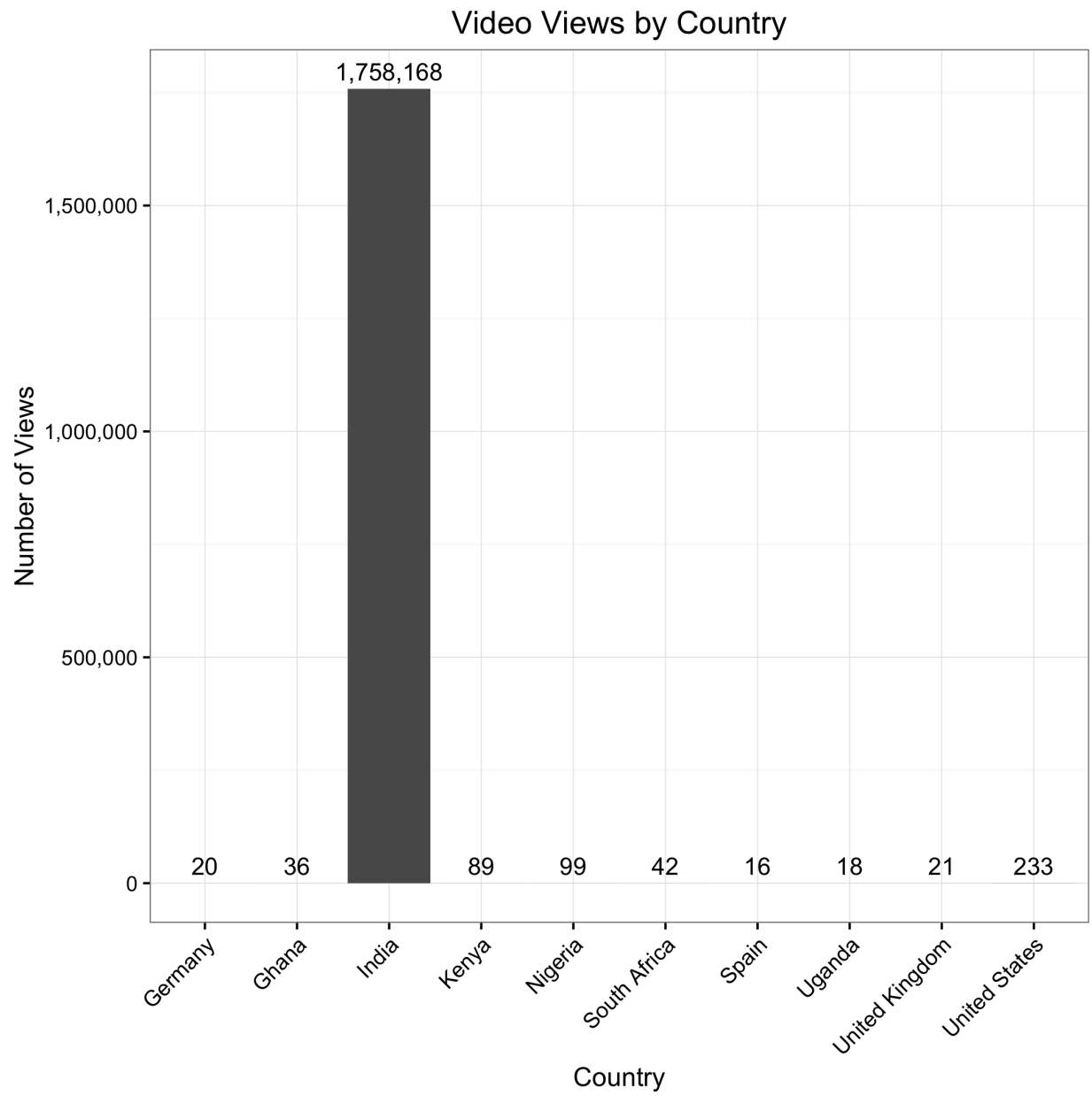
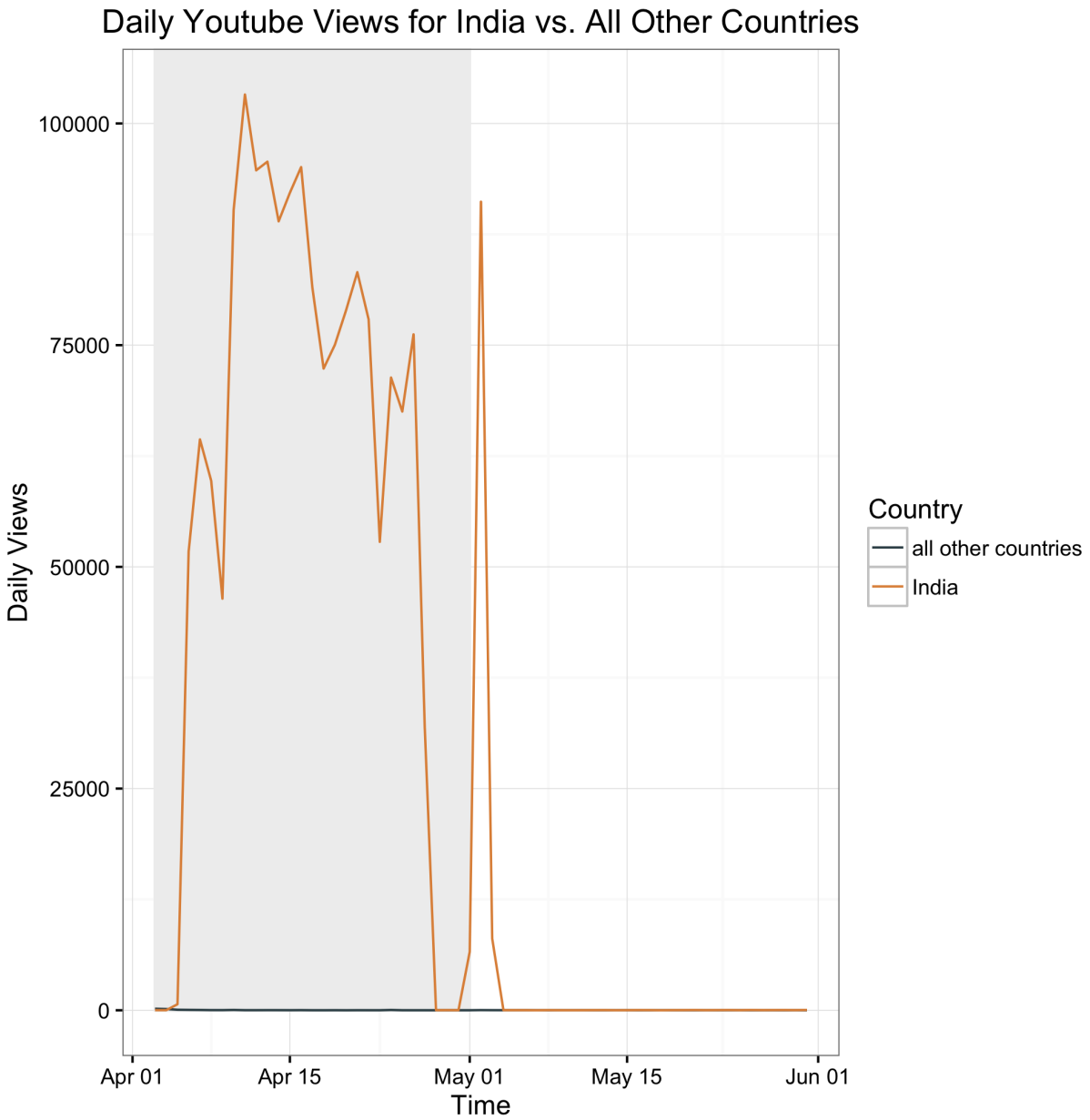


