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Data-Campaigning on Facebook: Do Metrics of User Engagement Drive French Political Parties' Publications?

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Abstract

Research on data-driven campaigning has mostly focused on the strategies of central campaign teams. However, there is a lack of evidence explaining how parties and supporters use data-driven campaigning techniques to organise their social media campaigning. Do user engagement metrics influence the choice of campaign themes by encouraging political parties to concentrate their communication on issues that are most liked, commented on, and shared? Our study focuses on the use of Facebook by French political parties and their supporters during the 2022 presidential election campaign. We conducted a supervised content analysis based on machine learning to examine their Facebook posts (n = 17,060). Our results show that the issues prioritized by parties on Facebook may be different from those that are most prominent in their broader communications. In most cases, however, these themes are not chosen based on user engagement, even for parties that claim to have developed their base through digital channels. Instead, the choice of themes seems influenced by more traditional campaign strategies, such as the desire to capture the electorate of their closest rival. In our conclusion, we discuss the implications of these findings for the adoption of data-driven campaigning in digital election communication across Europe.

Keywords

data-driven campaigning; issue salience; political communication; political programs; social media; supervised learning; user engagement



1. Introduction

The use of social media data in electoral campaigns has developed significantly over the years, allowing political parties to refine their data-driven campaign strategies. These data are said to allow political actors to influence and even manipulate citizens to further their electoral goals (Madsen, 2019). Particularly in the United States, they are used to develop individualised electoral influence strategies (Burkell & Regan, 2019) and can even be used to demobilise specific voters (Bodó et al., 2017). However, these data-driven campaign strategies vary from country to country (Dommett et al., 2023). For example, in European countries, legislation on the use of personal data by political parties is much more restrictive (Dommett, 2019; Dommett & Power, 2019). In most cases, restrictions on campaign budgets are defined to prevent the use of data analytics companies and the implementation of electoral strategies using sophisticated microtargeting techniques. However, these restrictions lead parties to develop data-driven campaigning techniques by analysing data from their social media accounts (Ennser-Jedenastik et al., 2022). For example, they manage their communication strategies and the choice of topics they cover by analysing the responses to and impact of their posts by relying on user engagement metrics, such as likes, comments, and shares.

Nevertheless, this strategic selection of subjects for data-driven campaigning is at odds with the ideological role played by political parties. It is a traditional function of political parties to defend different electoral programmes and to emphasise certain themes to a greater or lesser extent, depending on their ideology and political vision. The Chapter Hills Expert Survey Europe has been measuring these ideological differences between European parties since 1999 (Jolly et al., 2022). This ranking, based on expert assessments, also measures the salience of certain issues for different parties.

France represents a compelling case study for examining the potential contradiction between data-driven campaigning, particularly on social media, and the ideological function of political parties. In recent years, three political parties have emerged with the aim of disrupting France's traditional political landscape and securing the presidency: La République En Marche (REM), La France Insoumise (LFI), and Reconquête! (R!). Their focus on winning the presidency pushes their ideological ambition to the background, leading some authors to describe them as "movement parties" (Lefebvre, 2018). Moreover, these three parties rely extensively on digital tools for their communication and organisational activities, similar to parties such as Podemos in Spain and Movimento Cinque Stelle in Italy (Gerbaudo, 2021). Each of these French parties has established digital departments tasked with contributing to both their organisational and communication strategies, in line with the principles of "digital parties" (Gerbaudo, 2019). Consequently, it is probable that they will adopt a distinctive approach to social media communication, using data gathered from social media to shape their publication choices.

However, there is currently no research on the use of social media data as a guide for online campaign communication choices in France. Existing qualitative studies (Theviot, 2016) have analysed the use of data during elections through interviews with campaign team members, following a model used in American studies that emphasize the importance of stakeholder interviews (Kreiss et al., 2020). To date, no quantitative study has explored the use of data-driven campaigns on social media in France.

Given these circumstances, this article will study how data-driven campaigning based on social media data was developed by French parties and their candidates during the 2022 presidential campaign. Specifically,



it will analyse user engagement rates of Facebook posts by the various parties to determine whether this engagement influences the salience of the issues raised on the platform by the parties during the campaign, beyond their ideology and traditional focus. Facebook was chosen for this analysis because it is the most frequently used social media platform for political purposes by French citizens during the 2022 presidential campaign. Thirty-four per cent of French citizens reported that they had sometimes or often used Facebook for political activities (such as viewing, commenting on, or sharing content) during the campaign, compared to only 19.5% for Instagram, 18.2% for YouTube, and 17.6% for X (formerly Twitter; Neihouser, Haute, et al., 2022). This suggests that parties paid particular attention to their communication on that platform. Furthermore, this study focuses on the rates of user engagement because France has some of the strongest legal restrictions on the use of personal data as well as on campaign budgets in Europe (Dommett, 2019; Dommett & Power, 2019). Parties are therefore unable to use the social media user data potentially available via Facebook. But nothing prevents them from using the metrics from their posts (number of likes, comments, shares, etc.) to define their online communication strategy.

In this article, we will answer our research question by assessing whether French political parties publish more news on topics that generate the most user engagement on their pages (in terms of volume of likes, comments, and shares). To do this, we conducted a supervised content analysis based on machine learning to analyse the posts (17,060) published by Facebook pages (544) supporting the parties and candidates in this election. We will then compare these results with the results of the 2019 Chapter Hill Expert Survey (CHES).

