

DaTactic, Data with Tactics: Description and evaluation of a new format of online campaigning for NGOs

Pablo Aragón¹, Saya Sauliere², Rebeca Díez Escudero², Alberto Abellán²

¹ Barcelona Media, Spain

² Oxfam Intermón, Spain

Abstract. Social media has emerged as a powerful communication channel to promote actions and raise social awareness. Initiatives through social media are being driven by NGOs to increase the scope and effectiveness of their campaigns. In this paper, we describe the *#DaTactic2* campaign, which is both an offline and online initiative supported by Oxfam Intermón devised to gather activists and NGOs practitioners and create awareness on the importance of the 2014 European Parliament election. We provide details regarding the background of the campaign, as well as the objectives, the strategies that have been implemented and an empirical evaluation of its performance through an analysis of the impact on Twitter. Our findings show the effectiveness of bringing together relevant actors in an offline event and the high value of creating multimedia content in order to increase the scope and virality of the campaign.

1 Introduction

Social media have become a central tool to increase awareness of social issues and political change. Online social networks have emerged as a channel through which discussion is promoted, supporters and activists are organized and tactics during urban demonstrations and protests are defined. Social media have also become a new paradigm for the creation of collective identities and for sharing alternative storytelling outside traditional offline media through the logic of connective action[2].

This emerging form of activism can overcome academics and users' disappointment with regard to slacktivism - the perception that these tools and their use are too superfluous, superficial or ephemeral[11]. However, the catalytic role of social media in the recent new social movements (e.g. the Arab Spring, the Spanish 15M movement or the Occupy Wall Street movement) is currently being confirmed from a sociological and political point of view[5, 13]. Research carried out from a Social Network Analysis (SNA) perspective on recent mobilizations has allowed to create key concepts and identify clear evidence on networks and communication [6-9]. This knowledge is currently presented under a very technical and academic format, thus restricting activists and social practitioners'

access to this useful know-how for their future advocacy work. Among other objectives, the *#DaTactic* initiative intends to fill this knowledge gap. Our proposal is that the new format of *#DaTactic* is opening a door to social media’s potential for the achievement of social good through collective strategy, in other words, *data science for social good*.

As of October 2014, two editions of *#DaTactic* events have taken place. Organized as “training-action” events, each edition had that double objective. With regard to *training*, the aim is to easily share knowledge about SNA for social action. As for *action*, the objective is to carry out collectively a specific social media process using digital tactics based on the insights regarding digital methods[12]. In that sense, *#DaTactic* aims to offer an entirely new offline/online format for NGOs and activists by using SNA techniques prospectively, informing about digital tactics and reaching out to a broad range of communities in order to obtain a broader scope.

This article will first introduce the origin of the *#DaTactic* initiative. After a brief description of the first edition, this article will focus on *#DaTactic2*, which took place simultaneously in Barcelona and Madrid on May 22, 2014. The action *#OccupyEP2014* intended to show the importance of the European Elections and encourage Spanish citizens to vote by implementing a collective social media strategy. Then, we evaluate if the digital tactics were successful and whether the hypotheses of creating multimedia content and gathering offline profiles to increase online impacts are valid. Finally, we conclude with a discussion about the results obtained from the analysis of *#DaTactic2*.

2 DaTactic: Data with tactics

2.1 Context and origin: *#DaTactic1* / *#LaAyudaImporta*

In November 2013, Oxfam Intermón¹, in collaboration with the Outliers collective², began to explore the digital sphere concerning Cooperation and International Development in Spain. Inspired by Internet research methodologies designed by the Digital Methods Initiative³ of the University of Amsterdam, the research consisted in identifying social network structures and dynamics, as well as subjects of debate in different social media channels related to the issue. Some of the findings of digital research were significant and the *#DaTactic* team determined that they could shape a more strategic and tailor-made social network.

The idea to organize a *#DaTactic* emerged from that scenario, based on the team’s willingness to give back to these communities the processed data and share knowledge on best practices in social media (in the context of “open” philosophy). On April 8, 80 persons coming from different cities joined in Madrid for a face-to-face encounter. The first event was totally experimental but the

¹ <http://www.oxfamintermon.org/>

² <http://outliers.es/en>

³ <https://www.digitalmethods.net/Dmi/DmiAbout>

action *#LaAyudaImporta* was successful in reaching new audiences, becoming a trending topic in Madrid and Spain⁴ and catching the attention of some major politicians. Then, the audience showed interest in participating in a new edition of *#DaTactic* and the 2014 European Parliament election was targeted as the next scenario.

