

G-Tweet: Tool allowing to detect incidents on Twitter

In this Paper we show how we have tackled the problem of bad opinions about a waste company services on Twitter.

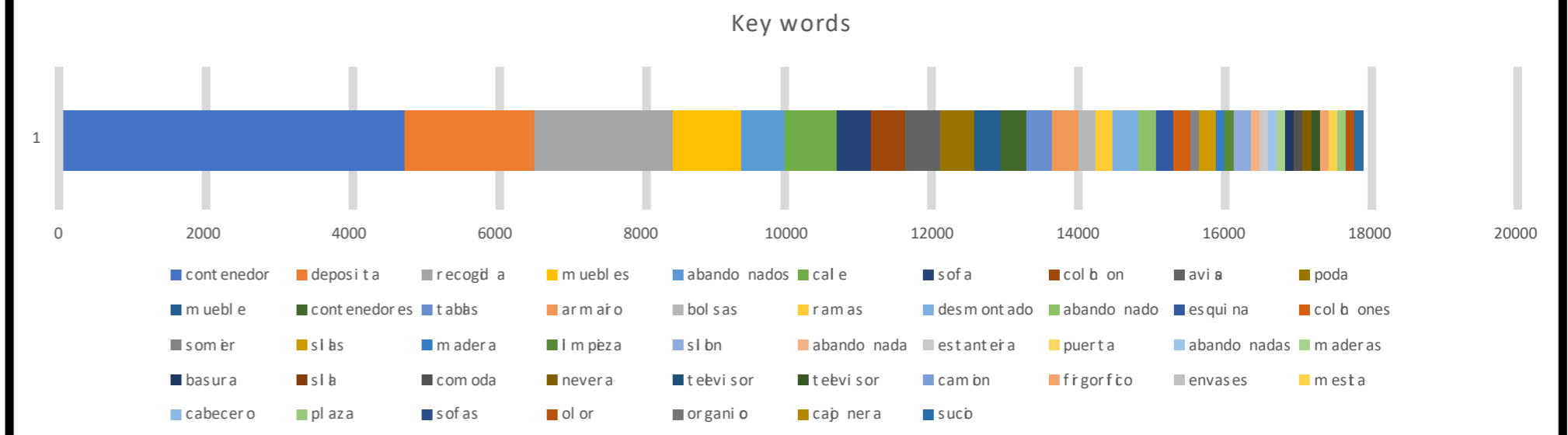
PHASES:

1. Detect and download tweets about waste service.
2. Define classifications of tweets in incidents and other.
3. Develop algorithms to classify tweets.
4. Manage the collected information sending it to the responsible for fixing them.
5. Technician fixes the incident and reports to citizen.

PHASE 1: Detect and download tweets about waste service.

1.1 Find key words

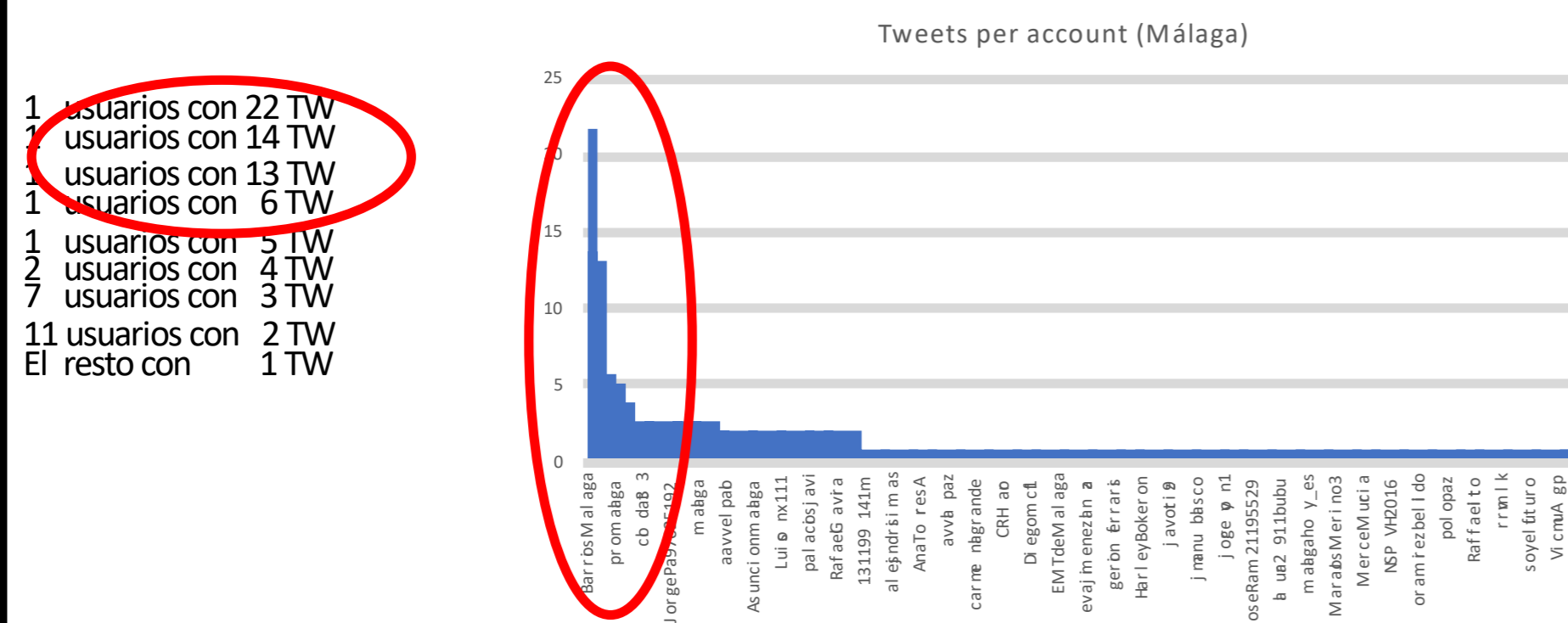
In that Phase it is necessary to know what words are used in twitter to report incidents.