Table 5: Total number of video views by country.

Country	Views
India	1758168
United States	233
Nigeria	99
Kenya	89
South Africa	42
Ghana	36
United Kingdom	21
Germany	20
Uganda	18
Spain	16

- 99.9% of YouTube video views were from India.

4.2 Views over Time



- The volume of daily YouTube video views in India remained high throughout the campaign period and lasted into the first few days after. It was reduced to less than 20 views per day by the middle of the week after the campaign.
- For a three-day period (4/28 to 4/30), India YouTube video views were reduced to no more than baseline (less than 20).
- Daily YouTube video views in all countries other than India remained very low throughout the campaign and after.

Table 6: Weekly Youtube views for India vs. all other countries.

Week start	Week end	India	all other countries
2018-04-01	2018-04-07	176594	470
2018-04-08	2018-04-14	611519	121
2018-04-15	2018-04-21	564048	55
2018-04-22	2018-04-28	299705	70
2018-04-29	2018-05-05	105897	68
2018-05-06	2018-05-12	74	24
2018-05-13	2018-05-19	91	20
2018-05-20	2018-05-26	143	33
2018-05-27	2018-05-31	97	13

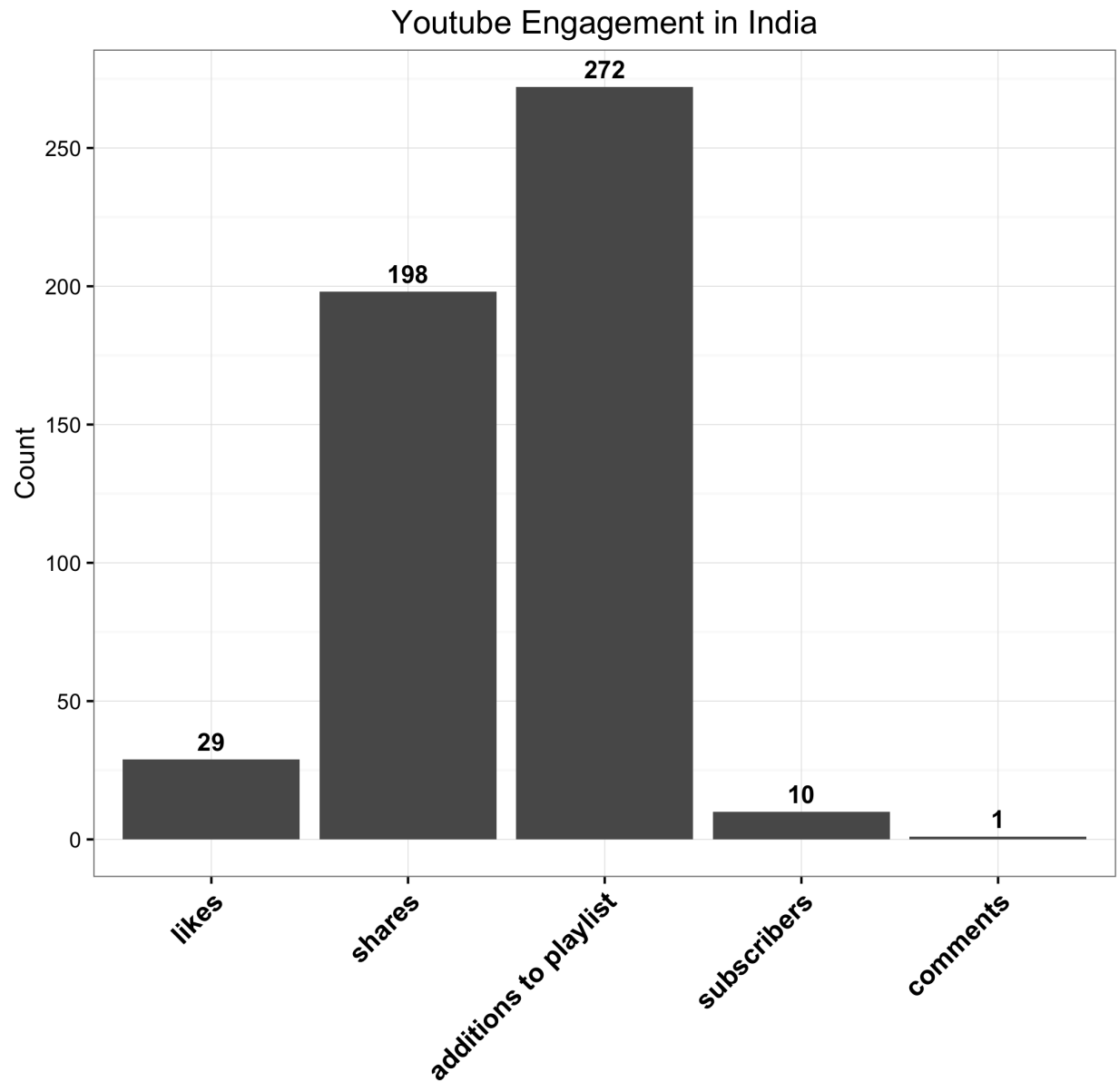
4.3 Video Views — paid vs. organic

Table 7: Breakdown of views and percent of video viewed by traffic source in India.

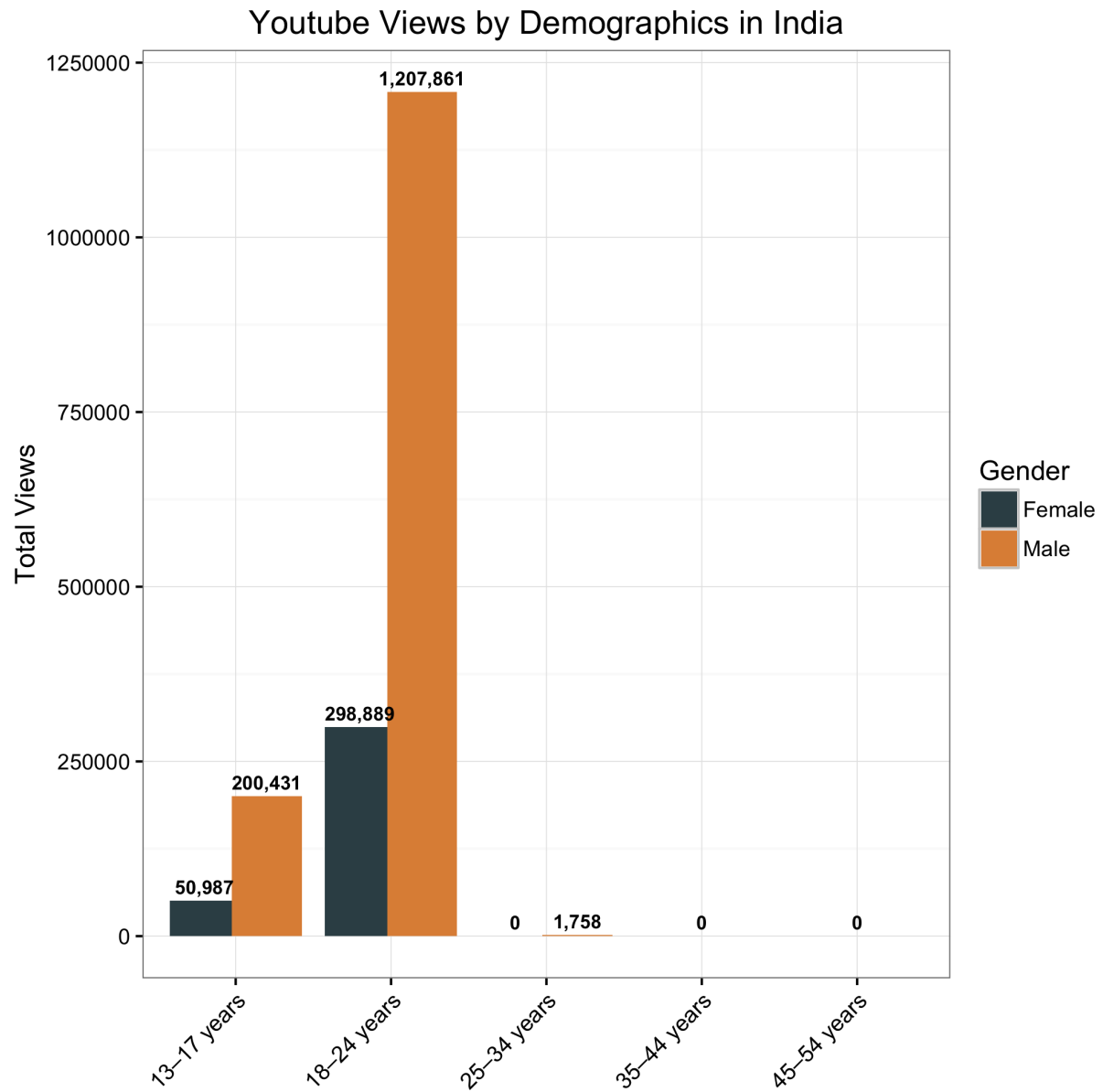
Source	Views	Avg. % Viewed
YouTube advertising	1757066	71
External	495	33
Suggested videos	154	26
YouTube search	117	43
Channel pages	113	23
Direct or unknown	85	34
Browse features	73	30
Other YouTube features	48	53
Notifications	8	52
Playlists	7	23
Playlist page	2	1

