Demystifying Political Advertising: A Comprehensive Guide to Accessing and Analyzing Meta and Google Ad Data through APIs

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Transparency in politics also means transparency in the expenditures of political figures. In her text (in Polish), Roksana Maślankiewicz described how to understand the costs of advertisements using the Google Ads Transparency Report and the Meta Ad Library. Let's go further – we want to gather all the data to be able to work with it on a massscale.

Does collecting data on multiple accounts and their quantitative assessment have to be tedious and time-consuming? Or is there a way to achieve this goal without heavy labor? Yes!

Use the API!

Before we get to the main part of the post, a few explanations. Phrases like "application programming interface," "developer," and "script" will appear here several times. Don't be afraid of them! You don't have to be a programmer to understand the expenses of politicians. I'll show you a relatively simple way to access the data you're interested in. I must be honest though – patience and openness to work with an intelligent machine will be required.

Let's start from the beginning: how to extract mass data about ads? Through the API. What is an API? It's a special way of communicating with a service: "lighter" and more understandable for machines (unfortunately, at the expense of understanding for humans). You might not have noticed, but most popular internet services operate based on APIs, allowing the separation of data handling and the logic of the service itself (back-end) from the visual layer (front-end). This has serious advantages – on the one hand, it's easier for specialized developers to focus on what they know best, and on the other hand, it enables relatively fast service development and the reduction of costly server resources. What's most important for us – working with an

API allows receiving data in an instant, and major service providers want you to use it whenever you access less popular functionalities — after all, most Facebook users aren't even aware of the existence of the Ad Library.

In the following part of the text, I will guide you step by step through the process that will allow you to gather data on political ads in Meta (Facebook) and Google. I will also show you what information you can extract from them using the example of the past election and referendum campaign.

Meta Verification

Before accessing Meta/Facebook data, verification is necessary. It is done only once, and then you only need to make sure your profile hasn't expired. Three components are required: verification for placing political ads, a developer account, and added applications (in this context, a fictional creation).

The following steps are described here.

Step 1: Confirming your identity and location

Go to Facebook.com/id and go through the confirmation process required for placing ads on social, electoral, or political topics. Confirming the submitted information may take a few days.

Note: Facebook will ask you for quite sensitive data (like a photo of your identity document) and will change the account settings, enforcing stronger protection. If you use Facebook every day, it's worth doing both things for your own security! Then you need to wait for about 2 days, and when you receive the appropriate notification, proceed to the next step.

Step 2: Creating a Meta for Developers account

Go to the Meta for Developers page and select the Get Started option. When creating an account, you need to accept the platform's terms of use.

Again, you will need to provide additional data and confirm possession of a phone number with the received SMS code.

Step 3: Adding a new application

Once you have an account, go back to https://developers.facebook.com/. Create a new application by selecting My Apps > Create App.

Next, choose Other, name it, leave the other fields unchanged, and confirm with the Create App button.

Ignore any subsequent forms that appear, as it's finally time to work with the data!

Test the accesses: go to the Graph API Explorer, and you should have a screen similar to the one below. If there is no application in the "Meta App" field, choose the one you created earlier from the list. If there is no data in the "Access Token" field, click the blue "Generate Access Token" button (be sure to choose User Token) – a new window may appear, requiring confirmation of access and re-login. Done? Click "Submit," and your data should appear in the field below. Success – we can move on to the next step.

Retrieve Data

Finally, we have the coveted access to the application programming interface. The only thing limiting you now is your imagination (or knowledge of what to ask for).

In the Graph API Explorer, in the top field, paste:

```
ads_archive?ad_reached_countries=%5B’PL’%5D&search_terms=referendum&fields=page
_id%2Cad_snapshot_url%2Cpage_name%2Cbylines%2Cad_creation_time%2Cad_delivery_st
art_time%2Cad_delivery_stop_time%2Cad_creative_bodies%2Cad_creative_link_titles
%2Cad_creative_link_captions%2Cad_creative_link_descriptions%2Cimpressions%2Csp
end%2Ccurrency%2Cdemographic_distribution%2Cdelivery_by_region%2Cpublisher_plat
forms%2Clanguages%2Cbeneficiary_payers%2Ctarget_ages%2Ctarget_gender%2Ctarget_l
ocations%2Cage_country_gender_reach_breakdown%2Ceu_total_reach
```

Click "Send (Submit)." Boom! We have the latest ads on Facebook that contain the word "referendum." Time for fun – change the word "referendum" to any other (or two apostrophes '', if you're not looking for specific words in the ad).

You can also search for ads from specific advertisers:

```
ads_archive?ad_reached_countries=%5B’PL’%5D&search_page_ids=126985130505102&fie
lds=page_id%2Cad_snapshot_url%2Cpage_name%2Cbylines%2Cad_creation_time%2Cad_del
ivery_start_time%2Cad_delivery_stop_time%2Cad_creative_bodies%2Cad_creative_lin
k_titles%2Cad_creative_link_captions%2Cad_creative_link_descriptions%2Cimpressi
ons%2Cspend%2Ccurrency%2Cdemographic_distribution%2Cdelivery_by_region%2Cpublis
her_platforms%2Clanguages%2Cbeneficiary_payers%2Ctarget_ages%2Ctarget_gender%2C
target_locations%2Cage_country_gender_reach_breakdown%2Ceu_total_reach
```

You can find the page ID by going to the profile, selecting "About," and "Page Transparency."

Documentation showing all search parameters and available response fields can be found here – just replace them appropriately in the above queries.