PHASE 1: Detect and download tweets about waste service.

1.2 Find key accounts and key hashtag.

In this Phase accounts and hashtag with the most activity are found. That allows improving the behaviour of algorithms.



PHASE 2: Define classifications of tweets in incidents and other.

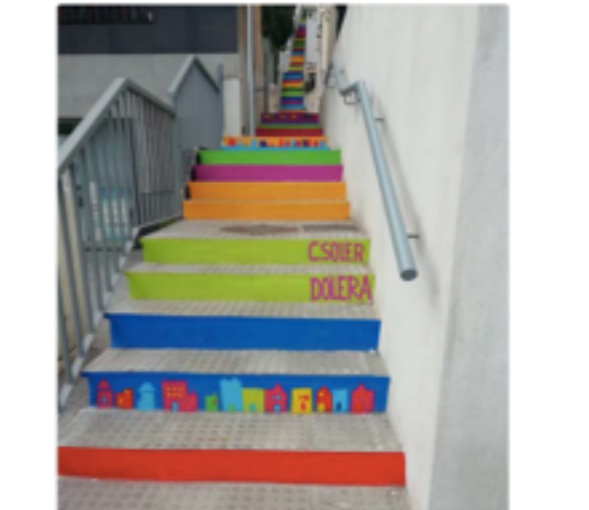
INCIDENT

Ayer visitáramos a los vecinos de #BailénMiraflores que se quejaban de la falta de cuidado y limpieza del barrio de Miraflores. Esta mañana ya están los muebles retirados, que no la sociedad. Aún así hay que solucionar otros problemas paralelos de la zona. @CsMálaga



CRITICISM

171.244 euros para arreglar unas escaleras en la avenida Pintor Joaquín Sorolla, que además fue pintada por asociaciones voluntarias. Este es el despliffo del Ayuntamiento de Málaga que denuncia un vecino en las redes ow.ly/J1xx30kcZNH