2. Theoretical Background

2.1. Issue Salience and the Impact of Digital Data

The literature has long demonstrated that different parties organise their political communication around a number of central issues that set them apart and allow citizens to identify and position them within the political landscape (Budge & Farlie, 1983; Petrocik, 1996). The importance each party attaches to each issue varies, depending on their values and ideology. For example, left-wing parties are traditionally more likely to focus on issues of redistribution or the environment, while right-wing or more conservative parties place more emphasis on economic liberalism. Bélanger and Meguid (2008) looked specifically at how the importance (or "issue salience") attached to different issues by the parties is likely to determine voting behaviour. Indeed, voters are able to position parties ideologically, and make their voting choices, based on their perceptions of the issues that are traditionally most salient or important to parties. This explains why the key themes of each party's communication tend to change little over time.

Nevertheless, the development of digital services and social media has changed parties' practices by encouraging them to position themselves on various topical issues when they feature prominently in discussions on digital platforms (Ennser-Jedenastik et al., 2022)—and not just according to their ideology. It has made data central to new campaigning practices and to the choice of issues around which parties seek to define their political communication strategies. Among these digital data, those that measure the audience of publications and level of user engagement have become key (Ennser-Jedenastik et al., 2022). The volume of likes, comments, and shares has become a valuable indicator for analysing the reception of different types of content.



Political parties have therefore refined their online communication strategies by changing the length of their posts or enriching them with images or videos in order to influence their reception and the dynamics of user engagement (Heiss et al., 2019; Jost, 2023; Koc-Michalska et al., 2021). Similarly, the tone of posts on Facebook—positive or negative—and their emotional dimension also have an impact (Peeters et al., 2023; Russmann et al., 2024; Vuckovic, 2023).

So far, however, no study in France has measured whether digital data has had an impact on the selection of the key issues addressed by political parties. There are, however, a number of studies that measure the salience of different issues in party communication more broadly (manifestos, speeches in the media, etc.). This is particularly true of the 2019 CHES (Jolly et al., 2022), which we use in this article. Thus, in light of the literature presented above, our first hypothesis is as follows:

H1: The issues most frequently addressed by parties in their Facebook posts are different from the issues they usually highlight in their communications.

As mentioned in the introduction, the focus of this article is more specifically on the influence of user engagement rates on the thematic issues raised by parties during the election campaign. User engagement rates can be considered to be "campaign data" as opposed to "voter data," which is also used in the context of data-driven campaigning (Dommett et al., 2023). While the former is collected about the campaign itself, the latter concerns citizens and includes information such as their voter registration data, their party preferences, and/or their other opinions and interests (Dommett et al., 2023, p. 7). In the French context, where the use of personal data is heavily restricted, campaign data—and in particular user engagement rates—are valuable sources of information.

Furthermore, only thematic posts linked to programmatic proposals are analysed here as we need to compare them with the issues studied in the 2019 CHES. Among these issues, not all generate the same reactions or have the same reach. Some studies have shown, for example, that corruption or immigration often attract more attention on social media than economic or environmental issues (Bene, 2021; Bene et al., 2022).

Thus, our second hypothesis is as follows:

H2: Parties will tend to communicate more on Facebook about the issues that generate the most user engagement, even if these issues are not traditionally the most prominent in their speeches and programmes.

2.2. The Digitalisation of Parties and the Use of Digital Data

In France, three parties—REM, LFI, and R!—represented in the 2022 election by Emmanuel Macron, Jean-Luc Mélenchon, and Eric Zemmour respectively, have grown over the last five years, largely due to the importance of digital tools in their organisation and communication (Neihouser, Figeac, & Le Coz, 2022). These parties align with the model of "platform parties" (Deseriis, 2020) which builds on the "digital party" model (Gerbaudo, 2019). They are centred around a charismatic leader with strong ambitions for power. This has a major impact on the ways in which digital tools are used (Gerbaudo, 2019). Significant resources are invested to effectively use these tools to inform, mobilise, and organise activists and voters. One such investment is the creation of



digital departments within the parties, staffed with data analysts, to leverage innovative digital technologies and data to compensate for their lack of regional presence and activist capabilities.

Another consequence of structuring around a leader's power ambitions is the sidelining of these parties' ideological ambitions. Their primary objective is to seize power, not to win an ideological battle against opponents. Under these conditions, it might be argued that any means are justified, including those provided by the use of data and data-driven campaigns:

H3: For REM, LFI, and R!, the tendency to communicate more on Facebook about the issues that generate the most user engagement will be stronger, even if these issues are not traditionally the most salient in their respective discourses and programmes.

2.3. Metrics of User Engagement and Their Impact on Campaign Themes

Scholars argue that analysing user engagement and perceived audience expectations allows candidate teams to monitor their campaigns on social media, especially Facebook (Ennser-Jedenastik et al., 2022; Kalsnes, 2016; Kelm, 2020). However, these studies rarely distinguish between different types of user engagement despite how important this distinction is. Indeed, liking, commenting, or sharing content does not involve the same level of engagement (Gerodimos & Justinussen, 2015). Commenting was found to be primarily related to social interaction motivations, liking to presentational motivations, and sharing to information-sharing motivations (Heiss et al., 2019, p. 1499). Thus, these types of user involvement imply different modes of political participation. Commenting is the most successful way to get involved and, for scholars, one of the best approximations of political engagement on social media (Bossetta et al., 2017).