- 99.9% of India YouTube video views came from YouTube advertising. Other traffic sources were negligible.
- The average percent of the video viewed was much higher for traffic coming from YouTube advertising versus other sources.

4.4 Video Engagement in India

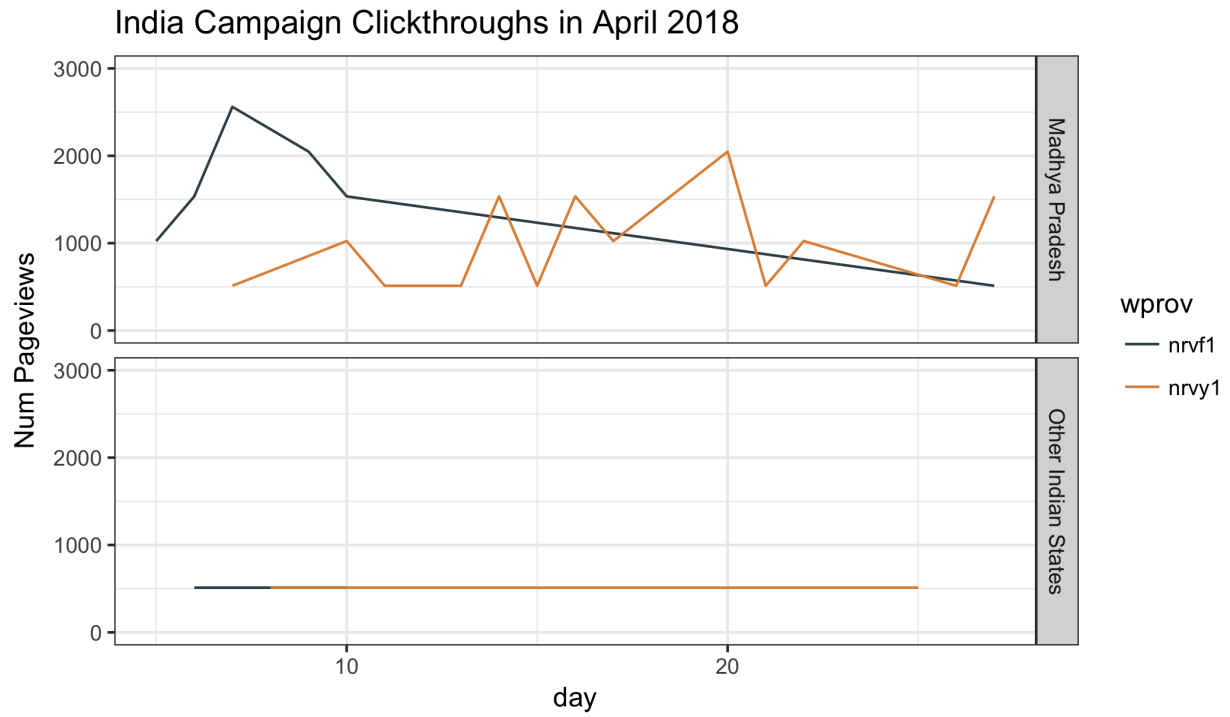


4.5 Viewer Demographics



- India YouTube video viewers were predominantly male (80.1%) and predominantly between 18 and 24 years old (86.3%).