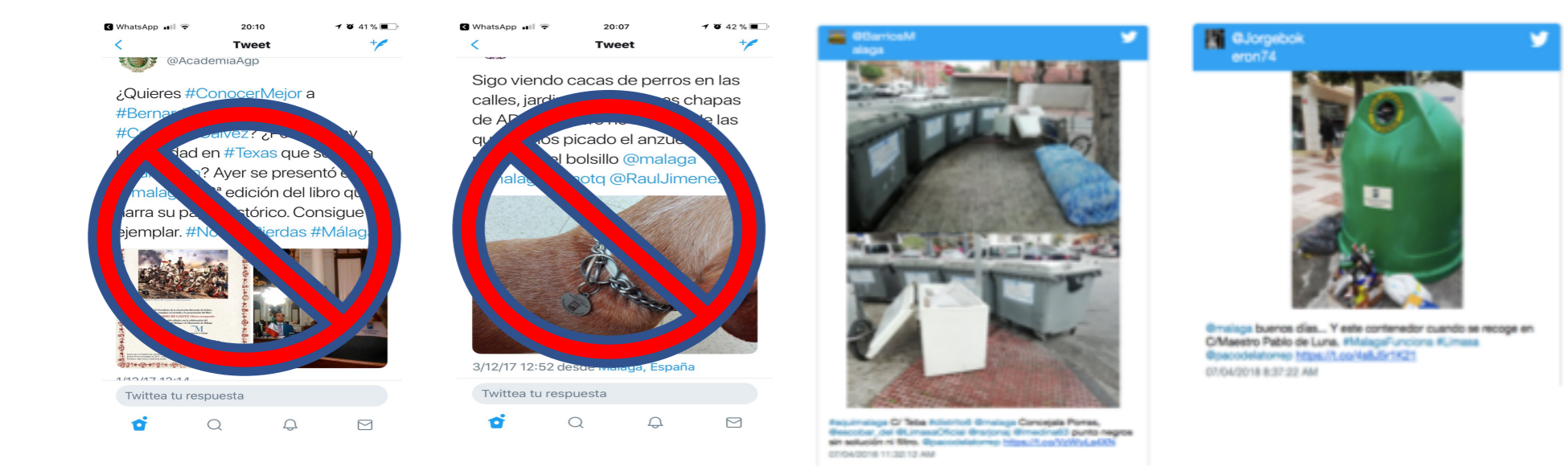
OTHERS

Serían las 17:30-45 ca. cuando la Plaza del Carbón se llenó de pétalos y aleluyas de la Virgen de la Victoria. En la foto un testimonio recogido en el lugar 5-6h después en el que el pétalo se mezcla con la estampa con la estampa @StaVictoriaMLG #CofradiasMLG #MagnaProcesionVictoria



PHASE 3: Develop algorithms to classify tweets.

The algorithms are :Semantic, geolocalization, and recognize images.



PHASE 4: Manage the collected information sending it to the responsible for fixing them.