Similarly, these actions do not have the same effect on the spread of the message and its circulation among users' friends or followers. Liking and sharing a Facebook post means that it reaches a much larger audience, often beyond the small network of supporters and followers (Bene, 2017b). This is not the case with comments. A share also creates more visibility for a post than a comment because a comment is only visible on the thread where it is written, whereas a share allows content to be shared on another page (Kim & Yang, 2017). Thus, certain types of user engagement allow the content authors to indirectly reach an audience with whom they have no relationship. This virality-based dissemination logic of social media is interesting because it allows political actors to spread their messages indirectly to wider segments of supporters (Klinger & Svensson, 2015).

In other words, political actors can reach different audiences on social media because of these different types of user engagements. Likes allow them to reach their supporters who mostly agree with their posts, shares help them reach their followers' followers (Vaccari & Valeriani, 2015, p. 1026), and comments have the potential to reinforce the beliefs of their most loyal supporters. Political parties can then use social media metrics to pursue data-driven campaign strategies with the volume of likes of their posts (because this data is a marker of support that helps increase the direct audience of the post), the volume of shares (because it reflects the willingness of the internet user to inform their followers or even to influence their political opinions in order to support the party's candidate), and the volume of comments (because it reflects the willingness of the user to engage in a deliberative argument with the immediate audience of the post, which may lead them to favourably modify the opinion of other commentators). As such, we propose:



H4: As comments and shares encourage greater engagement from political party supporters, we can expect them to publish more Facebook posts on topics that generate the most comments and shares.

3. Data and Method

3.1. Data

To test our hypotheses, we conducted a content analysis of Facebook posts by party and candidate supporters during the 2022 French presidential election campaign. France has a mixed electoral system, and we considered candidates who received at least 4% of the vote in the first round of the election: Emmanuel Macron (centrist, REM, 27.84%), Marine Le Pen (far-right, Rassemblement National [RN], 23.15%), Jean-Luc Mélenchon (far-left, LFI, 21.95%), Eric Zemmour (far-right, R!, 7.07%), Valérie Pécresse (right, Les Républicains [LR], 4.78%), Yannick Jadot (left, Europe Ecologie Les Verts [EELV], 4.63%). We collected data from the Facebook pages supporting these six candidates (N = 544) from 1 January to 24 April 2022 using the Facebook API. The initial dataset contained 22,620 posts. We pre-processed the textual data before applying automated content analysis methods by deleting all posts that contained only a link or a hashtag. The final dataset comprised 17,060 posts.

3.2. Hybrid Content Analysis Method

The number of posts in this dataset is too large for us to qualitatively determine the issues addressed by the parties in their publications. In social sciences, scholars mostly rely on two well-established approaches: human annotation on sampled data and quantitative methods. Each approach has its merits but combining them yields very promising results. Leveraging recent advances in sequential transfer learning has proven that an expert can train a precise and efficient automatic classifier. Thus, under certain conditions, expert-trained models produce better annotations than humans do (Do et al., 2022). In this article, we therefore used a supervised content analysis method based on machine learning to identify the topics of Facebook posts, following a two-stage process (Bene, 2017a). The first stage was performed by two annotators on a randomly selected sample of 1,500 posts (8.8% of the posts in the main dataset). They identified thirteen key issues raised by the parties in the 2022 French presidential campaign (cf. Table 1). These topics were manually coded by the annotators to provide a gold standard dataset for evaluating the performance of the supervised machine learning method. Despite the diversity of these topics, a significant degree of agreement was found between the two annotators, as shown by a Cohen's kappa index of 0.94 and a Krippendorff's alpha coefficient of 0.96.

The second stage was performed using a supervised machine learning method based on the French language model "CamemBert." This model was fine-tuned using the dataset of labelled posts to optimise its performance against the manually coded "gold standard." Evaluation of the performance of the model suggests highly accurate predictions. The overall precision for the semi-supervised detection of all topics was 76%, with an F1 score of 0.75.

Among these 13 key issues, this article focuses on eight themes related to political issues (the economy, environment, redistribution, education, health, migration, security, and foreign affairs) and on two "external shocks" (Farkas et al., 2024) that elicited strong reactions from the followers of political leaders because of their divisive nature, such as the Covid-19 pandemic and the war in Ukraine. Only this subsample of labelled



		Share of posts	Precision	Recall	F1-score	Cohen's Kappa
Offline calls for mobilisati	42%	42% 0.824		0.848	0.966	
Online calls for mobilisati	20.57%	0.545	0.462	0.500	0.978	
Media coverage of the campaign		10.11%	0.462	0.600	0.522	0.920
Information on political	Economy	4.96%	0.727	0.800	0.762	0.974
issues	Environment	1.96%	0.875	0.700	0.778	0.837
	Redistribution	2.33%	0.714	0.714	0.769	0.857
	Education	1.66%	0.875	0.636	0.737	0.970
	Health	1.04%	0.600	0.750	0.667	0.974
	Security	3.85%	1.000	0.667	0.800	0.899
	Migration	5.47%	0.667	1.000	0.800	0.833
	Foreign Affairs	2.43%	0.636	0.700	0.667	0.820
Shock events	Covid-19	0.83%	1.000	0.857	0.923	0.857
	War in Ukraine	2.77%	0.571	0.800	0.667	0.920
Overall (weighted)		100% (17,060)	0.757	0.748	0.745	0.940