It would be even more interesting if you could efficiently find truly all ads (there is a default limit to the latest results). How to do it? Here, programming skills will come in handy, so I'm here to help. Here's a simple (and unreliable) PowerShell script (which I provide under the MIT license):

```
$token = "insert token here"

$baseUrl = "https://graph.facebook.com/v18.0/ads_archive"

$date = "2023-08-09"

$countries = "[’PL’]"

$searchPageIds = "126985130505102"

$initiate = $true

$escape = $false

$alldata = @()

$url = "$baseUrl" +
"?ad_delivery_date_mi=$date&ad_reached_countries=$countries&search_page_ids=$se
archPageIds&fields=page_id%2Cad_snapshot_url%2Cpage_name%2Cbylines%2Cad_creatio
n_time%2Cad_delivery_start_time%2Cad_delivery_stop_time%2Cad_creative_bodies%2C
ad_creative_link_titles%2Cad_creative_link_captions%2Cad_creative_link_descript
ions%2Cimpressions%2Cspend%2Ccurrency%2Cdemographic_distribution%2Cdelivery_by_
region%2Cpublisher_platforms%2Clanguages%2Cbeneficiary_payers%2Ctarget_ages%2Ct
arget_gender%2Ctarget_locations%2Cage_country_gender_reach_breakdown%2Ceu_total
_reach&access_token=$token"

do {

 $results = Invoke-WebRequest -Method GET $url -ErrorAction Ignore

 $content = $results.Content

 if ($content -ne $null) {

 $data = ($content | ConvertFrom-Json).data
 $next = ($content | ConvertFrom-Json).paging.next -as [string]

 if ($data -ne $null) {

 if ($initiate) {

 $alldata = $data

 $initiate = $false

 } else {

 $alldata += $data

 }

 }

 if ($url -eq $next -or $next -eq "") {

 $escape = $true

 } else {

 $url = $next

 }

 } else {

 Write-Host "No data received from the URL: $url"

 $escape = $true

 }

} until ($escape)

$alldata | ConvertTo-Json | Out-File -FilePath ./facebook_data.json
```

Short instructions on how to use it (on Windows):

Open the Start Menu and type PowerShell ISE.
In the newly opened window, paste the above script into the white field.
Change the start date (it's good practice not to search for all data, as you can use up the entire query limit and not receive full results), specify the list of interesting pages

(separated by %2C – the equivalent of a comma, e.g., 703930466334460%2C611173789051754).
You still need a token – get it from the Graph API Explorer page and insert it in the appropriate place in the script (just remember to replace it the next time you run it, as it expires).
Press F5 (or the small triangle in the menu) and wait for the script to finish.

The data is in the facebook_data.json file – in a special data format that includes their hierarchy. If you just want to see the table, type the following in the blue field in the PowerShell ISE window: $alldata | ft page_name,id,ad_creation_time (you can list other fields after the comma).

Google Verification

If you've gone through the previous process, you'll surely be pleased: it's much faster and simpler with Google.

Step 1: Creating a developer account

Visit https://developers.google.com/ and click "Get Started" next to the avatar (or initials).

Step 2: Creating a BigQuery project

Visit https://console.cloud.google.com/bigquery and choose "New Project," then follow the on-screen instructions.

Once you've done that, you can start working with the data immediately. In the gray field, select the plus sign and paste the following query into the white area:

```
SELECT

 *

FROM

 `bigquery-public-data.google_political_ads.creative_stats` AS CS

WHERE

 REGEXP_CONTAINS(CS.regions,

 r”PL”)
 OR REGEXP_CONTAINS(CS.geo_targeting_included,

 r”Poland”)
```

Click "Run," and after a few seconds, results similar to the ones below should appear.

You have just received all ads and all associated attributes!

Perhaps grouped reports for all advertisers are sufficient? You can also achieve this:

```
SELECT

 *

FROM

 `bigquery-public-data.google_political_ads.advertiser_stats` as AR

WHERE

 REGEXP_CONTAINS(AR.regions,

 r”PL”)
```

More information about available data from the Google Ads Transparency Report can be found in this article.

What's next?

Going through all these steps could have been cumbersome, and in the end, we are left with a long list of ads and accounts that need to be manually reviewed to assess if they are truly political and to which party they should be attributed. You don't have to do this Sisyphean task – I've gathered all the available data and, together with the Responsible Politics Foundation and WhoTargets.Me, prepared a series of visualizations that can help you understand who, what, and for how much.

Expenses from the beginning of the campaign for Facebook: Link to Trends

By clicking on the profile name, you'll get a list of all the ads that the Facebook page distributed.

Data that also includes Google – the last 30 days of the campaign inclusive can be found on the page: Link to Poland 2023

In which electorate did the parties invest?: Link to Targeting

However, it's important to remember that API data is not 100% complete. I have often seen political ads that were not labeled as such by politicians (a necessary condition for them to be accessible via the API) or that disappeared from reports. I encountered this situation more often with Google ads.

Verification for X (Twitter)?

You're probably wondering why there isn't a description here for X (formerly Twitter). Well, the way the platform owned by Elon Musk shares data leaves much to be desired, and I haven't been able to get data either "manually" or through the API. The only way that has worked so far is... filling out a form and waiting for an email.

Advertisers and ad platforms interpret the requirement of the Electoral Code to disclose the sponsor of an advertisement in different ways. Fortunately, the European Union is working on standardizing the online political advertising market, and the work on new regulations is already having a positive impact on changes in services.