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PERCEIVE
Perception and Evaluation of Regional and Cohesion Policies by Europeans and Identification with the Values of Europe

Perception and Evaluation of Regional and Cohesion Policies by Europeans and Identification with the Values of Europe

PERCEIVE

GA nr. 693529

D 3.3 'Descriptive report on the specific role of new media in EU financed projects' communication strategies'

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0 Executive summary

0.1 Introduction

In this report, we inquire the **role of new social media** as a communication tool of EU Cohesion Policy[1]. Practitioners in the field of public policy communication in general and Cohesion Policy in particular[2] tend to agree on the need to increase the prominence and effectiveness of new media as **key channels** of strategic communication of both central institutions and national/local managing authorities.

Social media in particular tends to be associated with the possibility of reaching the youngest population (see for example the results of our interviews and survey in PERCEIVE Deliverables 3.1 and 3.2). However, their **potential impact** on communication strategies goes much beyond this point and encompasses **changes in the segmentation of target audiences** (i.e. communities rather than the general public) on the one hand, and in the **way Cohesion Policy 'stories' are told** on the other hand (i.e. interactivity with audiences).

In spite of the potential impact of new and especially social media on strategic policy communication, based on our experience in the field as well as on a review of both academic and practice-oriented literature, we argue that much is still to be learnt about how to realise this potential. This is especially true given the scarce attention of academic research to the specificities of Cohesion Policy, among other public policies.

Therefore, in order to extend current knowledge on the communication issues highlighted above, we present the results of empirical analysis we have performed with the aim of describing the **new (social) media presence** of different **key actors** in the institutional field of **EU Cohesion Policy communication** in the current report.

The empirical study

We have analysed data from different new media channels. In particular, we aimed at providing an initial description of:

1) basic dimensions of key actors' (i.e. Local Managing Authorities, shortened to LMA in the following, and international institutions) presence on **Facebook**, including for instance:
   a) the amount of activity (i.e. *posts*) and responses (i.e. *likes*) generated on their Facebook pages,
   b) the contents of the most '*liked*' *posts* and *comments* on the same pages,
   c) the opinions (i.e. sentiments) associated with the topics mostly used by the *posts* and *comments* respectively;
2) basic dimensions of Cohesion Policy discourse on **Twitter,** including for instance:
   a) the most popular (i.e. re-tweeted) tweets and users vs. the most active ones (i.e. tweeting more actively than the rest) or the most popular *hashtags* (keywords) vs. *mentions* (other users),

1The objective of the inquiry has been broadened in respect to the original focus on how projects communicate. This is because over the course of previous Deliverables in this working package (3.1 and 3.2) we have learnt that strategic communication activities related to Cohesion Policy are carried out at higher levels, such as for example by Local Managing Authorities as well as national and international programmes.

2 See for instance the agenda of most recent INFORM meetings: http://ec.europa.eu/regional_policy/en/policy/communication/inform-network/events/.

b) basic structural characteristics (i.e. strongest links and most central nodes) of the interaction network elicited from the re-tweeting behaviour of users,
c) events that correspond to high-points of time-dynamical usage (i.e. peaks in the distribution of daily tweets).

0.2 Main findings and policy implications

Our findings span across several different aspects of communicating EU Cohesion Policy through social media and hold potential implications to improve existing communication efforts. While a more extensive discussion of results is to be found in section 4 of this report, in the remainder of the current section, we briefly discuss the main findings concerning two core topics: a) LMAs communicating on Facebook, and b) the policy discourse unfolding on Twitter.

LMAs on Facebook

Our descriptive analysis of LMAs' Facebook pages indicates heterogeneous results regarding the extent and modalities of use across different national case studies. On the one hand, we have observed cases of unrealised potential: these include LMAs without a dedicated Facebook page for EU Cohesion Policy, or no Facebook page at all. While discourse does not arise in the first case, communication - even if present in the latter - is diluted; mixed together with the many other topics present in the pages.

Hence, a first implication to improve communication through social media concerns focus. In other words, it seems fundamental for the LMA to have dedicated social media accounts focusing on EU Cohesion Policy. In what is probably the 'best case' observation of our study, there is not only a dedicated account, but also a dedicated organisational unit for Cohesion Policy and social media.

However, this alone does not ultimately lead to success. In fact, many cases we have observed indicated that LMAs have dedicated Cohesion Policy accounts, but use them in the sense of a 'static website' in the spirit of web 1.0 rather than in the sense of social media. So, in spite of the fact that LMA Facebook pages can certainly be informative regarding the policy rationale or accomplishments, they seemingly fail to activate interaction with external audiences. This is typically the case in Facebook pages where the number of posts largely exceeds the comments, or where the amount of likes is rather low.

Here the implication for policy communication enhancement is a change in the communication approach. More specifically, this entails incremental movement from a perspective informing the public to one more focused on active community-building and interaction.

A particular case is that of LMAs targeted by complaints regarding fund management or various other concerns. This is not to be understood as a negative condition a priori, but it is important for policy communicator to be aware of how to deal with 'bad publicity' in the specific context of social media. After all, the use of social media is not merely associated with advantages, but comes at a certain cost, in which Euroscepticism in connection with the safety of anonymity or physical remoteness might pick up steam on Facebook (or Twitter).