5 Clickthroughs

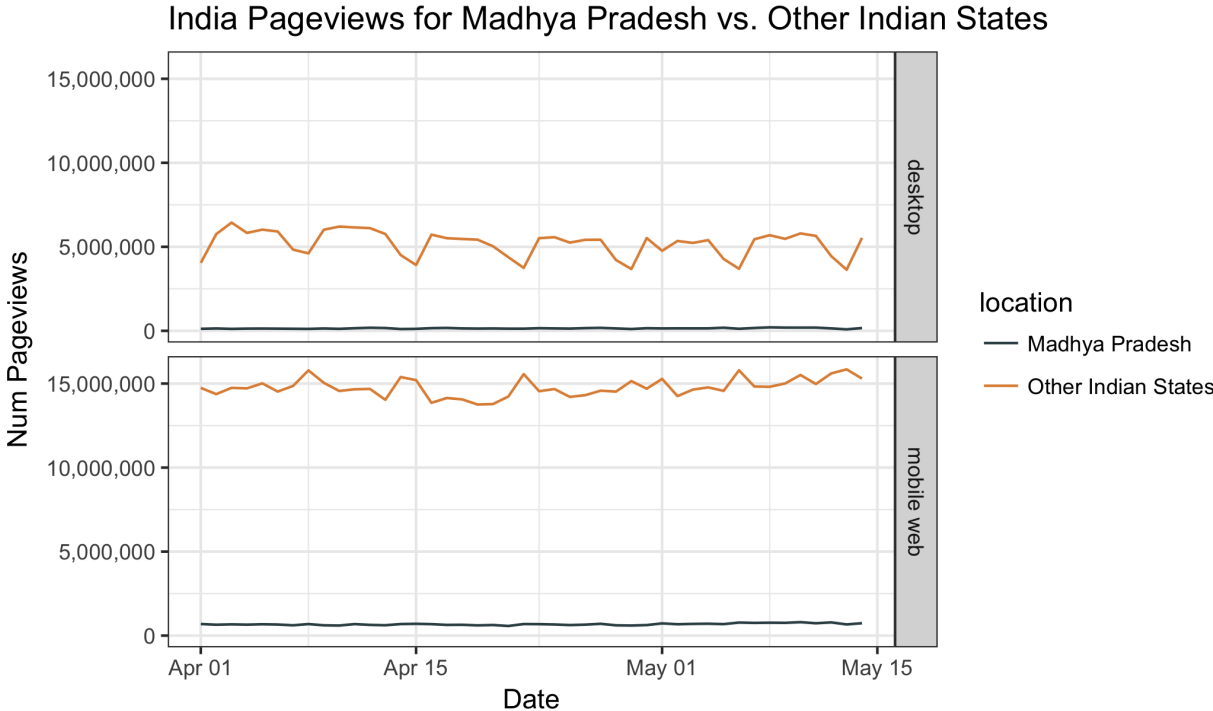


- There were approximately 9000 Facebook clickthroughs and 13000 YouTube clickthroughs from Madhya Pradesh.
- There were approximately 1000 Facebook clickthroughs and 1500 YouTube clickthroughs from other Indian states.

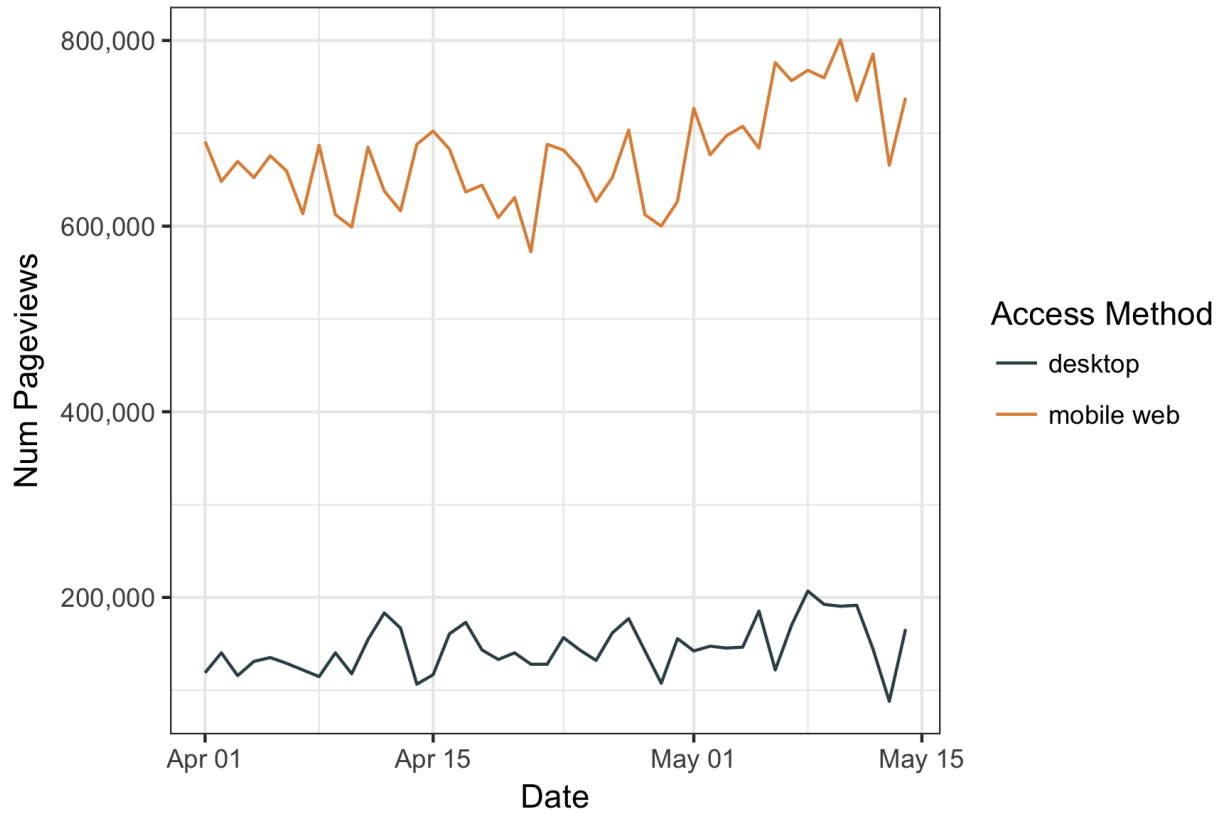
Table 8: India campaign clickthroughs by referer.