2.2 Strategy and Tactics: *#DaTactic2* / *#OccupyEP2014*

On May 22 - three days before the European Election Day in Spain - the second edition of *#DaTactic* (*#DaTactic2*) took place simultaneously in Madrid and Barcelona. With over 100 offline participants in the two cities, the overall objective was to increase Spanish citizens' votes for the European Elections. At that time, the elections surveys indicated a rate of abstention around the 70%. Prior to the event, participants were invited to collaborate in the elaboration of a clear narrative to reach this objective. Two main lines were identified to effectively communicate and convince Spanish citizens about the importance of the election.

First, the team sought to provide information about the importance of the European Parliament (after the Lisbon Treaty) and the impact of European Union decisions in daily life. Many significant decisions (e.g. Transatlantic Trade and Investment Partnership) are made at a European level that is distant from citizen control and awareness.

Second, at a more domestic level, the team sought to inform that voting in the European election could change the current - and highly criticized - two-party Spanish political rotation. European election formula would reflect political diversity more faithfully than the system established for Spanish general election. In order to achieve this goal, the participants carried out political analyses of the lists of candidates and their political proposals to provide citizens materials and information to help them in their vote decision. The participants also included images and data visualizations along with this information in order to communicate the potential impact of voting more effectively⁵.

Finally, to foresee the network behaviour and define tailor-made digital tactics, the team carried out a series of analysis on Twitter data. Conversations concerning the European Elections were mapped through hashtags such as *#EP2014* and some critical ones⁶.

#DaTactic2 followed the double objective mentioned above: *training* and *action*. On the one hand, the *training* approach consisted in two sessions focused on management of social media communities, how to carry out real-time monitoring of an online campaign with tools like NetVizz[3] and Gephi[1], and how to evaluate Twitter actions in a strategic way. On the other hand, the *action* approach was designed to raise awareness on the importance of the European

⁴ <http://www.trendinalia.com/twitter-trending-topics/spain/spain-140408.html>

⁵ Infographic example: <http://pbs.twimg.com/media/Bn8n1B4CAAEMupH.jpg>

⁶ *#SalDelBipartidismo*, *#sinovotasellosseriesen*, *#AsaltoUE*, *#NoVotisInjusticia*, *#TTIPNoGracias*, *#StoppTTIP*

election. Different groups were organized in Barcelona and Madrid with a specific focus on:

1. Disseminating major European issues
2. Bringing European politics closer to Spanish citizens

The digital tactics set forth in this edition were:

1. Inviting journalists, media and NGOs to the offline event to generate a cohesive community responsible of diffusing the online campaign.
2. Creating multimedia content (mostly images) as part of a viral strategy in order to reach different audiences and counteract to more technical message.
3. Mentioning and questioning politicians to ask their opinion on key European issues or on their political programs.

3 Evaluation

The evaluation of the strategies described above relies on a dataset that consists of 10,424 tweets and retweets. The messages were extracted through the Twitter Streaming API that returned the public messages during 22-30 May 2014 which match the term *OccupyEP2014*, selected as the official hashtag of the campaign. The dataset is composed of 2,945 original tweets (28%) and 7,479 retweets (72%) to the original tweets. 4,044 users were involved in the campaign tweeting or retweeting at least one message. Table 1 shows the number of messages per day revealing that most of them (84%) were produced the launch day.

Table 1. Number of messages per day.

Date (May 2014)	22	23	24	25	26	27	28	29	30
#Messages	8 749	826	334	302	110	27	29	34	13

We analyze the scope of the campaign according to the visibility of the hashtag as trending topic (TT) on Twitter during the launch day. Table 2 shows the length and position of *#OccupyEP2014* in the general/politics rankings of longest TTs for different locations. Data regarding TTs have been extracted from the online website Trendinalia⁷. We only focus on Spanish locations because the hashtag did not become TT in any region out of Spain. The hashtag was visible as a TT in Spain for more than 5 hours and was also TT in most of Spanish locations except for Valencia and Bilbao. In Table 2, we differentiate two rankings (general/politics): the first one is the original ranking from Trendinalia (TTs are sorted by length) and the second one is a subset focused just on political topics. For most locations, *#OccupyEP2014* was the second longest TT related to politics after *#VotandoPodemos*, campaign hashtag of the emerging political party

⁷ <http://www.trendinalia.com/twitter-trending-topics/spain/spain-140522.html>

PODEMOS. We also note that the highest length of *#OccupyEP2014* occurred in the local regions of Madrid and Barcelona. Although these two regions are the largest Spanish cities and presumably the locations with the greatest number of users on Twitter, *#OccupyEP2014* had the greatest scope in the cities which held the two offline *#DaTactic2* events.

