The Digital-Born and Legacy News Media on Twitter during the French Presidential Elections

Silvia Majó-Vázquez, Jun Zhao and Rasmus Kleis Nielsen

Key findings
In this RISJ Factsheet, we analyse a sample of 2.96 million news-related tweets from a larger dataset of 43.5 million tweets collected during the 2017 French Presidential election to examine the role of digital-born and legacy news media in online political discussions in France.

We find that:

• Legacy media, most notably newspapers and broadcasters, figure very prominently in the political discussion on Twitter. Legacy media generated more than seven times as much activity and engagement as digital-born news media during the election. 88.43% of news-related tweets collected either originated with or included explicit reference to legacy media, compared to 11.56% that originated with or included explicit reference to digital-born news media.

• A high number of followers and frequent tweeting does not automatically translate into high levels of engagement from audiences. Some prominent newspapers (Le Monde and Liberation), broadcasters (TF1 and BFM TV), and digital-born news media (Mediapart and Brut) see high levels of engagement, but some newspapers and digital-born news media have much lower levels of engagement than their general audience reach, follower count, and their frequent tweeting would lead one to expect.

• Attention and engagement is very unevenly distributed. A few media organisations like Liberation, TF1, and Mediapart are mentioned by others on average hundreds or even more than a thousand times for every time they tweet. In contrast, many news organisations, especially local and regional newspapers and smaller digital-born news media, find the level of engagement they receive does not correspond to the number of tweets they send, suggesting limited engagement. Interestingly, many of these organisations have a high ratio of following to followers - but despite thus engaging with many other accounts on Twitter see limited engagement in return.

Our findings suggest that news media organisations – especially a few prominent newspapers, broadcasters, and digital-born news media – figure very prominently in political discussions on Twitter, but also that a number of organisations with considerable audience reach, Twitter follower counts, and who tweet very frequently see much more limited engagement, and that local and regional newspapers as well as smaller digital-born news media see little engagement on Twitter.

General Overview
Digital-born and legacy media are competing to control the most central positions in the flow of online news. How this competition, which is even greater during major political events, unfolds on Twitter is still largely unknown. The 2017 French Presidential election offers a useful lens to investigate the role of digital-born and
legacy media in one of the most important countries in Europe, and one that is different from the English-language markets most frequently analysed, both in terms of its political system and its media system.

The purpose of this RISJ Factsheet is to present an overview of 1) the allocation of news audience attention on Twitter during the French elections and 2) the potential influence of digital-born and legacy media in this platform of news distribution.

The French context is different from that found in many other markets in important ways. First, French digital-born news media are more prominent than in other European countries. Also legacy media, especially newspapers, have a historically weaker role here than in, for example, Germany or the UK (Nicholls, Shabbir, & Nielsen, 2016). Print newspapers have lower reach than in much of Northern Europe and although television remains the most important and widely used source of news in France, the overall audience is aging and eroding (Newman, Fletcher, Levy, & Nielsen, 2016). In contrast, the French increasingly turn to social media for news. 40% say they get news via social media, especially Facebook. 8% use Twitter for news, and the figures for Twitter, and for social media more widely, is higher for younger media users.

While still only used by a small minority as a source of news, Twitter has a broader political role that makes it important to understand political discussion there. In addition to serving as a platform for discussion and news distribution, political campaigns seek to use it to mobilise support and shape political discussions, and journalists and news media in turn pay attention to Twitter as they cover politics (Chadwick, 2013; Conway, Kenski, & Wang, 2015; Murthy, 2015; Quinlan et al., 2017; Stromer-Galley, 2014). We therefore want to analyse political discussion on Twitter during the French Presidential elections and specifically focus on the role of legacy and digital-born news media organisations in political discussions on Twitter.