Another important aspect concerns the differences in terms of sentiments characterising different discussion topics. Our results in this area highlight a difference in the tone of communication

between LMAs and their external audiences. In more detail, the language of LMAs seems to be less characterized by sentiments and more positively connoted than those of external audiences. Also, we noticed that the ratio of neutral vocabulary was higher in cases in which LMAs dealt with relevant external criticism when compared to cases not exhibiting complaints.

In this vein, we suggest that for the EU to get "out of the ivory tower" important steps would have to be taken regarding embracing the 'emotional' logic and language of social media. This, of course, is a complex topic potentially linked to to the very identity and perceived societal role of institutional organizations, both of which rest on the values of neutrality and impersonality. While the solution of this issue goes beyond the scope of this report, it is still worth mentioning that more efficient solutions must be found for traditional institutions when dealing with emotional communication unfolding in the social media sphere. The observed use of neutral vocabulary in cases where major complaints emerged might very well head into in this direction.

Cohesion Policy discourse on Twitter

As regards Cohesion Policy discourse unfolding on Twitter, many of our jointly interpreted results indicate that the dialogue potentially remains rather 'closed' and 'self-referential'. The boundaries of social discourse remain quite clearly defined by institutional accounts. In other words, the most active actors producing and reproducing contents are institutional organisations or their spokespersons. Here, a crucial point in order to enhance communication through social media concerns the identification of practices and events helping social media to push the boundaries of the institutionally defined field (i.e. officers and practitioners only) to involve more private citizens and organisations on the one hand, as well as traditional media on the other hand (see for instance the recent feature of a tweet by the European Commission on CNN[3]). Particular mentions should be made regarding the absence of national and regional politicians in differently determined clusters of the most active actors.

On the bright side, there seems to be potential to expand the number of actors more actively involved in discourse about EU Cohesion Policy. This can be accomplished by mobilising the large base of 'occasional' contributors to the debate. In fact, we found that more than 60% of Twitter users in our sample only tweeted once, while 90% of them tweeted less than 10 times.

Therefore, a policy indication would be to change the focus from top-down communication departing from institutional centres to community-building communication departing from influencers. Also, it seems that the importance of private citizens with an interest in EU Cohesion Policy has been overlooked so far. Indeed, we believe that changing the boundaries of this system of roles in which institutional actors do not engage with private individuals entails another important step. However, we also see the potential drawbacks for institutional accounts engaging in a social media debate – i.e. re-tweeting other institutional actors might grant 'political correctness' not given with private accounts. Still, further viable ways of engaging can be thought of – i.e. asking and answering questions instead of the more passive act of re-tweeting.

As regards time dynamics we have observed that peaks of activity (both in view of tweeting and re-tweeting) are often linked to EU Cohesion Policy-related events. While the often comprise a diverse audience of stakeholders, many of them are not openly available to the general public. Regarding

3 The article can be found here: http://edition.cnn.com/2017/12/20/europe/poland-eu-punishment-judicial-reforms-intl/index.html.

the largely institutional networks (i.e. re-tweets largely linked to institutional actors referencing one another), communication might profit from opening up the discussion and increasing (re-)tweeting activities around more citizen-centred events.

The current use of social media however certainly shows potential to 'build the bridge' between the EU and its citizens. In fact, twitter activity around the 7th EU Cohesion Forum from June 26-27, 2017 for instance has lead to #CohesionPolicy trending in Belgium – potentially reaching citizens who had never heard about Cohesion Policy, structural funds, or benefits to their region before.

1 Status of the art

In this section we provide a non-comprehensive literature review on communicating policy using new, and more specifically, social media. The reviewed contributions are organised according to the field of literature, namely practitioner -oriented and academic contributions.

With a view to the nature of this report, **practice-oriented literature** geared towards the use of new media by the European Union was of particular interest. A quick study of recent consultancy reports and think-tank papers indicated a generally positive outlook and thus, recommendations towards using new, and in particular, social media – best summarised through the call to "come out of the ivory tower of Europe" (Futurelab Europe, 2014). To this end, the advantages of social media over traditional outlets are emphasised: such as moving the EU closer to where the citizens are – Facebook and Twitter – and making use of the two-way communication structure these channels offer – through leaving comments, likes, and/or befriending or following one another. In this way, the process of receiving valuable feedback is accelerated as interaction and engagement become evident at a single glance. And indeed, many advisory papers make use of these (and other) figures to demonstrate the benefits. These include, inter alia, growing numbers of households with a broadband connection, of Twitter and/or Facebook followers, or of likes/comments/re-tweets. More than that, the mining of social data is recommended (e.g. Delancray & Lorthiois, 2014) to advance responsiveness and comprehend citizens' needs.

While advice is seemingly centred on recommendations to 'jump onto social media', the showcasing of advantages rather than specifying the means of implementing social media in the respective communication strategy is emphasised. Certain advisory reports however refine this through the identifying of **stages in the implementation of social media strategies**: Delancray & Lorthiois (2014) for instance describes the *early stage* (organisations having social media accounts and using it to share their messages), the *developing stage* (organisations monitoring and their social networks), and the *maturing stage* (organisations actively engaging with social media users), all of which include respective objectives as well as KPI areas.

Special emphasis emerges regarding **targeting young Europeans**: commonly denoted 'digital natives', the youngest audiences are described as natural target groups of social media, while citizens of higher age groups are generally targeted through traditional media. Certain voices however emphasise the changing demographics of social media, linking it not exclusively to younger audiences, but as a channel of **reaching European citizens of higher age groups or professional journalists** (e.g. Futurelab Europe, 2014).