day	wprov	pv	location
5	nrvf1	1024	Madhya Pradesh
6	nrvf1	512	Other Indian States
6	nrvf1	1536	Madhya Pradesh
7	nrvy1	512	Madhya Pradesh
7	nrvf1	2560	Madhya Pradesh
8	nrvy1	512	Other Indian States
9	nrvf1	2048	Madhya Pradesh
10	nrvf1	512	Other Indian States
10	nrvf1	1536	Madhya Pradesh
10	nrvy1	1024	Madhya Pradesh
11	nrvy1	512	Madhya Pradesh
13	nrvy1	512	Other Indian States
13	nrvy1	512	Madhya Pradesh
14	nrvy1	1536	Madhya Pradesh
15	nrvy1	512	Madhya Pradesh
16	nrvy1	1536	Madhya Pradesh
17	nrvy1	1024	Madhya Pradesh
20	nrvy1	2048	Madhya Pradesh
21	nrvy1	512	Madhya Pradesh
22	nrvy1	1024	Madhya Pradesh
25	nrvy1	512	Other Indian States
26	nrvy1	512	Madhya Pradesh
27	nrvf1	512	Madhya Pradesh
27	nrvy1	1536	Madhya Pradesh
Total	nrvf1	9216	Madhya Pradesh
Total	nrvf1	1024	Other Indian States
Total	nrvy1	12800	Madhya Pradesh
Total	nrvy1	1536	Other Indian States