**Data Collection**

Our dataset contains 2.96 million tweets collected between 2 April and 8 May 2017. We use a supervised third-party software for Twitter data collection, named Kalium, which calls the Streaming API. As Morstatter, Pfeffer, Liu, & Carley (2013) note the essential drawback of the Twitter Streaming API is the lack of information concerning what and how much data one gets. Yet we do know that it allows us to retrieve at most a 1% sample of all the data matching a set of predetermined parameters (see Morstatter et al., 2013 for a systematic comparison between the Streaming API and the Twitter Firehose data).

Our focus here is on news-related tweets, which we gathered 1) by collecting all tweets from a pre-defined list of Twitter handles and 2) by collecting additional tweets on the basis of relevant hashtags identified separately.

**IDENTIFYING MEDIA OUTLETS AND INDIVIDUAL ACCOUNTS**

We started by defining a sample of French news media outlets based on their overall audience reach. Using comScore online metrics, we averaged the individual audience reach for French media outlets during the last three months starting from April 2017. We obtained the ranking of the most visited news sites in France with at least a percentage reach of 0.03%. To avoid leaving out important news sites, not in terms of their reach but instead of their brand awareness, we double-checked our list of news media with a group of five French experts including researchers and journalists (see the Acknowledgements). They helped us to identify two main types of additional media outlets: recently founded news sites that are not indexed in comScore yet (e.g. Brut, cFactuel, Brief.me or Explicite); or popular news sites that fall at the extremes of the ideological spectrum (e.g. Égalité & Réconciliation, Fdesouche or Dreuz Info). In total, we studied 27 digital-born outlets and 71 legacy media (see the Appendix for the full list). Finally, we incorporated the list of key actors by including the name of the eleven French presidential candidates and their political parties.

We gathered all tweets sent by our pre-selected set of media and political actors. We also collected all tweets including their name or their Twitter username. Tweets where their names were mentioned in URLs embedded in text were also gathered.

**IDENTIFYING TAGS**

Previous research has already pointed out the drawbacks of collecting tweets based on usernames as well as the complexity of tracking a multithreaded social event such as an election campaign (Jungherr, 2016).

To minimise the risk of missing other relevant tweets
during the elections, we completed this primary data collection strategy with a second approach. We also included news-related tweets from other users by identifying relevant hashtags in the overall French Twitter conversation by tracking trending conversations twice per day. We used several online tools for this purpose. The most important hashtags in terms of the overall conversation were included in our Twitter crawler too.

Overall, we gathered 43.5 million tweets through this combination of approaches, which we then filtered following the criteria specified in Figure 3 (at the end of the Factsheet). Finally, we obtained a sample of 2.96 million tweets. 718,000 of them are original tweets and 2.24m are retweets.

**NEWS CONTENT ACTIVITY**

The first step in our analysis is to assess the distribution of news content volume throughout the electoral campaign cycle. Figure 1 shows the overall volume of tweets about the French Presidential elections by type of news media. The category legacy media includes national daily newspapers, monthly and weekly newspapers, regional and local daily newspapers, magazines, news agencies, radio, broadcasters and free national newspapers. Digital-born news media include a variety of news-related organisations launched online, most of them recently. The main findings of this longitudinal analysis are:

- Legacy media figure far more prominently in news-related Tweets during the French Presidential elections than digital-born news media do. 88.43% of the news-related content on Twitter either originate with or include explicit reference to legacy media. Only 11.56% of this content originate with or include explicit reference to digital-born news media.
- The volume of news-related Twitter activity is clearly driven by events and especially by the electoral cycle. Spikes in volume correspond to the most important stages of the electoral campaign i.e. electoral debates, the start of the campaign and the first and second polling days, as well as to events like the attack on the Champs Élysées.
- The first electoral debate, or “Le Grand Débat”, that took place on 4 April and featured eleven presidential candidates saw the highest amount of news-related activity registered in one day on Twitter. More than 126,000 messages around that date included legacy media content or mentioned this type of media outlet.
- Digital-born media content reached the highest volume on Twitter before the second and final polling day, but their output varies far less than that of legacy media and they account for much less activity overall.