Academic literature provides similar insights into the use of social media, albeit from a different perspective: in a very broad categorisation, we distinguish literature as taking either a *political* or a *strategic* focus on communication. While we encountered both forms, it appears as if social media in particular has been predominantly studied from a **political communication**-perspective. This, for one, has been the case on different levels: the use of social media by European institutions, by national representatives of EU institutions, or by national and sub-national political figures and institutions. Political communication has however also been studied from different viewpoints, that we broadly distinguish between content (What is the actual use of social media by political representatives?) and citizen participation (e.g. How is the use of social media received? Which topics receive the most attention?) (for a similar, yet more defined categorisation, see Bryer, 2013). This is mirrored in the chosen methodology: while the content of political communication is analysed through the properties and topics of posts, 'acceptance' or 'success' is often measured through the means of sentiment analysis (along with the frequency or amount of citizens' reactions).

Gausis (2017) for instance analyses the use of social media by European institutions: more specifically, he reviews the content of four social media accounts (including Facebook and Twitter) of the European Parliament with a view to the notion of European citizenship in media catered to the youth, and feedback generated by the youth (in terms of involvement). By investigating content (e.g. the use of visual material or tagging), messages (e.g. sense of belonging, citizens' rights) and feedback indicators (e.g. likes, shares, comments), the author shows that, for now, the **possibilities in developing the notion of European citizenship are limited.**

Rather than depicting general policy communication, literature has largely focused on social media use in campaigns and **how social media** (mostly Twitter and Facebook) can **anticipate election results or voting behaviours**. In this vein, literature is also often concerned with the voices of **individual politicians** or political **parties** (Usherwood & Wright, 2017) standing for election (e.g. Ceccobelli & Siewert, 2016) – creating the possibility to compare contrasting individuals or groups. In the case of the latter, Usherwood and Wright (2017) explore the use of social media during the **UK referendum** by analysing the three major groups (Stronger In, Vote Leave, and Leave.EU) in terms of content and framing. More specifically, through descriptive statistics (e.g. twitter follower growth, number of tweets per group, number of re-tweets per group) as well as the groups' tweets by theme, positively and negatively framed tweets per group, as well as negative mentions of other groups, the authors conclude that **Leave groups were largely shaping the debate**; leaving a 'larger footprint in the Twitter-sphere'.

Nulty, Theocharis, Popa, Parnet, & Benoit (2016) somewhat similarly investigate the **social media campaigning during the 2014 European Parliament elections** using Twitter by inquiring the overall tweet volume, tweets per day, or hashtags co-occuring with the name of candidates; but also more refined indices such as the communication patterns of social media and the content of social media communications (are the **statements made pro- or anti-EU?**).

Strategic aspects of communication, in the sense of strategic choices made within the communication process of social media, have received less attention in our literature sample. Examples thereof are not explicitly linked to policy communication, but the social media presence of government institutions in general. For example, Hofmann, Beverungen, Räckers, & Becker (2013) analyse 'what makes local governments' online communication successful?' by emphasising the fact that **merely moving onto** – what they call – **social networking sites (SNSs) will not lead to success**. Instead, **the 'how to' gains** in value. By laying down **actions and measurements of exploitation**, the

authors elaborate a coding scheme comprising: the **provision of current information** (e.g. through the frequency of posts, comments, topicality of posts), **marketing** (e.g. reference to government services), **co-design** (e.g. government requests for citizen involvement, polls), **transaction** (e.g. link to government websites), and **multi-media features** (e.g. posts including pictures, video files). By employing these in a sample of the Facebook pages of the 25 largest German cities, and contrasting them with notions of success (citizens' reactions in terms of frequency and polarity), the authors describe the most successful social media activities including practice-oriented recommendations. These comprise the use of multimedia features (pictures and videos), the provision of one platform, as well as a balance of describing leisure activities (which receive more likes) and government activities (which are more often less positively received). The authors also recommend the use of social media for **more than the mere provision of information, but for matters of co-design, or marketing**.

We conclude that, in general, **practice-oriented literature** makes a recommendation for the EU (and further governmental institutions) to move onto social media – especially by highlighting its advantages over traditional media – albeit indications regarding the implementation process of social media are made to a lesser extent. **Academic literature** centres on content (with a view to the channels used to what extent) and citizen participation (often descriptive in terms of the amount or frequency of comments/likes, but also in terms of sentiment and how well received certain topics are). A prevalence regarding political communication was observed, in which the comparison of certain groups (political parties, politicians running for office) in terms of social media presence or reception by the general public was put in relation to election results.

Less emphasis is placed on strategic aspects of communication, and the deliberate choice of certain communication elements to shape public opinion. While there is academic literature on policy communication through **storytelling** (i.e. Shanahan, McBeth,& Hathaway, 2011, 2013; Jones, 2014), storytelling using new, or social media has not been investigated to a large extent.

In summary, combining the reviewed literature with the knowledge we have acquired so far (through previous Deliverables and participating at activities in the field of communicating Cohesion Policy), we understand **that the main issues to be further inquired in this report** in order to provide insight on how to better communicate through new media are the following:

a) quantifying and qualifying the social media presence of given key actors in the field (i.e. policy implementers such as the LMAs),

b) assessing the boundaries (i.e. who is a member) as well as the internal relevancy (i.e. who is referred to more often than the rest) of "all" relevant actors participating in the discourse that ultimately constitutes this field,

c) providing basic qualifications of contents (i.e. topics and keywords) circulating in the field,

d) describing the interactivity (i.e. social networks) of institutional actors as well as their dialogue (i.e. production and reproduction of contents),

e) describing the basic time dynamics elicited by the actors' use of the main social media platforms (i.e. Facebook and Twitter).