6 Pageviews



India Pageviews for Madhya Pradesh by Access Method

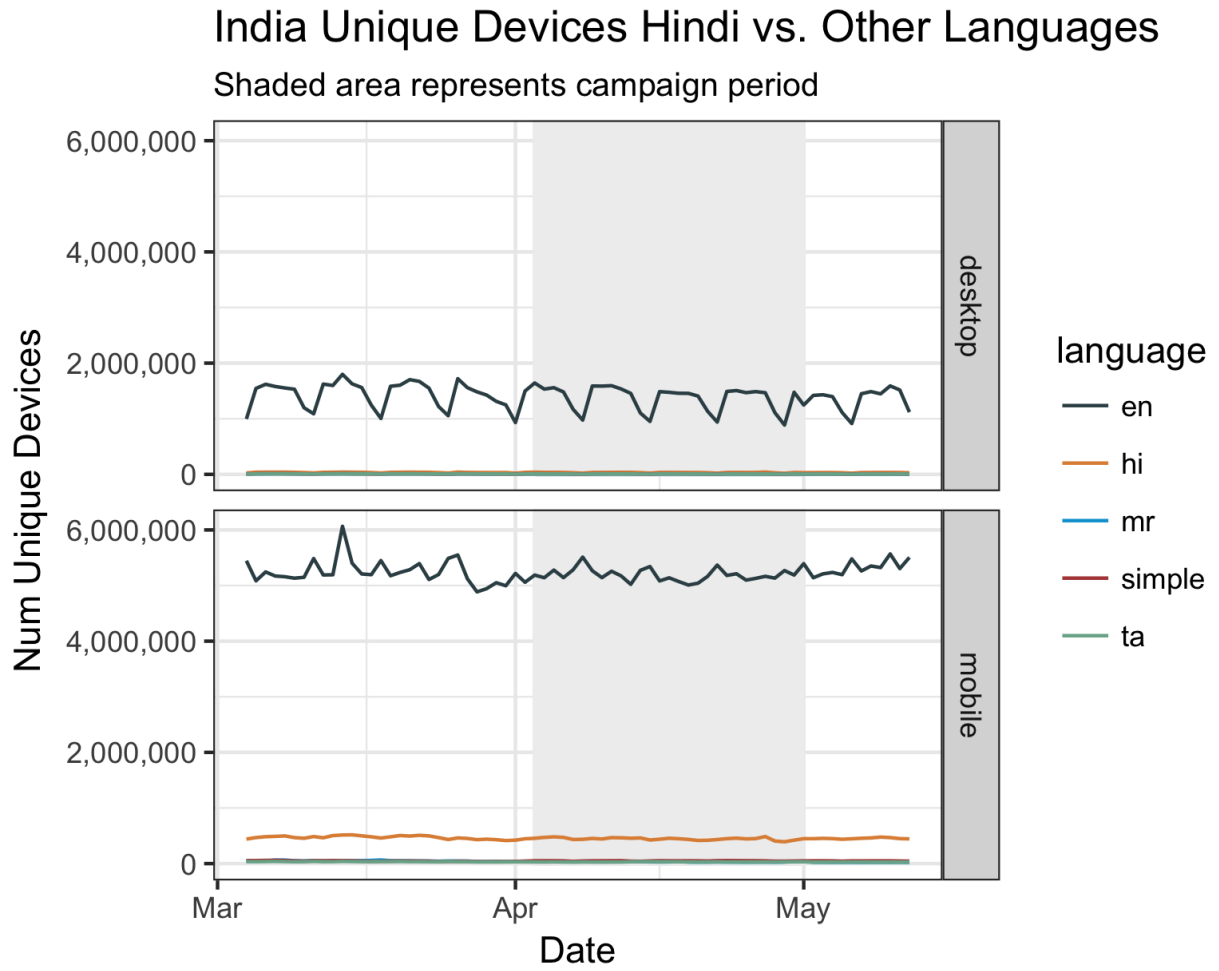


- There was no discernible change in total Wikipedia pageviews from Madhya Pradesh or other Indian States during the campaign period.
- There was a small increase in mobile pageviews in Madhya Pradesh, but this was after the campaign period. There was a 14% increase in pageviews the week of May 6th compared to the previous week.

Table 9: Pageviews for India broken down by access method and location.

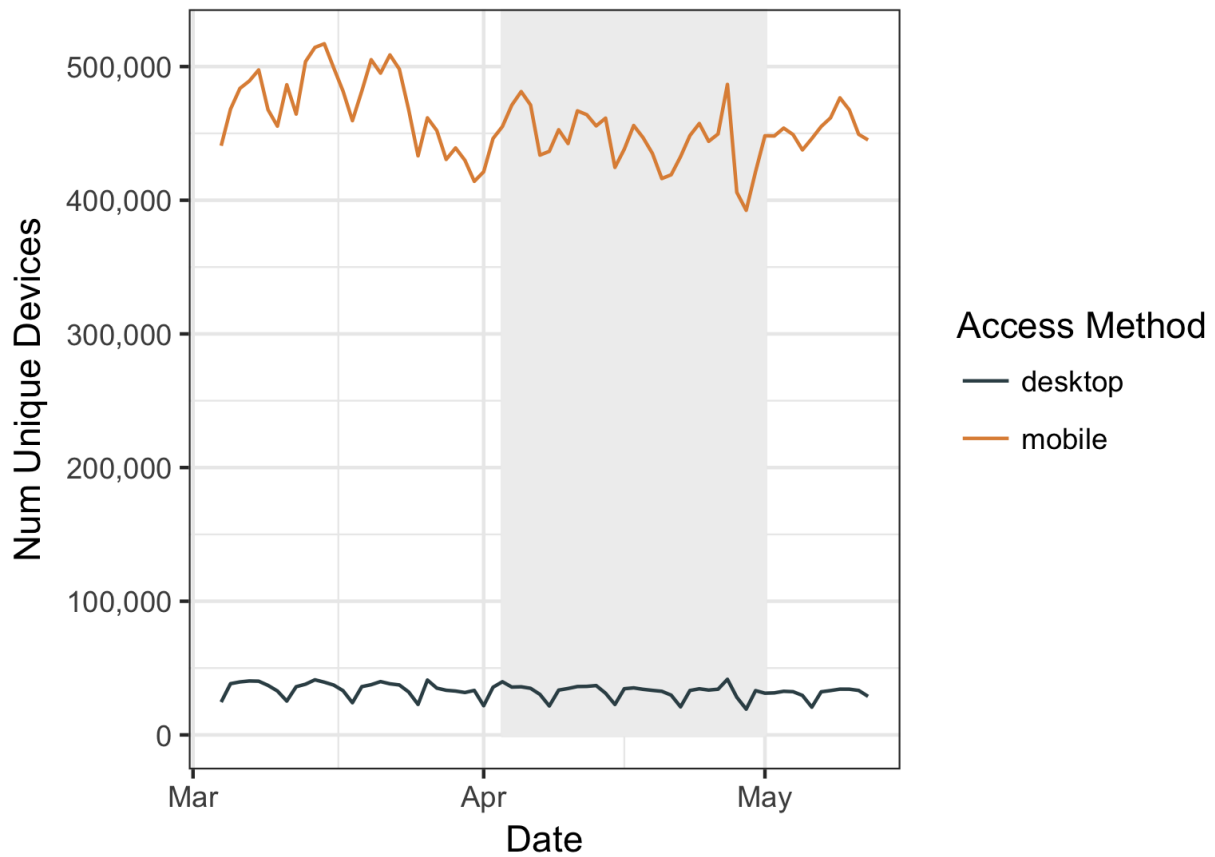
week_of	access_method	location	pageviews
2018-04-01	desktop	Other Indian States	38831104
2018-04-01	desktop	Madhya Pradesh	891904
2018-04-01	mobile web	Other Indian States	102971392
2018-04-01	mobile web	Madhya Pradesh	4610048
2018-04-08	mobile web	Other Indian States	104155136
2018-04-08	mobile web	Madhya Pradesh	4526080
2018-04-08	desktop	Other Indian States	39365632
2018-04-08	desktop	Madhya Pradesh	984064
2018-04-15	mobile web	Other Indian States	99021824
2018-04-15	mobile web	Madhya Pradesh	4478976
2018-04-15	desktop	Other Indian States	35461120
2018-04-15	desktop	Madhya Pradesh	995328
2018-04-22	desktop	Other Indian States	35133440
2018-04-22	desktop	Madhya Pradesh	1041408
2018-04-22	mobile web	Other Indian States	102400000
2018-04-22	mobile web	Madhya Pradesh	4627456
2018-04-29	mobile web	Other Indian States	103358464
2018-04-29	mobile web	Madhya Pradesh	4719616
2018-04-29	desktop	Other Indian States	34212864
2018-04-29	desktop	Madhya Pradesh	1030144
2018-05-06	desktop	Other Indian States	36199424
2018-05-06	desktop	Madhya Pradesh	1217536
2018-05-06	mobile web	Other Indian States	106519552
2018-05-06	mobile web	Madhya Pradesh	5382144