Table 2. Length and position of the hashtag *#OccupyEP2014* in the general/politics rankings of the Spanish locations available on Twitter. Data from the cities which hosted *#DaTactic2* offline events are bolded. Source: *trendinalia.es*

Location	Population	General position	Politics position	Length
Spain	46 525 002	13	2	05:25
Madrid	3 255 944	12	2	08:20
Barcelona	1 621 537	16	1	06:05
Valencia	852 208	-	-	-
Seville	703 206	13	2	05:25
Zaragoza	674 317	79	10	00:10
Malaga	568 305	13	2	05:10
Murcia	436 870	26	2	02:20
Palma	401 270	15	2	04:35
Las Palmas	381 847	36	7	01:30
Bilbao	354 860	-	-	-

3.1 Diffusion network structure

To understand the diffusion dynamics of the campaign on Twitter we analyze the retweet-network of the tweets from the dataset. We build a directed graph whose nodes are users and the edges represent users who retweeted tweets from other users (see Figure 1). The weight of each edge indicates the number of retweets between the corresponding adjacent nodes. The resulting graph consists of 3,929 nodes and 6,459 edges. The clustering coefficient of the graph is 0,029.

Then, we apply the Louvain Method[4], a community detection algorithm based on the modularity of the graph, and we identify 61 communities. For each community, we build a sub-graph with the corresponding nodes and the inter-community edges. We calculate the clustering coefficient of each sub-graph and we identify (1) the node with the highest in-degree (HI), (2) if HI participated in the offline *#DaTactic2* event (Madrid or Barcelona) and (3) the type of user HI is (citizen platform, personal account, journalist, politician, ngo, religious platform). The results of the communities formed by more than 10 nodes are presented in Table 3. We observe that, in general, communities whose HI participated in the offline event acquire higher levels of clustering. In fact, the average clustering coefficient of those communities is 0.036 (SD=0.023) while the communities whose HI did not participate in the offline event is 0.009 (SD=0.001). Among these last communities, the only ones with comparable levels of clustering

Table 3. Communities, with more than 10 nodes, detected through the Louvain method (N=number of nodes; E=number of edges; HI: node with the highest in-degree in the community subgraph; HI.P: if HI participated in the offline event; HI.category: category assigned to HI; C.c: clustering coefficient of the community subgraph). The communities whose HI participated in the offline event are bolded.

Id	N	E	HI	HI.P	HI.category	C.c
1	387	386	@AsambleaVirtual	no	citizen platform	0
2	345	537	@jaazcona	yes	personal	0.057
3	334	410	@lidiaucher	yes	personal	0.035
4	294	294	@otromundoesposi	yes	personal	0.029
5	263	267	@itoguille	no	personal	0.007
6	260	381	@fanetin	yes	journalist	0.05
7	211	232	@DRYmadrid	no	citizen platform	0.025
8	188	221	@Partido_X	no	politician	0.031
9	180	199	@AlberAG	yes	personal	0.038
10	156	175	@attacespana	no	ngo	0.04
11	137	201	@frmat	yes	personal	0.089
12	117	118	@15MBcn_int	yes	citizen platform	0.004
13	117	121	@TheTroikaParty	yes	citizen platform	0.016
14	106	117	@AmigosTierraEsp	no	ngo	0.029
15	92	92	@Lineasdefuga	no	personal	0
16	88	88	@Famelica_legion	no	citizen platform	0
17	79	79	@Stop_Monsanto	no	citizen platform	0
18	71	72	@elpidiojsilva	no	politician	0
19	65	69	@serg_manero	yes	journalist	0.013
20	64	66	@PatriHorrillo	no	journalist	0.025
21	53	52	@JovenesIUCM	no	politician	0
22	49	48	@arqueoleg	no	personal	0
23	44	44	@RazonFe	no	religious platform	0
24	38	40	@CeliaZafra	yes	personal	0.03
25	35	34	@elNota_Lebowski	no	personal	0
26	30	29	@Resetgr	no	personal	0
27	12	11	@3Blackhawk	no	personal	0

hypothesis: the tweets with images were more likely to be re-diffused and get viral. In particular, almost half of tweets without images were not retweeted, whereas only 30% of tweets with images received no retweets.

3.3 Mentions to political candidates and potential allies

#DaTactic2 participants mentioned 27 political candidates on Twitter. 8 of them interacted and replied to the questions and 8 non-mentioned politicians used the hashtag to spread their ideas about the European election. In addition, the participants mentioned potential allies to spread the actions.