After having stated the rationale of our report, in the following, we will provide a description of both the data gathered and the analyses made before moving to the findings.

2 Methodological note

2.1 Data

An extensive description of our social media datasets as well as of the methods of collecting them has been provided in Deliverable 5.2. Therefore, we only provide a short description here.

In short, we have collected data for analysis in this report from two main sources: Facebook and Twitter.

As regards Facebook, we have retrieved contents from the respective pages of:

- the 8 LMAs in the PERCEIVE case study regions (distributed over 6 countries)
- The following 6 EU institutional programmes/projects
    - EU Regional Policy
    - Interreg Europe
    - Assembly of European Regions
    - European Committee of Regions
    - Interreg Central Europe
    - PERCEIVE Project

In total, this amounted to 35.328 posts, 18.946 comments and 149.767 likes.

As regards Twitter, we have retrieved tweets and re-tweets by using two search strings: an institutional one (based on a collection of hashtags and accounts) and a discursive one (based on Cohesion Policy keywords). For the purposes of the current analysis we only analysed data from the institutional string, which exhibited a lower level of "noise" (i.e. non-policy-related discourse).

The afore-mentioned institutional search string was composed of the accounts and keywords indicated in Table 1 below.

We downloaded data twice a week over June and July 2017 and collected, in total: 42.778 tweets (again, referring to the institutional search string). Out of the 42.778 tweets captured, 13.341 were original tweets, while 29.387 were re-tweets. The average number of re-tweets for each tweet was 17.55, with a median of 5.

Table 1 – Hashtags and accounts composing the search string used for data collection on Twitter

Hashtags	Accounts
#InterregYouth	@EU_Regional
#interreg	@EU_CoR
#EUinmyRegion	@RegioEvaluation
#CohesionPolicy	@RegioInterreg
#euregions	@INTERREGTweets
#ilovetheeu	@interregeurope
#FutureOfEurope	@europeanregions
#FutureCohesion	@CoR_President
#euregions	
#EUFunds	
#ESF	
#ERDF	
#DGregio	
#NUTS2	
#interact	
#ESPON	
#ESPON2020	
#URBACT	

2.2 Analysis

A variety of descriptive techniques (both qualitative and quantitative) has been used in order to disentangle the relevant aspects of communicating Cohesion Policy using new media. More specifically, we started with a general description of the LMAs' Facebook pages, then we performed a sentiment analysis regarding the content of the topic models derived from the same source. Then, we used both social network analytical and standard descriptive statistics in order to describe both social and content layers of discourse on Cohesion Policy on Twitter. All our analytical steps are described in more detail in the remainder of this section.

General description of LMAs' Facebook homepages

First of all, we wanted to provide a basic description of the Facebook presence of LMAs given the centrality of these actors in Cohesion Policy communication. Hence, we looked at a number of characteristics of the Facebook pages created by Local Managing Authorities (if any, as our case study sample for the UK did not employ a Facebook channel) in the case study regions of the PERCEIVE project, as well as by EU institutional organisations and projects (i.e. EU Regional, Interreg, AER, CoR) whose importance for communicating Cohesion Policy emerged in previous Deliverables (see Deliverables 1.1, 3.1, 5.2, and 5.3). In more detail, we tried to address the following aspects: a) the general focus of the page (i.e. specific to Cohesion Policy or not); b) the content of the three most "liked" posts and comments in terms of the topics[4] composing them. This qualitative description was

4 Topics have been previously analysed in Deliverable 5.3. At the organisational level, this information is available for LMAs, albeit not for EU institutional organisations.

then complemented with an international comparison over four indicators: 1) posts per year, 2) likes per post, 3) likes per comment and 4) comments per post.

Sentiment analysis of Facebook topics

Once a basic description of the LMAs' Facebook presence was provided, we observed different indices in terms of posts and comments indicating different ways in which LMAs co-produce contents together with their external audiences. We further disentangled these key differences in terms of 'sentiment' potentially attached to the co-produced contents. That is, we wanted to see if contents produced by the LMAs somehow differ from contents produced by their external audiences in terms of positive, neutral and negative words used in the content production.

This task has been performed through sentiment analysis. The main objective of this explorative technique is to assess which opinions, or sentiment, (i.e. positive, neutral and negative) are more associated with the respective text. In this vein, we have analysed the most used topics by posts (i.e. as a proxy for the voice of the LMA) and comments (i.e. as a proxy for the voice of the external audiences) on the Facebook pages of LMAs.

Sentiment analysis is based on *lexicons* – collections of words coded according to sentiment they potentially express. We used several such lexicons in order to strengthen the reliability of our interpretation of results. The VADER lexicon in particular was used for its focus on social media (Hutto & Gilbert, 2014) while Liu was used for its diffusion in social sciences as well as presence in the literature we reviewed (Hu & Liu, 2004). While the two abovementioned lexicons are widely used in social sciences, the only provide lists of positive and negative words. Therefore, with the main issue of wanting to include neutral words, we used two extra lexicons: Sentic Net 4 (Cambria, Poria, Bajpai, & Schuller, 2016) and Subjective Clues (Wilson, Wiebe, & Hoffmann, 2005).