![Figure 1. Timeline of overall number of tweets by media type](https://example.com/figure1.png)

<table>
<thead>
<tr>
<th>DATE</th>
<th>Total Number Tweets</th>
</tr>
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<tbody>
<tr>
<td>Apr 03</td>
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<tr>
<td>Apr 10</td>
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<td>Apr 24</td>
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<td>May 01</td>
<td></td>
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<tr>
<td>May 08</td>
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</tbody>
</table>

1 Tweets that do not contain any of the above-mentioned criteria are not included in the final sample. Our data sampling strategy thus might have missed tweets containing native online media videos, which usually do not include an URL (to illustrate this see https://goo.gl/f439Iq). These types of tweets, which are more likely to be sent by digital-born outlets, might not have been included if they did not mention a media source on the text.
Of note, the jump in the overall number of tweets related to legacy media content reached its highest point only hours after both polling days. This contrasted with the subsequent 24 hours after the first round of the elections, where there was a substantial drop in legacy media news content. As tweets were only collected until 8 April, (the day after the second polling day) it is not clear whether this drop took place again on 9 April. However, we do observe an even greater jump in the immediate hours after the second round.

Finally, the trend representing content by, or mentions to, digital-born outlets follows a more stable pattern with less spikes, whereas the line of legacy media shows deep falls and jumps before and after a salient electoral event.

**Most Active Media**

A more in-depth analysis looks at the individual activity on Twitter of the 98 media outlets under study. Table 1 includes the ranking of the top 20 most active news media as measured by the number of original tweets posted during the French campaign. At this level, we find that:

- **Le Figaro** was the most active news media outlet overall.
- **Le Huffington Post** is the only digital-born outlet amongst the top 20 most active news media.
- Legacy media led the posting activity on Twitter by a great distance. National daily newspapers, broadcasters and radio are the most active categories.
- Amongst the three least active media users in our sample we find **Le Canard Enchainé**. This is the weekly newspaper that first reported on the alleged financial scandals affecting François Fillon's wife, known for its political satire (and its off-hand approach to digital media).
- In this category of least active we also find two local daily newspapers, **L’informateur d’Eu et L’Éclaireur** and **Le Républicain 47**.

**Media Influence**

So far, we have documented the overall importance of news media content during the French Presidential elections. The next step is to examine whether the prominence of legacy media and their high levels of Twitter activity are translated into greater levels of influence within the overall flow of news. To address this question we analyse the relation between the amount of news content produced and the number of mentions and replies received by each media outlet. Drawing on previous research on network role identification on Twitter (Gonzalez-Bailon, Borge-Holthoefer, & Moreno, 2013), we estimate the overall potential influence of each news outlet by relating their level of audience engagement to the relationship they establish with #

<table>
<thead>
<tr>
<th>Type</th>
<th>Brand</th>
<th>TW username</th>
<th>Tweets</th>
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<td>1518</td>
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<td>20Minutes</td>
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<td>L’Express</td>
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<td>876</td>
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<td>TV</td>
<td>Franceinfo</td>
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<td>Digital-born</td>
<td>Le Huffington Posts</td>
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<tr>
<td>Weekly Newspaper</td>
<td>Le Point</td>
<td>LePoint</td>
<td>863</td>
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</tbody>
</table>
their followers. The basic idea here is that influence can be mapped along two dimensions. First, the ratio between how often an account tweets (messages sent) and how often it is mentioned or receives replies by others (messages received) and, second, the ratio between how many accounts it follows, and how many followers it has. In line with this, we first look at the ranking of most retweeted tweets2 (Table 2) and find that:

- At the top of the ranking there is a digital-born outlet. A satirical video from Brut was posted at the end of the electoral campaign and one day before the final polling day. It obtained almost 40,000 retweets and over 25,000 likes.
- At the aggregate level, tweets from prominent television broadcasters dominated the ranking of most retweeted messages.
- All top ten most retweeted tweets contained some kind of audiovisual content, which speaks to the importance of compelling videos and pictures to boost the popularity of a news message on Twitter. Finally, we look at the allocation of news audience attention by media brands and their relationship with their public (Figure 2) along the two dimensions of messages sent/received and following/followers, and find that:

- The level of Twitter activity does not seem to always explain the overall influence of news media outlets as measured by number of mentions and replies received by news content.
- The weekly newspaper Le Canard Enchainé reached the highest level of attention on Twitter during the French Presidential elections, although it was amongst the least active news media in this platform. This result highlights that offline news content also drives Twitter audience attention.
- Similarly, several digital-borns exhibit a higher level of audience attention in comparison to their posting activity. This is the case of Brut (number of posts=84), Mediapart (n=435) and Explicité (n=55) amongst others.
- The most active accounts, even when these are associated with very prominent news media,

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2 We examined the raw sample (n=43.5) to obtain this ranking.
do not necessarily see particularly high levels of engagement on Twitter. The broadcasters BFM TV and TF1 have high general audience reach across offline and online media, high follower counts, and are very active on Twitter, and see high levels of engagement as measured by messages sent/received, but this is less so in the case of, for example, the newspapers Le Figaro and Les Echos. In contrast, news media like the newspaper Liberation and the digital-born news media site Mediapart seem far more influential on Twitter judging by overall engagement than their general online audience reach or their Twitter following alone would suggest.

- The ratio of messages received and sent is negatively related to the ratio of following over followers. In other words, news media outlets that achieve higher levels of attention do not necessarily follow large numbers of other accounts. Particularly interesting here is how attention and engagement is very unevenly distributed, and how our data documents that many news organisations, especially local and regional newspapers and smaller digital-born news media, tweet almost as often as other Twitter users engage with their tweets, suggesting limited engagement. Interestingly, many of these organisations have a high ratio of following to followers - but despite thus engaging with many other accounts on Twitter see limited engagement in return.

\(^3\) Nodes are identified where space permits. We have used a base 10 log scale for the x and y axis.
Summary

This document provides a descriptive analysis of the role of digital-born and legacy media in the flow of news content on Twitter during the French Presidential elections in 2017. We have brought evidence to understand better the re-allocation of roles between digital-born and legacy media looking at Twitter during a major political event. We have found that legacy media dominate the overall production of news content on Twitter. However, once we look at the audience engagement we have seen that Twitter activity is not always associated with the same levels of influence as measured by audience engagement. Our analysis has helped identify both the limited number of very influential, mostly legacy media, brands that figure very prominently in online political discussions in France, those that seem more influential on Twitter than their audience reach and following count alone would suggest, some who are punching below their weight, and a significant number of smaller legacy and digital-born news media organisations that see very little engagement on Twitter.

References


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ABOUT THE AUTHORS

Silvia Majó-Vázquez is Research Fellow at the Reuters Institute for the Study of Journalism at the University of Oxford
Jun Zhao is Senior Research Fellow at the Department of Computer Science at the University of Oxford
Rasmus Kleis Nielsen is Director of Research at the Reuters Institute for the Study of Journalism at the University of Oxford

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Figure 3. Sampling and filtering process

We first filtered tweets that fulfilled these criteria:
- contained the name of a French party
- contained the name of a candidate
- were posted by a party or a political candidate

Tweets in French that either:
- contained the top hashtags used by news media*:
  - #Presidentielle2017
  - #Legranddebat
  - #2017Debat
  - #Presidentielle
  - #ChampsElysees
* The same hashtags with accents were also used as filters.

The resulting sample was further filtered via tweets that contained:
- a French media name
- a French username
- a French media URL

Final Sample 2.96m**

Total Tweets collected 43.5m

** The final sample analysed contains 718k original tweets and 2.24m RTs