

ADVERTISEMENT DATA-SET

ANALYSIS OF DASHBOARD DESIGN

By: EDUARDO CORT PONS May 31, 2019 This dashboard has two different receivers. The first one is the Digital Officer (CDO). The CDO has to use this information to define and design the company's digital strategy for the different products and, later on, to review that digital marketing actions achieve good results and that they generate value. Once the digital strategy is defined, the Digital Marketing Officer (who is the other receiver) will get the strategy started. The Digital Marketing Officer will also report the main KPIs from the Marketing department to the Digital Officer, and for doing so he or she will use the dashboard, which will show the updated information (as the strategy progresses).

The decision-making goal of our dashboard is to analyze the different reasons why a post of a specific product can have a better efficiency, to choose the best possible strategy for a specific product. That strategy of a specific product will be related to the place in which the post of a product is done, the tag ('Like') that is put in the post by the social media platform, the month of the year in which the post is publish on a specific platform and the target range age.

Before continuing, we need to clarify the most important metric of our analysis: "efficiency". Efficiency is the number of hits (clicks on the post) per prints (number of times each post is published by a respective platform), and we multiply that number by 100 to show the measure as a percentage. The efficiency is the cornerstone around which the CDO will plan the digital strategy. The dashboard will show KPIs of the efficiency of the different products so that the Digital Marketing department can use them to evaluate if the strategy is going as expected.

The analysis has been done at county level, but to understand our dashboard the only information that a user needs is to know our definition of efficiency and understand what is a hit, a print, a post and the different social media platform .

In this advertisement data we have different information with which, based on our own experience with social media and not on the analysis of the data-set, we could infer relationships or the existence of patters that, in reality, does not exist. These worthless relationships are:

- -The number of posts is almost the same in all platforms for all different age ranges. We can see this in "Sheet 0". In other words, young people has the same posts as older people (however, the efficiency change (we will review this later on)).
- -The number of male and female presence in the different platforms is the same. We do not have more male than female, or vice versa, in any platform; so we cannot say that one platform is more focus on woman and another on man. We can see this in "Sheet 1". Also, if we compare the efficiency based on male and female in the different platforms, it is almost the same ("Sheet 2")
- -As we can deduce from the information of Sheet 0 and Sheet 1: the number of posts in all the different platforms is almost the same. We can see this in "Sheet 3"
- -All products are publish in the same amount in all platforms. We can see this in "Sheet 4".
- -All products have (almost) the same efficiency in all platforms. We can see this in "Sheet 5"
- -At the same time, there is no product with a clearly better efficiency inside once specific city. We can see this in "Sheet 6".

-During the whole year, all platforms has the same efficiency. We can see this in "Sheet 7". However (as we will review later on), the efficiency changes depending on the city/area.

So then which patters can we found in the database that are valuable? From now on, we will analyze the content and metrics of our dashboard:

- -With a map of Spain we can differentiate the different efficiencies (and number of posts) of the different cities that exists in the data-set. We can easily see the cities with greater efficiency checking the size of the circle of the city: the bigger the circle, the higher the efficiency is in that city. Also, we can see the total number of posts of that city if we click in its circle. This information is in the sheet named "Spain based on efficiency & N° of Posts"
- -Another important information that we can get from a sheet is "which are the likes that receive the best efficiency?". We can see this in "Likes' efficiency" sheet. To color the bar-charts help us to see the best and worst likes (in terms of efficiency) at a glance
- -Once we know the overall information likes' efficiency, another important information is "which likes are the best ones for a specific product?". We have reflect this information in "Efficiency of a product based on its Like tag" sheet.

We have seen that all products have almost the same efficiency in all platforms, so it seems that it does not matter the platform that is being choose for a product; however, as the like of a product is assigned by the platform and the like affects to the efficiency of a product, we can post a product in the platform that tags it with its best possible like to optimize the efficiency

- -As I commented before, during the whole (2017) year, the efficiency changes depending on the Spain's area. The different areas are: Centre (Madrid, Valladolid and Toledo), Coast (Barcelona, Tarragona and Valencia), North (Bilbao, La Coruña and Gijon) and South (Sevilla, Cadiz and Malaga). We have translate this information in "Efficiency based on month & Spain's area" sheet. We can use this information to know in which city it would be better to work.
- -I have also commented that all age ranges have almost the same number of posts in all the different platforms; however, the efficiency changes depending the age range. In other words, although having the same number of posts, depending on the age range we can have a better or a worse efficiency in the different platforms. This information is in "Efficiency based on Age Range & Platform (having almost equal N° of Posts)" sheet. We can use this information to focus on the best possible age range.

Finally, in our dashboard we have add two more features:

- -Our definition of "Efficiency", to clarify what is "efficiency" in all the different sheets that we have used.
- -A list to filter the products that we want to review in "Efficiency of a product based on its Like tag" sheet.