We did not use the lexicons in bundles with the semantic/syntactic parsers they are usually accompanied with. Instead, we used them as mere codes for individual words. This choice makes sense in the context of our analysis as we wanted to understand the prevalent sentiment of topics elicited before (in Deliverable 5.3), in which topics were constituted by bags of words (therefore missing the textual context needed for parsers to work).

In practice, we have computed the prevalent sentiment of a given topic as a count of the matches between full lists[5] of words constituting the topics and the words forming the four different lexicons coded per sentiment (i.e. positive, neutral and negative). In order to facilitate the interpretation of results we also computed ratios of negative/positive and neutral/positive words as the total number of negative (or neutral) words divided by the sum of positive and negative (or neutral) words.

Twitter Content and Social Network Analysis

In the third and last step of our analysis, we analysed Twitter discourse about EU Cohesion Policy. Together with Facebook, Twitter constitutes one of the main social media channels used in EU policy communication and offers a good opportunity to cover the spectrum of contents and interactions happening through this channel.

5 The topic models we have computed are made of 100 words.

In this section, along with standard descriptive statistics, we used social network techniques and metrics in order to model Twitter data. In more detail, we modelled twitter data referring to the following networks:

- account X hashtag (account x uses hashtag y)
- account X account mention (account x mentions account y)
- account X tweet (account x tweets content y)
- account X account re-tweet (account x re-tweets a tweet produced by account y)

Then, we used the models listed above to describe the following aspects of Twitter as a policy discussion channel:

1) the most active accounts (or users) in terms of both tweeting and re-tweeting,
2) the most frequently occurring hashtags and mentioned accounts overall,
3) the strongest relations in the re-tweet social network,
4) the centrality of users in the re-tweet social network,
5) the time dynamic variation of a number of the indicators above.

All social network analytical metrics we used are standard metrics and can be found in widely quoted handbooks (i.e. Wasserman and Faust, 1994). Here, we provide a simple definition to contextualise their utility in our case. Other descriptive network metrics are directly defined in the section reporting findings of the analysis.

In-degree centrality: is defined as the number of links directed into a node normalised by the maximum number of links. In our study, this measure tends to indicate popularity of a node in a social network – i.e. in a Twitter social network it indicates how influential a focal node is in terms of how often tweets are re-tweeted by others.

Out-degree centrality: is defined as the number of links departing from a node normalised by the maximum number of links. In our study this measure tends to indicate the level of commitment and activity of actors – i.e. in a Twitter social network it indicates how active a focal actor is in terms of generating distinct relations with other actors.

The *betweenness centrality* of node v in a network is defined as: across all node pairs that have a shortest path containing v, the percentage that passes through v. When the data is weighted, the higher the weight, the more value the link has. Accounts that are positioned to broker connections between groups and to bear the influence of one group on another or serve as a gatekeeper between groups are potentially influential in re-tweet networks.

A node is *hub-central* to the extent that its out-links are to nodes that have many in-links. Individuals or organizations that act as hubs are sending information to a wide range of others each of whom has many others reporting to them. In our re-tweet networks this measure seems adequate to explore the extent to which communication is developed from central institutional accounts (with many outgoing re-tweets) to important opinion influencers (accounts with many incoming re-tweets).

The *clustering coefficient* of each node is defined as the density of the node's ego network. In other words it measures the extent to which the neighbours of a focal node are connected with each other. Higher values of this metric indicate more density around a node's ego network. In the context of re-

tweet networks, it might indicate the existence of local groups or communities around particular accounts.

3 Findings

3.1.1 Emilia-Romagna (IT)

Emilia-Romagna does not have a Facebook profile explicitly dedicated to the communication of projects, events and calls related to Cohesion Policy. During our interviews with the communication responsibles for this Local Managing Authority, we were told that this decision depends on the fact that Emilia-Romagna wants to avoid too many channels of communication[6]. In order to communicate ERDF and ESF, the main Facebook page of Emilia-Romagna is used (https://www.facebook.com/RegioneEmiliaRomagna). We downloaded the whole content of this page, which at the time amounted to 41.132 likes[7]. All together, we collected 3.379 posts and 5.210 comments. The first post was published on 27th August 2009. On average, posts generated 27,45 likes, while comments generated 0,6 likes.

Posts

The most liked post received 3.222 likes and was published on the 25th of June, 2016. It is a post that contains a call directed to citizens to protect themselves from mosquitoes and sandflies, together with the video of the campaign: *"Zanzare e pappataci possono trasmettere malattie anche gravi: prevenì la diffusione di questi insetti, proteggi te e i tuoi familiari con alcune semplici azioni. Scopri di più su www.[...]"*. By retrieving the topic descriptions that we discussed in Deliverable 5.3, we can characterise this post: it is composed of 63% of topic 7, 11% of topic 13, and 6% of topic 3. Topic 7 deals with "disinfestations", which fits the top post. Topic 13 was mainly used to describe projects in Calabria, so we find a minor use of this topic probably because this post shares words with projects realised in Calabria. Topic 3 is about health care administration, and is used by this post because of the impact of sandflies on citizens' health.

The second most liked post received 1.873 likes and was published on July 13, 2017. It is a post that launched the 2017 campaign against mosquitoes and sandflies: essentially the same post, but a year later. *"Zanzare e pappataci possono trasmettere malattie anche gravi: prevenì la diffusione di questi insetti, proteggi te e i tuoi familiari con alcune semplici azioni. Scopri di più su www.*[...]". Comprising the same post, it demonstrates the same composition: 63% of topic 7, 11% of topic 13, and 6% of topic 3.