 Table 1. Performance metrics for semi-supervised detection of each topic.

posts will be analysed in this article. The other messages did not address the main topics of the political campaign. They dealt with other issues, in particular, off- and online calls for mobilisation or the media coverage of the candidate's campaign. These posts are not of interest to us, as the aim here is to study the programmatic issues raised by the parties on Facebook.

3.3. Statistical Models

The unit of analysis in this study is Facebook posts, and the dependent variable is user engagement. Facebook data specify user engagement with party and candidate supporters' Facebook posts by referring to the number of likes (ranging between 0 and 91,371; M = 1,021), comments (ranging between 0 and 57,587; M = 226), and shares (ranging between 0 and 32,743; M = 231). This enables us to determine the volume of user engagement, in terms of likes, shares, or comments, generated by the party and candidate supporters' Facebook posts by targeting more precisely the audience for the ten central issues raised during this election.

We used multilevel modelling to analyse the data (Bene, 2017a; Heiss et al., 2019). This approach allowed us to account for the influence of the number of posts published by different Facebook pages, ensuring that the topics most covered by the most active pages were not over-represented at the expense of those most covered by the less active pages (cf. Table 5, 6, and 7, in the Supplementary File). We used two types of control variables: "visual content" and "post length." Specifically, we distinguished between visual (video and photo) and non-visual content in the political communication of parties and their supporters. Additionally, we measured the effect of text length (between 1 and 4,999; M = 188; SD = 408).

3.4. Comparison with the CHES de 2019

We then compared the topics of Facebook campaign posts with the relative salience of different issues by party, as measured by the 2019 CHES (Jolly et al., 2022). Conducted in the winter of 2020 and completed by 421 political scientists specializing in political parties and European integration, the 2019 CHES provides



information on the positioning of 277 parties. Based on expert opinions, the 2019 CHES measures the relative importance (0 = not important; 10 = very important) of various themes in each party's communication. Not all the themes identified in the parties' Facebook posts are examined in the 2019 CHES, but the four most important ones are the economy, immigration, redistribution, and the environment. For this reason, our analysis focuses more specifically on these four themes. Furthermore, of the six French parties and their candidates we study, five are represented in this survey. Eric Zemmour's party, R!, which did not exist when the 2019 CHES data were collected, is not included. Table 2 summarises the results for each of the parties analysed.

	Economy	Immigration	Redistribution	Environment
EELV	5.6	4.3	6.5*	9.4*
LR	7	6.8*	5.4	2.6
RN	5.1	9.9*	5.4	2.5
REM	7.8*	5.7	4.7	5.5
LFI	8.9*	4.5	8.9*	6.5*
R!	NA	NA	NA	NA

Table 2. Salience of different issues by party according to 2019 CHES.

Note : * = particularly salient. Source : 2019 CHES (Jolly et al., 2022).

4. Results

First, this article identifies which issues are most frequently addressed in each party's Facebook political communication. In particular, it assesses whether parties tend to communicate more on Facebook about the issues that are otherwise most prominent in their usual communication (H1), or whether they communicate more about those issues that generate the most user engagement, even if these issues are not traditionally the most prominent in their respective discourses and programmes (H2). Additionally, the study assesses whether this trend is more pronounced among the three most recently created parties in France (REM, LFI, and R!; H3). Fourth, this article analyses the different modalities of user engagement (liking, sharing, and commenting) generated by each campaign theme. The aim is to assess whether parties tend to publish more posts on the topics that generate the most shares and comments (H4) to encourage these practices among their subscribers in the hope of disseminating their information to their networks of followers.

4.1. Do Political Parties Communicate on Facebook About Specific Issues?

We analyse whether the topics about which parties communicate most on Facebook differ from those that are most salient in their communication more broadly according to 2019 CHES (H1). Table 3 shows the distribution of topics covered by political parties on Facebook during the 2022 presidential campaign. The first four topics are also analysed in the 2019 CHES to show which are the most salient for each party. We have highlighted the most salient issues for each party according to 2019 CHES.

The most salient themes on Facebook vary across parties. Two of the five parties analysed by CHES 2019 give the most prominence on Facebook to the theme that is most prominent in their broader communication compared to the other parties. Twenty-seven point six per cent of REM's posts deal with the economy



	LFI	EELV	REM	LR	RN	R!	Average
Economy	5.1%	24.1%	27.6%*	22.9%	22.7%	13.5%	19.3%
Environment	43.7%*	13.5%*	3%	4%	3.7%	2.3%	11.7%
Redistribution	5.9%*	17%*	8.9%	8.6%	7.5%	7.6%	9.3%
Migration	3.5%	4.2%	11%	5.3%*	21.5%*	33.3%	13.1%
Education	5.1%	11.5%	11%	6.1%	2.6%	6.1%	7.1%
Security	4.3%	4.2%	19.3%	7.2%	15.5%	19.1%	11.6%
Health	5.9%	8.8%	3.6%	5.3%	4%	1.7%	4.9%
Foreign Affairs	4%	3.9%	5.9%	18.6%	8.8%	7.9%	8.2%
War in Ukraine	21%	11.3%	8.9%	18.3%	4.7%	7.9%	12%
Covid-19 pandemic	1.3%	1.5%	0.9%	3.6%	9.2%	0.6%	2.9%
Total	100%	100%	100%	100%	100%	100%	_
Ν	371	407	337	694	1,005	1,846	—

Table 3. Distribution of topics covered by political party Facebook posts.

