# Impact of Message's Length over Likes, Comments and Shares

The Mexican Universities Case

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*Abstract*—In a society inundated by information, the ability of capturing other's attention is a valuable resource. Social media, particularly Facebook, are important spaces to exchange information between organizations and their followers. Universities have been leaders in the social media usage for this goal. Thus, the objective of this research was to explore the impact that text message length could have relating the amount of likes, comments and shares that a post receive. A quantitative analysis was made with 31,590 posts from 28 universities and 1,270,621 likes, 80,620 comments and 252,399 shares generated. Research results allow concluding that the most successful messages are short and that the message length can increase if supported by another media.

Keywords-Facebook fan pages publications; attention economy; message's length.

## I. INTRODUCTION

We live in a society drowned in information. We are exposed to an incredible amount of information that bombs our brain through our senses. Economist Herber Simon points out that the richness of information creates poorness of attention [1], and this is due to the fact that persons have a limited capacity, because of their sensorial organs, to process signals and only those sufficiently intense are finally perceived [2]. This situation has become more evident nowadays because millions of persons use the Web to share their needs, discoveries and personal interests, phenomenon known as crowdsourcing [3], while at the same time content suppliers fiercely compete for the persons' attention with the goal of orienting attention towards their web sites and sell products and services [2].

Attention is a limited resource that we should administrate the best way possible. This applies to those professors in their classrooms, enterprises in their marketing strategies and any other who wants to capture others attention. Every day different information suppliers (parents, professors, enterprises, governments and so on) have a battle to capture the attention of their receptors. A message must include the necessary elements that enable capturing the attention before others. One of those key ingredients is without doubt the ability of perceiving the meaning of the message with the least effort and in the shortest possible time. So much information is available to be consulted that María del Carmen Rodríguez-Martínez Faculty of Health Sciences University of Malaga Málaga, Spain marrodmar@uma.es

we can do not have the means to spend too much time and effort checking the message. Hence, the characters amount included on messages is important.

Facebook, Twitter and other social networks have turned into propitious spaces where companies can transmit information to their current and potential clients. For many companies, online social networks are important tools for marketing. In order to be in the mind of their consumers, the main challenge is to identify the correct mix of promotional elements like advertising, sales promotion, public relations and publicity [4] [5].

However, the transmission of the message does not assure the reception of itself. The company can make the effort of sending valuable information to their clients, but if they are not receptive to such information, it will never have the expected effect on the company. While it is difficult for a company to certainly know how many followers of their social networks are impacted by their messages, there are variables that can help to provide an idea of such impact. The concept of engagement, widely addressed in the research of social networks impact in businesses, refers to the set of reactions that a follower experiences regarding a received message. Typically, these reactions include the amount of comments received, the amount of acceptance declarations (I like) and the number of times the message gets to be shared.

Probably, due to the amount of university students using social networks, one of the areas that have been incorporated into the use of social networks as a communication tool with stakeholders is education, particularly in the case of universities.

Online social networks have been representing a new alternative to communicate news, solving doubts, share small lessons, and other actions related to keeping a good relation between faculty and students [6][7][8].

Thus, the objective of this research was to explore the impact that text message length, generated by Facebook Fan pages administrators of Mexican universities, could have on the amount of likes, comments and shares that they produce.

This paper has the following structure: 1) Method, where subjects, recollection data procedure and analysis method are described; 2) Results, where the finding from the data recollection is presented, and 3) Conclusions, where the implications of the results are proposed.

## II. METHOD

When obtaining the sample research, the QS Latin American University Ranking [9] was analyzed. In it are registered 46 Mexican universities. From the 46 available universities, 28 were selected fulfilling the following criteria: a) the university must have a Facebook fan page; b) the fan page must be official and global (universities with only multiple local fan pages and no global fan page were discarded); c) the fan page must be at least 1 year old (this to guarantee that the fan groups are relatively consolidated) and; d) the fan page must not register inactivity greater than 6 months during the observation period (April 30th, 2012 to April 30th, 2013).