The third most liked post received 1.755 likes and was published on March 15, 2016. It is an advertisement post targeted at launching a new website aimed at reducing waiting lists for healthcare exams: *"Riduciamo insieme i tempi d'attesa per esami e visite specialistiche con tante azioni concrete, e anche con il tuo aiuto. Guarda il video e scopri di più su www.[...]"*. This topic is mostly composed of topic 3, which constitutes 35% of the post, and refers to health care.

6 Please see Deliverable 3.1 for more details.

7 Numbers referring to Facebook throughout the report correspond to the end of July 2017, when data was collected.

Comments

The most liked comments received 31, 27, and 23 likes respectively. The first one was published on November 22, 2016, and is part of a conversation related to the heated debate regarding vaccines: here the commentator refers to someone else, that received less likes, and was complaining because Emilia-Romagna passed a law that would only allow vaccinated children in kindergarten. The commenter, here, explains that vaccines are good for living in a community: *"Ma non capisco, se uno non vuole vaccinare i figli se li tiene a casa. Non è un obbligo assoluto, semplicemente se qualcuno non rispetta le indicazioni di prevenzione di una comunità non può pretendere tutti i servizi".* The main topics for this comment are topic number 9 (20%), which centres on vaccines, and topic 7 (20%), which is about disinfestations. The latter is used here because both mosquitoes and non-vaccinated kids can spread diseases.

The second most liked comment was published on July 23, 2014, and is in support of Emilia-Romagna. The commenter says that despite the existence of problems, the quality of life is high due to the region being administered superiorly than the average: *"In Emilia Romagna sicuramente ci sono problemi e tantissime cose migliorabili. Tuttavia è innegabile che nel complesso sia una Regione dove si vive bene e amministrata molto meglio della media. Chi lo nega o è in malafede o non ha mai avuto occasione di vivere altrove."* The most important topic for this comment is topic 8, which constitutes 35%, and is mainly used by the LMA to promote its success.

The third most liked comment was published on November 23, 2016, and again, is supporting the regional law on vaccines, by directly addressing someone complaining against it: *"[...], mica la obbligano a vaccinare. Semplicemente se non lo fa non può metter a rischio altri bambini andando al nido. Quando va in piscina la obbligano a mettere la cuffia, potrebbe obiettare che basta la mettano gli altri e che lei può non metterla mettendo a rischio solo se stesso. Eppure è obbligatoria per tutti per evitare il proliferare di germi e batteri. Se non vuole mettere la cuffia non si iscrive in piscina ma a basket. Se non vuole vaccinare non va al nido ma prende la baby sitter."*. Topic 9, on vaccines, constitutes 47% of this comment.

In a nutshell

The Facebook profile of Emilia-Romagna is a lively place with active commenters and readers. Each post receives, on average, 1,54 comments. On average, more than 400 posts a year are published. Yet, news related to Cohesion Policy tends to be obscured by other themes.

3.1.2 Calabria (IT)

Calabria has a Facebook profile that is specifically dedicated to Cohesion Policy: the name of the page is POR Calabria and amounts to 5.569 likes (https://www.facebook.com/PorCalabria/). The first post was published on the 12th May 2016 and over more than a year 428 posts and 339 comments were published – making it a young, but lively profile. On average, posts collects 16,1 likes, while comments collect 0,29 likes.

Posts

The most liked post is the very first one, which collected 132 likes. This post defines the aims of the Facebook profile by welcoming citizens and saying that the page will comprise calls, news, infographics, press releases and videos: *"Benvenuti nella pagina ufficiale del Programma Operativo Regionale Calabria Fesr-Fse 2014/2020. Saranno pubblicati bandi, news, infografiche, comunicati*

stampa e video per un aggiornamento e una condivisione costante sugli interventi e sulle attività del POR. Il futuro è un lavoro quotidiano. E lo raccontiamo, anche qui." The language is non-bureaucratic, and very direct. This post is mainly composed of topic 13 (41%: using structural funds in Calabria) and of topic 12 (31%: Managing Structural Funds in Calabria).

The second most liked post received 99 likes and was published on July 14, 2016. *"La Regione da' il via a 5 nuovi bandi per le imprese! Un contributo significativo per lo sviluppo dell'economia calabrese. Saranno presentati in conferenza stampa domani, venerdì 15 luglio, alle ore 11.30 presso la Sala Oro della Cittadella regionale. #SiPorFare http:[...]"*. The post informs about a public event where five new calls for enterprises will be made. A hashtag is used and a link to the event is provided, together with a description of the link. The post is mainly composed of topic 13 (47%).

The third most liked post was published on the June 1, 2016 and collected 73 likes: *"Sosteniamo le Piccole e Medie Imprese calabresi che investono sull'innovazione. Il primo bando della nuova programmazione 14/20, finalizzato alla concessione di incentivi per l'acquisizione di servizi di consulenza e innovativi, è stato pubblicato sul BURC. Troverete l'Avviso e tutti gli altri documenti sul sito http:[...]". Per la prima volta tutte le procedure dell'avviso saranno digitalizzate. Se i piccoli diventano più forti, tutta la Calabria sarà più Smart. #siPORfare"* It is a very interesting example of communication, as in contains a.) information on the first call for enterprises in the 14/20 program, b.) the description of the call and a link for further information, c.) information on the fact that this is the first time where the call will be managed only digitally, d.) a hashtag, and e.) a picture.