Notes: * = The more salient issues for each party for the 2019 CHES (cf. Table 2).

(compared to 24.1% of EELV's posts, the second party with the highest proportion of this topic on Facebook). Twenty-one point five per cent of RN's posts deal with immigration, compared with just 11% of REM's posts (the second most popular party on Facebook, excluding R! which is not included in the 2019 CHES). The economy and immigration are traditionally the most prominent themes in the communications of REM and RN respectively.

On the other hand, the other two parties analysed by the 2019 CHES show a preference for different themes on Facebook than those that are usually most prominent in their communication. These two parties, EELV and LFI, identified as left-wing by the 2019 CHES, are in direct competition to attract progressive voters. According to the 2019 CHES, each of these two parties emphasises the most prominent themes of their direct opponents on Facebook. EELV, for instance, posts proportionally much more about redistribution than its opponents on Facebook (17.5% of posts compared to 8.9% for REM, the second party that posts proportionally most on this topic). However, redistribution is traditionally the most prominent theme in LFI's communications (2019 CHES). Conversely, LFI posts proportionally much more on the environment than its opponents (43.7% of posts compared to 13.5% for EELV, the second party that posts proportionately the most on the subject), despite the environment being traditionally the most prominent theme in EELV's communications (2019 CHES).

Another interesting finding, not covered by the 2019 CHES, relates to the REM's focus on security in its Facebook posts. REM, the ruling party, is much more active on this subject than its opponents (with the exception of R!). This may reflect a campaign effect: In 2022, the far-right (RN and R!) seems to be the only true opponent of the president and his party (REM) in the race for re-election. This undoubtedly prompted REM to campaign on Facebook on an issue that is typically associated with the far-right. This tendency of parties to campaign on issues traditionally associated with the far-right also seems to be illustrated by the high proportion of LR posts about the war in Ukraine (18.3% of posts compared to 4.7% for RN and 7.9% for R!). This focus allows LR to distance itself from the far-right (RN and R!) in the campaign—its direct opponents—which are often considered to be Russophiles by some sections of the public.



In the end, H1 was only partially validated. While the themes presented by political parties on Facebook occasionally align with those most prominent in their general communication, the most important variable influencing topic selection on the platform seems to be the desire to differentiate themselves from their direct opponents by focusing on issues either traditionally associated with their communication or that are likely to undermine their rivals.

4.2. Do Political Parties Organise Their Communication According to the Metrics of User Engagement?

Table 4 displays the user engagement scores generated by different topics, distinguishing between the number of likes, shares, and comments. These scores for the level of user engagement are derived from the statistical models presented in the Supplementary File.

The first result from Table 4 allows us to reject H2: Political parties do not communicate more on Facebook on the topics that attract the most user engagement. According to Table 3: LFI shares proportionally more Facebook posts than its competitors on the environment (43.7%) and the war in Ukraine (21%); EELV on the economy (24.1%), the environment (13.5%), redistribution (17%), education (11.5%), and health (8. 8%); REM on the economy (27.6%), education (11%), and security (19.3%); LR on foreign affairs (18.6%) and the war in Ukraine (18.3%); RN on migration (21.5%), security (15.5%), and the Covid-19 pandemic (9.2%); and R! on migration (33.3%) and security (19.1%). However, these topic preferences only lead to higher user engagement in specific cases: EELV's posts on the environment are certainly positively correlated with a higher share rate—but not those on the economy, redistribution, health, and education; LR's posts on the war in Ukraine are certainly positively correlated with the share rate—but not those on security and migration.

On the contrary, certain issues promoted by the parties on Facebook are negatively correlated with user engagement rates. This is the case, for example, for the environment for LFI and for migration and security for the RN. Other issues promoted by the parties on Facebook have no effect on user engagement rates: this is the case for the economy (EELV and REM), redistribution (EELV), education (REM and EELV), security (REM), foreign policy (LR), and the war in Ukraine (LFI and LR). On the other hand, issues that are less frequently addressed by the parties are likely to bring them user engagement: the Covid-19 pandemic (LFI), migration (EELV), the economy (LR), and the environment (RN).

This first set of results also invalidates H3, at least for REM and LFI: Neither of these parties promotes topics on Facebook that allow them to attract the most user engagement. However, R! stands out from its competitors in this respect. In fact, it is the only party that receives significantly more user engagement (comments [migration] and shares and comments [security]) for the two topics that it promotes proportionally more on Facebook than its opponents (migration and security). However, it may be that these topics were chosen based on the party's ideology—openly anti-immigration and security-oriented (Ivaldi, 2022)—rather than on an analysis of the user engagement they generate.