7 Unique devices



India Unique Devices – Hindi Only

Shaded area represents campaign period



- The average number of daily unique devices was 8% lower in April compared to March for mobile Wikipedia in Hindi and 6% lower for desktop. However, average unique devices for English, Tamil, and Marathi were lower in April compared to March, as well, so this pattern is not specific to Hindi.
- There were no changes in unique devices that could clearly be attributed to the campaign.

Table 10: Average number of unique devices per week for India broken down by access method and language.

week_of	access_method	en	hi	mr	simple	ta
2018-03-04	desktop	1431851	36135	8586	11321	9466
2018-03-04	mobile	5198047	471767	52725	53099	36052
2018-03-11	desktop	1505909	35766	8785	10736	9489
2018-03-11	mobile	5391323	495241	52770	49563	36668
2018-03-18	desktop	1476717	35050	7696	9846	8884
2018-03-18	mobile	5263922	487989	50486	43910	35413
2018-03-25	desktop	1400581	32863	6587	8985	8546
2018-03-25	mobile	5148018	437239	41591	38526	32641
2018-04-01	desktop	1402183	33460	5387	10368	7924
2018-04-01	mobile	5186928	454301	35775	46495	29562
2018-04-08	desktop	1405553	32921	5617	10595	7696
2018-04-08	mobile	5234916	454227	35680	47925	29723
2018-04-15	desktop	1338559	31752	5406	10394	8030
2018-04-15	mobile	5121624	433686	30165	49557	32049
2018-04-22	desktop	1353055	32314	4807	10624	7350
2018-04-22	mobile	5183868	446369	26817	51112	29945
2018-04-29	desktop	1281267	29934	4383	9548	6704
2018-04-29	mobile	5233284	435837	29510	47443	29625
2018-05-06	desktop	1360554	30956	4100	9820	6985
2018-05-06	mobile	5399109	457356	23800	48088	28164

8 Queries

8.1 Facebook

Wikipedia/insights/?metric=page_impressions_by_country_unique&period=day&since=2018-02-28&until=2018-05-31

Wikipedia/insights/?metric=page_fans_by_city&period=day&since=2018-02-28&until=2018-05-31

8.2 Clickthroughs

```
SELECT day, x_analytics_map['wprov'] as wprov, geocoded_data['subdivision']='Madhya Pradesh'
as MP_flag, COUNT(*) as pageviews FROM wmf.webrequest TABLESAMPLE(BUCKET 1 OUT OF 512 ON hostname,
sequence) WHERE agent_type = 'user' AND is_pageview = TRUE AND x_analytics_map['wprov'] LIKE
'nrv%' AND geocoded_data['country_code'] = 'IN' AND year = 2018 AND month = GROUP BY day, x_
analytics_map['wprov'], geocoded_data['subdivision']='Madhya Pradesh';
```

8.3 Pageviews

```
SELECT month, day, access_method, geocoded_data['subdivision']='Madhya Pradesh' as MP_flag,
COUNT(*) as pageviews FROM wmf.webrequest TABLESAMPLE(BUCKET 1 OUT OF 1024 ON hostname, sequence)
WHERE agent_type = 'user' AND is_pageview = TRUE AND geocoded_data['country_code'] = 'IN' AND
year = 2018 AND month = 4 AND pageview_info['project'] like '%.wikipedia' AND geocoded_data['country_
code']='IN' GROUP BY month, day, access_method, geocoded_data['subdivision']='Madhya Pradesh';
```

8.4 Unique Devices

```
SELECT month, day, domain, uniques_estimate FROM wmf.unique_devices_per_domain_daily WHERE
country_code = 'IN' AND domain like '%.wikipedia.org' AND year = 2018 AND month BETWEEN 3
AND 5;
```