TWITTER



TÉCNICIAN



TWITTER

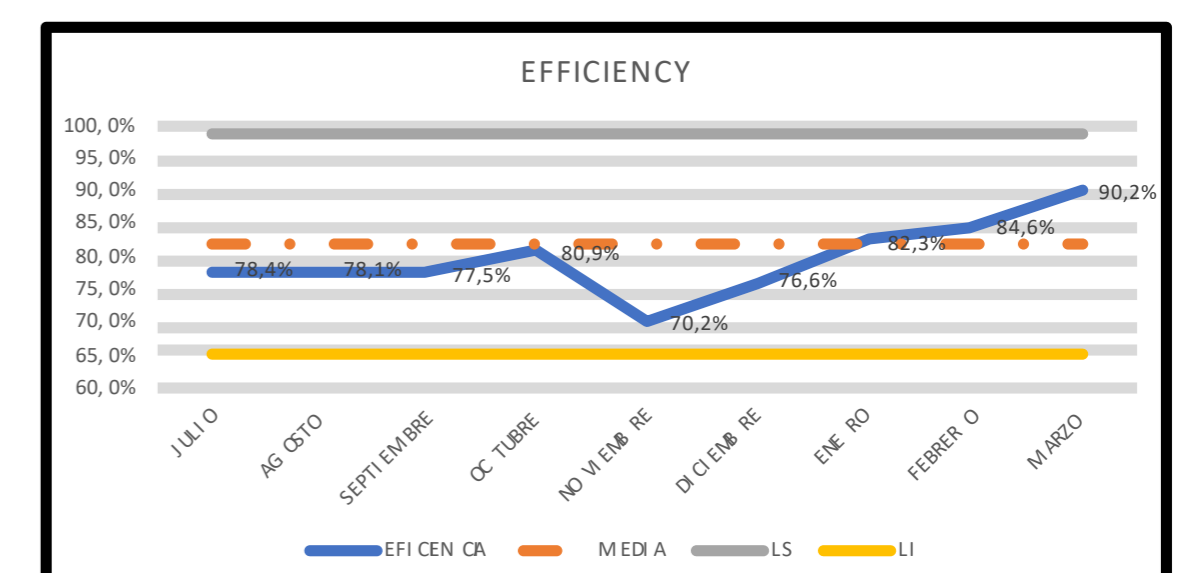
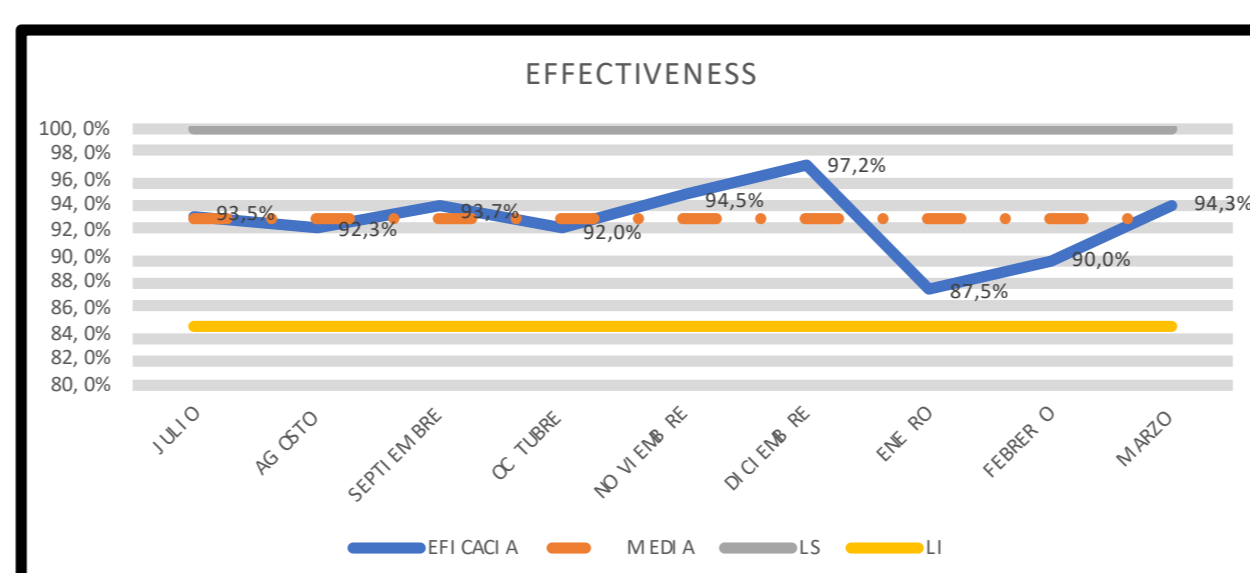
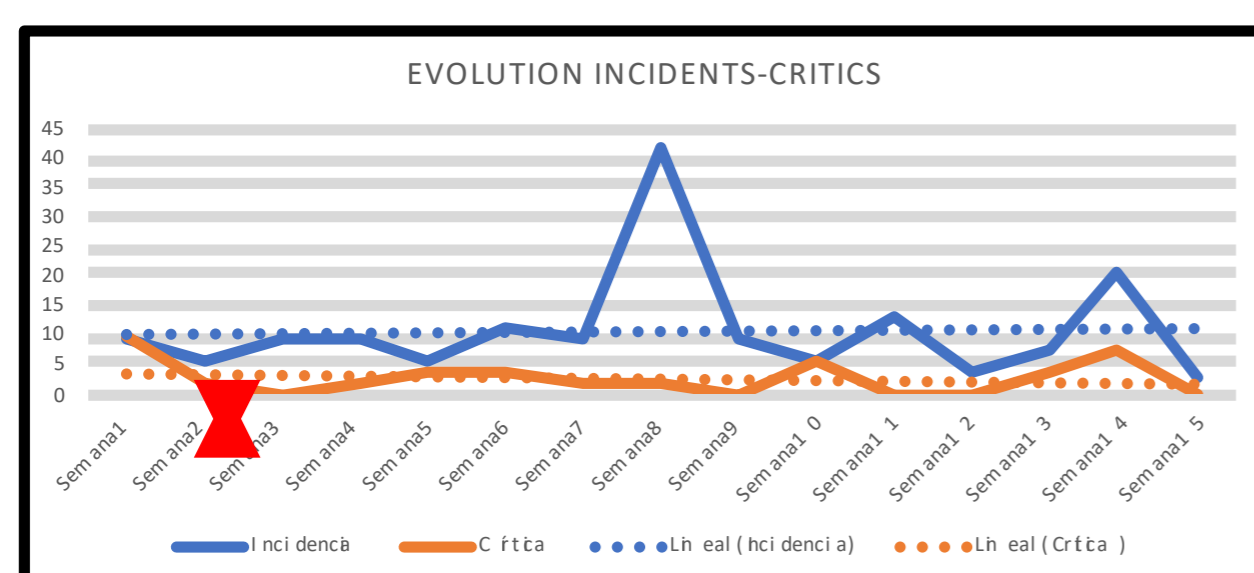


Algorithms to classify
Semantic,
Recognize
images,
Geolocalization

PHASE 5: Technicians fix the incident and report to citizen.

The trends of the criticism tweets against the incidents tweets have varied, **observing a transfer of criticism to incidents.** This happens, because **the citizens lose their anonymity** when they receive the answer about their critics tweets.

IN 6 MONTHS REDUCED 80% CRITICISM TWEETS



Effectiveness **93%**

Efficiency **82%**