Comments

There are very few comments with several likes. In particular, there is one comment with three likes, and three comments with four likes each. The most liked comment was published on June 21, 2017 and is a polite complaint regarding a call: the commentator specifies that technical details prevented the call from being successful, and gives suggestions for the future: *"Un consiglio per il futuro: la divisione al 50 e 50 tra spese in macchinari ed attrezzature ed altre attività è un'assurdità. Tale limite ha bloccato la presentazione di numerosissimi progetti. Quindi hai voglia a prorogare, il bando non è stato ideato in maniera funzionale per chi deve iniziare una nuova attività. Mi spiace."* Topic 12 on managing structural funds is the most important for the comments, accounting for 26%.

Then there are three comments with four likes each: the first one is a comment by the owner of the page (LMA), published on June 16, 2016. Here the administrator answers to some issues raised by commentators: *"Gentilissimi, le motivazioni sono contenute nel decreto che il Dipartimento competente sta predisponendo. Sarà nostra cura darne massima diffusione e comunicazione appena lo stesso sarà registrato."* This post composed of 51% of topic 12. The second comment, published on July 19, 2016, is a polite critique to the strategy pursued by the LMA: *"Tutto bello, ma...a che serve? Horizon, r&s per imprese innovative, servizi avanzati? Probabilmente non conosco bene il tessuto produttivo calabrese, ma esistono medie imprese innovative (quarto capitalismo) in settori avanzati capaci di sfruttare innovazioni di processo? Secondo me no. Tra l'altro, se ci sono saranno aziende ad alta intensità di capitale, con (poca) occupazione altamente qualificata, inserite in un contesto fortemente competitivo che a stento resiste (ormai sono piccole nicchie) nelle regioni più avanzate d'Italia... Non è che la Calabria ha completamente sbagliato la strategia di fondo con cui attua la programmazione comunitaria? Non è che sarebbe meglio far funzionare i depuratori, affrontare i processi di erosione costiera, rafforzare il Tpl, ammodernare le strade*

statali ionica e tirrenica, puntare su un turismo almeno semestrale, che si intrecci con turismo ecologico e industria agroalimentare? Se volete vi risistemo io la strategia, gratis…". Indeed, this comment comprises topic 13 (using structural funds in Calabria) to 39%. It is a critical comment, but a constructive one. The third comment with four likes is a populist comment, that complains about the "usual suspects receiving all the money": "*Come al solito chi mangia sono sempre gli stessi ……sensa un fine lavorativo".* It was published on January 21, 2017.

In a nutshell

With over 400 posts related to Cohesion Policy in the first year of life, despite being a relatively new page, POR Calabria on Facebook is a well-managed profile, with engaged citizens commenting often. The number of comments per post is lower when compared to Emilia-Romagna, with about 0,8 comments for each post, which still amounts to a high number, if we consider the number of posts published each year. This channel of communication is used by the LMA in a policy-related way.

3.1.3 Burgenland (AT)

For the Austrian region of Burgenland, the Local Managing Authority is Regionalmanagement Burgenland GmbH. Regionalmanagement Burgenland GmbH has a Facebook page (www.facebook.com/rmbgmbh/), where communication activities started in June 2014. The page only has 268 likes. All together, we gathered 578 posts and 68 comments: on average, posts collect 3.76 likes, while comments generate 0,4 likes.

Posts

The most liked post was published on November 24, 2014: it collected 89 likes and is about a quiz to win a board game as christmas present: *"Jetzt schnell noch ein tolles Weihnachtsgeschenk gewinnen. Mach mit beim FB-Quiz und gewinne eins von zehn Brettspielen. Schicke uns eine PN und sag´ uns bis 8. Dez. warum gerade du gewinnen sollst."* The post is accompanied by a picture and is composed of 28% of topic 0, coverage of press announcements, and 28% of topic 4, that refers to specific events.

The second most liked post collected 42 likes and was published on March 25, 2016. It is a job announcement, searching for two employees for the office in Eisenstadt, and is accompanied by a picture. *"Wir suchen für unser Büro in Eisenstadt, Technologiezentrum, zum ehestmöglichen Eintritt zwei MitarbeiterInnen im Bereich Europäischer Sozialfonds! Nähere Infos dazu gibt's auf unserer Website unter www.[…! "* This post is composed of topic 1 (26%), which refers to actors involved in management.

The third most liked topic received 32 likes and was posted on November 13, 2014. The post announces the hiring of a new colleague in the controlling department. *"Wir haben einen neuen Kollegen im Controlling. Seit Montag unterstützt uns […] im Büro Eisenstadt. […] ist unter der Tel […] bzw.. per Mail unter […] erreichbar. Herzlich Willkommen".* His e-mail and phone number are provided, together with a picture. Topic 3, which is about informal settings at work, constitutes 39% of this post.

Comments

There are only four comments with more than one like. The only comment with three likes is posted by the same LMA and celebrates successful results by saying that, according to the Directorate-General for Regional Policy, Burgenland has achieved its funding targets. Funding agencies and RMB have done a good job. *"Lob von der Europäischen Kommission - laut Generaldirektion Regionalpolitik - das Burgenland hat Förderziele (mehr als) erreicht. Förderstellen und RMB haben gute Arbeit geleistet".* It was posted on June 18, 2014 and comprises 49% of topic 13, which is about social funds and cooperation.

