

# TV Attribution Analysis

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Instructions to run the R script: 20160601\_TVATTRIBUTION.R

## 1. General Information

The purpose of this script is to calculate the TV attribution of a given TV campaign. It contains several comments and instructions.

- Duration: The script can take hours. For example, for a Campaign with 2846 spots, it takes 2 hours and 20 minutes (1 hour and 20 minutes to attribute each spot, 1 hour to generate all the graphs).

## 2. Instructions

1. Create the file with the information from the spots. It should be a csv file and follow the same structure of the template (see Figure 1).
  - The GRPmen column is not used, it can be all 0.
  - If the names of the stations contain any special character, remove it.
  - Broadcastingdate values should follow this format: dd/mm/yy
  - Exacspotbroadcasting time values should follow this format: hh:mm:ss.
  - Contacts and NetCost should not have any point nor space.
2. Fill the asked variables: game, country, campaign\_start, ... The R script Campaigns.R contains the variables used for all the countries and dates already analysed.
  - For the benchmark data I usually select the two months before the campaign. However, check in backoffice if is a good period to be the benchmark. If not, select a smallest period or a previous one.
  - Achtung! Once, I found an error while downloading the data (in the section DOWNLOAD SPOTS DATA): the format of the obtained date should be day + hour. However, depending on the campaign\_start and campaign\_end dates, few times the data returned only contains day. Be aware of it, and if happens, download the data in smaller intervals of times.
3. Execute the script.
  - Compute the attribution analysis: START (libraries and dependencies), DOWNLOAD SPOTS DATA (download data from redshift), DOWNLOAD BENCHMARK DATA (download data from redshift), BENCHMARK FUNCTION, LOAD SPOTS DETAIL, ATTRIBUTION ANALYSIS.
  - The remaining sections compute the graphs and figures.
4. Et voilà! All the plots and figures are available in your folder. In google slides there are all the campaigns that have been already analysed and also one template slides with the whole structure of the analysis.
5. It is advisable to save the R Global Environment just in case it is needed in the future.

Channel	Broadcasting	Exactspotbr	GRPmen	ContactsMer	NetCost
BS1	21/02/15	06:56:00	0,0111	6559	25,99
BS1	21/02/15	08:26:00	0,02477	14638	39,55
BS1	21/02/15	11:56:00	0,01542	9114	45,2
BS1	21/02/15	12:25:00	0,02149	12699	56,5
BS1	21/02/15	14:48:00	0,10528	62212	187,58
BS1	21/02/15	16:44:00	0,1085	64116	204,53
BS1	21/02/15	23:01:00	0,14406	85130	362,73
BS1	21/02/15	23:58:00	0,06448	38106	120,91
BS1	22/02/15	00:45:00	0,0607	35870	122,04
BS1	22/02/15	07:27:00	0,01595	9427	29,38
BS1	22/02/15	09:32:00	0,02951	17437	90,4
BS1	22/02/15	11:57:00	0,01722	10174	44,07
BS1	22/02/15	13:05:00	0,02496	14750	65,54
BS1	22/02/15	19:33:00	0,13822	81679	337,87
BS1	22/02/15	23:13:00	0,10367	61259	210,18
BS1	23/02/15	00:55:00	0,06103	36066	151,42

Figure 1: Template of the datetime.csv file