Another main finding of Table 4 concerns the H4, which predicted that parties would have tended to publish more posts on topics that generated the most comments and shares ("likes" not having the same function). This hypothesis was not validated because the different metrics of user engagement very often converge. First, if a topic generates more likes, it tends to generate more shares and comments, and vice versa. For example,



	LFI			EELV				REM			LR		RN		R!			
	Like	Share	Comment															
Economy	0	0	-2	0	0	0	0*	0*	0*	2	3	0	-3	0	-3	-1	3	-1
Environment	-2*	-1*	-2*	0*	1*	0*	0	0	0	0	0	0	0	3	0	0	0	0
Redistribution	0*	-1*	-3*	0*	0*	0*	0	0	0	0	0	0	-2	0	-1	0	0	0
Migration	2	0	0	3	3	1	0	0	0	3*	0*	0*	-1*	0*	-2*	0	0	1
Education	0	0	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-1
Security	-3	0	0	0	0	0	0	0	0	0	0	0	-3	-1	-1	0	3	3
Health	0	0	0	2	0	0	0	0	0	0	0	0	-1	0	0	0	0	0
Foreign Affairs	0	0	0	0	0	0	-2	-1	0	0	0	0	-1	0	0	0	0	0
War in Ukraine	0	0	0	0	0	0	0	0	0	2	0	0	-2	0	0	0	0	0
Covid-19	3	3	1	0	0	0	0	0	0	0	0	0	0	3	0	-1	0	0

Table 4. The topics in political parties' posts and their likelihood of generating likes, shares, or comments.

Notes: The score of the user engagement ("like," "share," "comment") is determined by the significance of the *p*-value in the statistical models (cf. Tables 2, 3, and Table 5 of the Supplementary File); the value is "0" when the *p*-value test is not significant; if the estimation is positive, the value is "1" if p < 0.05, "2" if p < 0.01, and "3" if p < 0.001; if the estimation is negative, the value is "-1" if p < 0.05, "-2" if p < 0.01, and "-3" if p < 0.001; * = The more salient issues for each party for the 2019 CHES.

the topic of immigration generated many likes, shares, and comments among EELV supporters. The same trend could be seen with the topic of the Covid-19 pandemic for LFI, the economy for LR, and security for R!. Second, this trend could also be observed when a topic generated fewer reactions, and the scores for all user engagement metrics fell to a lower level. This was the case, for example, with the environment for LFI, security for RN, and foreign affairs for REM.

5. Conclusion

This article examines whether French political parties post more frequently on topics that generate the most user engagement on their Facebook pages (in terms of the volume of likes, comments, and shares). Our results show that the topics favoured by parties on Facebook may differ from those most salient in their communication in general (H1). Nevertheless, in the majority of cases, these themes are not chosen on the basis of the user engagement they generate (H2 and H4)—even in the case of parties that claim to have been built partly through digital means (H3). Instead, they seem to be chosen on the basis of more traditional campaign dynamics, such as the desire to capture the electorate of the most direct opponent.

In this article, we have focused on the study of user engagement rates because French law prohibits political parties from running targeted advertising on social networks during election campaigns. Similarly, strict regulations govern the use of personal data. The data that political parties can use for data-driven campaigning on social media is thus very limited. User engagement rates could therefore have been a tool for campaign teams (Ennser-Jedenastik et al., 2022) as they are classified as "campaign data" and not "voter data" (Dommett et al., 2023). However, even in this context, during the 2022 French presidential election campaign, there was no link between the topics that generate the most user engagement and those that are



most present in the parties' Facebook communications. One might have thought that the reverse would be true. The parties could have published more posts on the issues that elicited the most reactions.

Instead, more traditional campaign dynamics seem to have had a greater influence on online communication choices. Parties sought to compete with their direct opponents on their key political issues, regardless of the user engagement levels. This strategy reflects a key finding highlighted in this article: Parties tend to shift away from the issues that align the most with their usual discourse and their values towards the issues that are usually at the centre of the communication of their most direct opponents. While the literature has long shown that parties structure their political communication around a set of core lissues that distinguish them and allow citizens to identify and position them in the political landscape (Budge & Farlie, 1983; Petrocik, 1996), online communication seems to encourage them to take up the key issues raised by their most direct opponents in order to appeal to their voters and potentially sway them. We know that ideologically close individuals are exposed to relatively similar content on the internet (Pariser, 2011). Thus, parties would likely aim to appeal to the supporters of their closest competitors, who might be accidentally exposed to their online messages, by targeting issues that are typically addressed by those parties. Indeed, our results show that parties sometimes neglect online issues that are otherwise most prominent in their overall communication, giving their immediate opponents this opportunity to attract their voters.

This trend can be found in the online communication of most of the parties in this study, including recent parties (REM and LFI) which claim a high level of digitalisation (Neihouser, Figeac, & Le Coz, 2022). It would be interesting to compare these results in France with those of other European cases with similar parties—such as Italy (Movimento Cinque Stelle) or Spain (Podemos). Do these parties use user engagement rates, and more generally "campaign data," to guide their social media communication more than their respective national opponents? Does this type of data-driven campaigning make it possible to differentiate these parties from their competitors in national contexts that are otherwise similar to the French case (relatively strict legislation on personal data, etc.)?