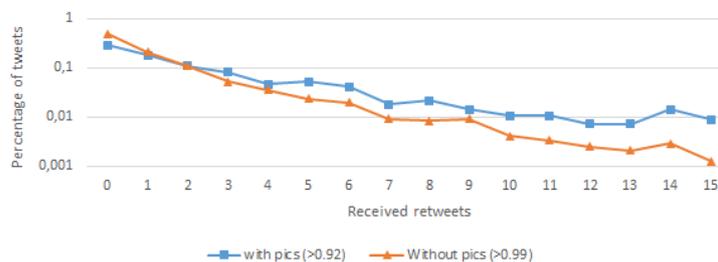


Fig. 2. Distribution of tweets by the number of received retweets.

The allies were organized in three categories:

- 60 profiles related to NGOs (institutional profiles),
- 35 profiles related to media (digital newspapers and blogs)
- 60 profiles related to journalists

The analysis of the dataset reveals that the mentioned profiles on Twitter had a notable rate of collaboration:

- NGOs: 32 profiles were engaged (53%)
- Media: 11 profiles were engaged (31%)
- Journalist: 15 profiles were engaged (25%)

4 Discussion

In this paper we have offered an overview of *#DaTactic*, a new methodology for enabling citizen and NGO initiatives through social media. The results of the evaluation of its second edition have provided valuable insights about the usefulness of the proposed strategies. First, we have confirmed that the communities of users who participated in the offline event exhibited a more cohesive structure. We also note that NGOs communities and networked social movements (e.g. 15M movement) should be taken into account when online campaigns are launched. The event included training sessions as well as specific sessions to prepare contents to be diffused, which were mostly images. The distribution of tweets over the number of received tweets shows that the tweets that contained images were more likely to be retweeted. Consequently, we confirm our hypotheses of creating multimedia content and gathering offline profiles to increase online impacts. Finally, although most politicians ignored the mentions on Twitter related to *#OccupyEP2014*; we report that NGOs, media and journalists are valuable actors to increase the visibility of online campaigns.

Acknowledgements

We would like to thank Tamara Izko for her valuable suggestions that helped to improve the manuscript.

References

1. M. Bastian, S. Heymann, M. Jacomy, et al. Gephi: an open source software for exploring and manipulating networks. *ICWSM*, 8:361–362, 2009.
2. W. L. Bennett and A. Segerberg. The logic of connective action: Digital media and the personalization of contentious politics. *Information, Communication & Society*, 15(5):739–768, 2012.
3. D. Beyer. Network visualizer (netviz). *Network animation tool*. [http://www.rooftop.com Research and Development page](http://www.rooftop.com/Research%20and%20Development/page).
4. V. D. Blondel, J.-L. Guillaume, R. Lambiotte, and E. Lefebvre. Fast unfolding of communities in large networks. *Journal of Statistical Mechanics: Theory and Experiment*, 2008(10):P10008, 2008.
5. M. Castells. *Networks of outrage and hope: Social movements in the internet age*. John Wiley & Sons, 2013.
6. S. González-Bailón, J. Borge-Holthoefer, A. Rivero, and Y. Moreno. The dynamics of protest recruitment through an online network. *Scientific reports*, 1, 2011.
7. P. N. Howard, A. Duffy, D. Freelon, M. Hussain, W. Mari, and M. Mazaid. Opening closed regimes: what was the role of social media during the arab spring? 2011.
8. H. H. Khondker. Role of the new media in the arab spring. *Globalizations*, 8(5):675–679, 2011.
9. G. Lotan, E. Graeff, M. Ananny, D. Gaffney, I. Pearce, et al. The arab spring— the revolutions were tweeted: Information flows during the 2011 tunisian and egyptian revolutions. *International Journal of Communication*, 5:31, 2011.
10. S. Martin, W. M. Brown, R. Klavans, and K. W. Boyack. Openord: An open-source toolbox for large graph layout. In *IS&T/SPIE Electronic Imaging*, pages 786806–786806. International Society for Optics and Photonics, 2011.
11. E. Morozov. *The net delusion: The dark side of Internet freedom*. PublicAffairs, 2012.
12. R. Rogers. *Digital methods*. MIT Press, 2013.
13. J. Toret, A. Calleja, Ó. Marín, P. Aragón, M. Aguilera, and A. Lumbreras. Tecnopolítica: la potencia de las multitudes conectadas. el sistema red 15m, un nuevo paradigma de la política distribuida. *IN3 Working Paper Series*, 2013.