Once the sample was chosen, information was gathered. Information gathering was aided by Facebook Query Language (FQL), a consulting language that allows the extraction of users' public data of Facebook through an interface that resembles the one of Structured Query Language (SQL). From it, 31,590 contents were collected. Such contents generated 1,270,621 likes, 80,620 comments and were shared 252,399 times. These were the total of data used to perform a statistical analysis.

For specific effects of data analysis, a quantitative methodology in which the dependent variables correspond to the number of: likes, comments and shares associated to an engagement level was implemented; the independent variable is the text length quantified in the amount of characters found in the broadcasted messages.

The use of a conventional statistical test was excluded since the number of likes, comments and shares have a highly positive skewed distribution.

### III. RESULTS

Results obtained after implementing the previously mentioned methodology are shown as follows. With the aim of exploring if the impact of the text message length regarding the different variables that typically compose engagement (likes, comments and shares) is different to that using other media (images, photos, videos, links) in the message, results analyzing entries implementing only text and entries using other type of media are displayed. The following graphs represent with dark gray circles the reaction proportions (likes, comments or shares) that an entry receives when having only text and with light gray circles those entries which, besides text, use other multimedia. To facilitate the lecture, the *X* axe scale is logarithmic.

Figure 1 helps to perceive the impact of the text length regarding the amount of likes:

- The majority of entries (99%), both those using text and other media and those with only text, record less than 13.2 comments per 1000 fans.
- A small group of entries (1%) distinguishes from others due to the amount of comments they registered (between 13.2 and 170.8 per 1000 fans with a mean of 24.7 comments). This small group has a media length of 109.4 characters.

• Most (78.2%) of the distinguished entries implement other media besides text.



Figure 1. The impact of the text length regarding the amount of likes

Figure 2 helps to perceive the impact of the text length regarding the amount of comments:

- The majority of entries (99%), both those using text and other media and those with only text, record less than 1.49 comments per 1000 fans.
- A small group of entries (1%) distinguishes from others due to the amount of comments they registered (between 1.49 and 170.5 per 1000 fans with a mean of 3.5 comments). This small group has a media length of 221.5 characters.
- Most (64.7%) of the distinguished entries implement other media besides text.



Figure 2. The impact of the text length regarding the amount of comments

Figure 3 helps to perceive the impact of the text length regarding the number of shares:

- The majority of entries (99%), both those using text and other media and those with only text, record less than 3.23 shares per 1000 fans.
- However, a small group of entries (1%) distinguishes from others due to the amount of shares they registered (between 3.23 and 366.11 per

1000 fans with a mean of 8.3 shares). This small group has a media length of 192.7 characters.

• Most (94.6%) of the distinguished entries implement other media besides text.



Figure 3. The impact of the text length regarding the number of shares

As we can see, all the three different kinds of reactions (likes, comments and shares) have more possibility to be successful when the message length is short.

#### IV. CONCLUSION

With the gathered results, it can be concluded that entries with a greater text length (more than 1,000 characters) are not successful in terms of amount of likes, comments and shares they receive. However, it is not concluded that all short text messages will have a high impact. These conclusions resemble those found in the Track Social company research [9] regarding the company fan pages in different industries.

While it cannot be concluded that an inverse correlation between message length and the amount of likes, comments and shares exists, it can be concluded that messages with a higher amount of reactions relatively include fewer characters. Moreover, it can be concluded that the set of the most successful entries (1%), messages using text and other media, tend to be more shared; also, messages implementing only text are more commented.

This opens that door to conclude two things: short messages are the most successful and the text length can be increased if accompanied by any other type of media.

The results of this research are important because they enable the opportunity to recommend university community managers to moderate the amount of characters to be used in their entries. While the results agree in many ways to those found in [9], there are not enough elements to assure that this behavior will be obtained in other fields. It is assumed that since the followers of university fan pages are young adults. This emphasizes the need of working with short messages inside social networks. It seems that the economy of attention, term coined more than 40 years ago, is more present that ever and the message length can be a key factor.

It is important to say that the Fan Page administrators can erase their publications in any moment. In fact, numbers analyzed could have a variation if, for example, administrators erase messages that could have an adverse effect.

Could happen that a message has many reactions, but most of them are negatives. That's why is important to note that, in this research, the term "successful" was used just in terms of the number of reactions, but not in terms of the sentiments transmitted.

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