One party stands out in the 2022 French presidential campaign: R! It is the most recently created party in the presidential race (just a few months prior). It therefore relied heavily on digital technology to communicate and organise in a very short time frame (Neihouser, Figeac, & Le Coz, 2022). It is also the only party to highlight topics on Facebook that attracted the most user engagement from its supporters. However, it remains unclear whether R! posted more on these themes because they attracted more user engagement from supporters, or because they form its programmatic base, which consequently leads to more reactions from supporters on Facebook.

A limitation of this study is its focus on a single social media platform, Facebook. While Facebook is particularly interesting as it was the most widely used during the campaign (Neihouser, Haute, et al., 2022), it would still be interesting to compare our findings with those of data-driven campaigns on other platforms. Indeed, each platform attracts different audiences, partly because they have different digital architectures (Bossetta, 2018). It could therefore be the case that, depending on the audiences of the platforms, the parties decide to conduct (or not) data-driven campaigning on the basis of user engagement rates. For example, they could use data-driven campaigning to prioritise the issues that generate the most reactions from supporters on platforms that tend to attract a younger audience (Instagram, TikTok, Snapchat; Larsson et al., 2024), with the specific aim of mobilising this age group. Following on from this, another research possibility would be to



analyse whether the issues presented by the parties on social media align with the issues that resonate most with their platform-specific audience.

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Conflict of Interests

The authors declare no conflict of interests.

Supplementary Material

Supplementary material for this article is available online in the format provided by the author (unedited).

References

- Bélanger, É., & Meguid, B. M. (2008). Issue salience, issue ownership, and issue-based vote choice. *Electoral Studies*, 27(3), 477–491.
- Bene, M. (2017a). Go viral on the Facebook! Interactions between candidates and followers on Facebook during the Hungarian general election campaign of 2014. *Information, Communication & Society, 20*(4), 513–529.
- Bene, M. (2017b). Sharing is caring! Investigating viral posts on politicians' Facebook pages during the 2014 general election campaign in Hungary. *Journal of Information Technology & Politics*, 14(4), 387–402.
- Bene, M. (2021). Topics to talk about. The effects of political topics and issue ownership on user engagement with politicians' Facebook posts during the 2018 Hungarian general election. *Journal of Information Technology & Politics*, 18(3), 338–354.
- Bene, M., Ceron, A., Fenoll, V., Haßler, J., Kruschinski, S., Larsson, A. O., Magin, M., Schlosser, K., & Wurst, A. K. (2022). Keep them engaged! Investigating the effects of self-centered social media communication style on user engagement in 12 European countries. *Political Communication*, 39(4), 429–453.
- Bodó, B., Helberger, N., & de Vreese, C. H. (2017). Political micro-targeting: A Manchurian candidate or just a dark horse? *Internet Policy Review*, 6(4), 1–13.
- Bossetta, M. (2018). The digital architectures of social media: Comparing political campaigning on Facebook, Twitter, Instagram, and Snapchat in the 2016 US election. *Journalism & Mass Communication Quarterly*, 95(2), 471–496.
- Bossetta, M., Dutceac Segesten, A., & Trenz, H. J. (2017). Political participation on Facebook during Brexit: Does user engagement on media pages stimulate engagement with campaigns? *Journal of Language and Politics*, 17(2), 173–194.
- Budge, I., & Farlie, D. J. (1983). Explaining and predicting elections: Issue effects and party strategies in twenty-three democracies. Allen & Unwin.
- Burkell, J., & Regan, P. M. (2019). Voter preferences, voter manipulation, voter analytics: Policy options for less surveillance and more autonomy. *Internet Policy Review*, 8(4), 1–24.
- Deseriis, M. (2020). Two variants of the digital party: The platform party and the networked party. *Partecipazione e Conflitto*, 13(1), 896–917.
- Do, S., Ollion, É., & Shen, R. (2022). The augmented social scientist: Using sequential transfer learning to annotate millions of texts with human-level accuracy. *Sociological Methods & Research*, *53*(3), 1167–1200.
- Dommett, K. (2019). Data-driven campaigns in practice: Understanding and regulating diverse data-driven campaigns. *Internet Policy Review*, 8(4). https://doi.org/10.14763/2019.4.1432



- Dommett, K., Barclay, A., & Gibson, R. (2023). Just what is data-driven campaigning? A systematic review. *Information, Communication & Society*, 27(1), 1–22. https://doi.org/10.1080/1369118X.2023.2166794
- Dommett, K., & Power, S. (2019). The political economy of Facebook advertising: Election spending, regulation and targeting online. *The Political Quarterly*, 90(2), 257–265.
- Ennser-Jedenastik, L., Gahn, C., Bodlos, A., & Haselmayer, M. (2022). Does social media enhance party responsiveness? How user engagement shapes parties' issue attention on Facebook. *Party Politics*, 28(3), 468–481.
- Farkas, X., Burai, K., & Bene, M. (2024). Shocking experience: How politicians' issue strategies are shaped by an external shock during campaigns. *Politics and Governance*, 12, Article 8077. https://doi.org/10.17645/ pag.8077
- Gerbaudo, P. (2019). The digital party: Political organisation and online democracy. Pluto.
- Gerbaudo, P. (2021). Are digital parties more democratic than traditional parties? Evaluating Podemos and Movimento 5 Stelle's online decision-making platforms. *Party Politics*, *27*(4), 730–742.
- Gerodimos, R., & Justinussen, J. (2015). Obama's 2012 Facebook campaign: Political communication in the age of the like button. *Journal of Information Technology and Politics*, 12(2), 113–132.
- Heiss, R., Schmuck, D., & Matthes, J. (2019). What drives interaction in political actors' Facebook posts? Profile and content predictors of user engagement and political actors' reactions. *Information, Communication & Society*, 22(10), 1497–1513.
- Ivaldi, G. (2022). Un "cultural backlash" à la française? L'extrême droite et le «retour de bâton» culturel dans l'élection présidentielle de 2022. *Revue Française de Science Politique*, 72(4), 485–514.
- Jolly, S., Bakker, R., Hooghe, L., Marks, G., Polk, J., Rovny, J., Steenbergen, M., & Vachudova, M. A. (2022). Chapel Hill expert survey trend file, 1999–2019. *Electoral studies*, 75, Article 102420. https://doi.org/ 10.1016/j.electstud.2021.102420
- Jost, P. (2023). How politicians adapt to new media logic. A longitudinal perspective on accommodation to user-engagement on Facebook. *Journal of Information Technology & Politics*, 20(2), 184-197.
- Kalsnes, B. (2016). The social media paradox explained: Comparing political parties' Facebook strategy versus practice. *Social Media+ Society*, 2(2), 1–11.
- Kelm, O. (2020). Why do politicians use Facebook and Twitter the way they do? The influence of perceived audience expectations. *SCM Studies in Communication and Media*, 9(1), 8–34.
- Kim, C., & Yang, S.-U. (2017). Like, comment, and share on Facebook: How each behavior differs from the other. *Public Relations Review*, 43(2), 441–449.
- Klinger, U., & Svensson, J. (2015). The emergence of network media logic in political communication: A theoretical approach. *New Media & Society*, 17(8), 1241–1257.
- Koc-Michalska, K., Lilleker, D. G., Michalski, T., Gibson, R., & Zajac, J. M. (2021). Facebook affordances and citizen engagement during elections: European political parties and their benefit from online strategies? *Journal of Information Technology & Politics*, 18(2), 180–193.
- Kreiss, D., Lawrence, R. G., & McGregor, S. C. (2020). In their own words: Political practitioner accounts of candidates, audiences, affordances, genres, and timing in strategic social media use. In L. Bode & E. K. Vraga (Eds.), *Studying politics across media* (pp. 8–31). Routledge.
- Larsson, A. O., Tønnesen, H., Magin, M., & Skogerbø, E. (2024). Calls to (what kind of?) action: A framework for comparing political actors' campaign strategies across social media platforms. *New Media & Society*. Advance online publication. https://doi.org/10.1177/14614448241229156
- Lefebvre, R. (2018). Vers un nouveau modèle partisan? Entre déclassement des partis de gouvernement et avènement des partis-mouvements. *Cahiers de la Recherche sur les Droits Fondamentaux*, (16), 21–30.



Madsen, J. K. (2019). The psychology of micro-targeted election campaigns. Springer.

- Neihouser, M., Figeac, J., & Le Coz, F. (2022). Faire campagne dans Facebook. Une pratique privilégiée par l'extrême droite et les partis émergents. *Politique de Communication*, 19, 55–86.
- Neihouser, M., Haute, T., Von Nostitz, F. C., & Sandri, G. (2022). Les réseaux socionumériques dans la campagne présidentielle de 2022 en France: Diversité des usages, diversité des usager.e.s? *Revue francaise de science politique*, (6), 977–996.
- Pariser, E. (2011). The filter bubble: What the internet is hiding from you. Penguin.
- Peeters, J., Opgenhaffen, M., Kreutz, T., & Van Aelst, P. (2023). Understanding the online relationship between politicians and citizens. A study on the user engagement of politicians' Facebook posts in election and routine periods. *Journal of Information Technology & Politics*, 20(1), 44–59.
- Petrocik, J. R. (1996). Issue ownership in presidential elections, with a 1980 case study. American Journal of *Political Science*, 40(3), 825–850.
- Russmann, U., Klinger, U., & Koc-Michalska, K. (2024). Personal, private, emotional? How political parties use personalization strategies on Facebook in the 2014 and 2019 EP election campaigns. *Social Science Computer Review*, 42(5), 1204–1222.
- Theviot, A. (2016). Les data: Nouveau trésor des partis politiques—Croyances, constitutions et usages comparés des données numériques au Parti Socialiste et à l'Union pour un Mouvement Populaire. *Politiques de communication*, 6, 137–166. https://doi.org/10.3917/pdc.006.0137
- Vaccari, C., & Valeriani, A. (2015). Follow the leader! Direct and indirect flows of political communication during the 2013 Italian general election campaign. *New Media & Society*, 17(7), 1025–1042.
- Vuckovic, M. (2023). Politicizing, personalizing, and mobilizing in online political communication: Drivers and killers of users' engagement. *International Journal of Communication*, 17, 21.

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