Then there are three comments with two likes each. The first one is just a very sad face, *":((((*", published on July 4, 2014. The second and the third are written by the same user. Both are very specific comments on an issue being discussed: one says that "The students answered the questions nicely. ("*Die Schüler und Schülerinnen haben die Fragen toll beantwortet".*)", the other that they "have done what was in our power :-) ("*haben getan, was in unserer Macht stand :-))*". Both are part of the same conversation, and were published on September 22, 2014, with ten minutes between each other. One is mainly composed of topic 19 (33%), and the other is mainly composed of topic 4 (28%), both of which refer to events.

In a nutshell

About 200 posts per year are published by the LMA, but they apparently deal more with its management than with the funds' management. Moreover, they do not create populated discussions: there are only 0,12 comments per post as citizens do not really interact with this Facebook page.

3.1.4Warmińsko-Mazurskie (PL)

Warmińsko-Mazurskie has a Facebook page especially devoted to the communication of projects, events, and calls related to Cohesion Policy (https://www.facebook.com/pg/RPO.Warmia.Mazury). The first post was published on June 14, 2012. We downloaded the whole content of this page that amounted to 24.527 likes, i.e. 1.777 posts and 8.319 comments. On average, posts collects 30,93 likes, while comments collected 0,53 likes.

Posts

The most liked post was published on July, 31, 2013 and is a postcard-like picture of a port with the caption *"To Mazury - no Croatia".* It collected 955 likes. The only text accompanying the post card says "exactly!": *"Dokładnie tak!".*

The second most liked post collected 483 likes and was posted on December 18, 2012. It is similar to the previous one, as this is another picture with the caption *"Warmia i Mazury przepraszaja inne regiony za to, ze sa najpiekniejszym miejscem na Ziemi! ;) Przepraszamy!"* This can be translated as "Warmia and Mazury are apologising to other regions for being the most beautiful place on Earth! ;) Sorry!"

And the third most liked post is similar as well, as is the picture of a countryside, with a caption saying: *"Warmia i Mazury – zawsze pięknie!"*, that can be translated in "Warmia and Masuria - always beautiful!".

Comments

There are interesting interactions on the Facebook profile of Warmińsko-Mazurskie: each post collects 4,68 comments on average, which amounts to the highest index in our sample. All other Facebook profiles collect about one comment per post, or way less, with the only exception of Emilia-Romagna generating 1,54 comments per post, and the Facebook profile of PERCEIVE generating 3,97 comments per post. Yet, on the Facebook profile of Warmińsko-Mazurskie, comments receive a number of likes that is similar to the ones received in the other cases. In particular, there are six comments that received 8 likes each, 11 comments with 7 likes and so on. Focusing on the comments with 8 likes, we see that they were published between May 23, 2014, and October 28, 2015. One of them is published by Mrągowskie Centrum Informacji Turystycznej, a tourist information office, while the other are posted by citizens. Two comments are just emoticons, while the other four focus on touristic related issues: a.) "Warmia and Masuria are paradise on earth, beautiful landscapes, clean water in the lakes [...]" *("Warmia i Mazury to istny raj na ziemi przepiękne krajobrazy czysta woda nad jeziorami wręcz zachęca do aktywnego spędzania czasu Mostek zasypany śniegiem na szlaku kajakowym rzeki Dajny)*, b.) "Walk in the fields in Piecky :)" *("Spacer polnymi w Pieckach :)")*, c.) *"Olsztyn"*, which is a caption of a picture specifying the place where the picture was taken, d.) "I have something like that :)" *("Mam coś takiego :)").*

In a nutshell

With about 355 posts a year, this Facebook profile is very active. Posts receive attention and a lot of comments by citizens, who engage with the page. The most liked posts however deal with tourism, and are not specifically related to Cohesion Policy calls or substantive information.

3.1.5 Dolnośląskie (PL)

Dolnośląskie, as well as Warmińsko-Mazurskie, has a Facebook page especially devoted to the communication of projects, events and calls related to Cohesion Policy (https://www.facebook.com/RPOWD) – this, however, is where the similarities end. The first post was published on June 10, 2011, and the profile has 2.620 page likes. In about six years, 831 posts were published, that generated only 117 comments. About 138 posts are published per year, with about one comment for every ninth post. On average, posts collects only 2,21 likes, while comments collect 0,33 likes.

Posts

There are three posts that received a lot of likes: all of them are directly linked to opportunities provided by European funds. The most liked post was published on May 13, 2017 and has received 72 likes: *"Dni Otwarte Funduszy Europejskich tuż tuż! A przed Wami 19 maja otwierają się drzwi Impulsu – pojazdu spalinowego Kolei Dolnośląskich. Proponujemy darmowy przejazd, jak również zwiedzanie elektrycznego zespołu trakcyjnego. Wszystko pod okiem maszynisty, który odpowie na nurtujące Was pytania. https:[...]"*. This post advertises the Open Days of European Union Funds. More specifically, the event is about a former vehicle of the Lower Silesian Railways, which will offer a free ride under the supervision of the driver, who will answer questions. This post is mainly composed by topic 1 (37%), which is about the Open days of EU funds.

The second most liked post was published on May 22, 2017, and has received 67 likes. It is a post that advertises classes for students, courses and trainings for teachers, the opportunity to equip schoolrooms and improve the conditions of education in schools and institutions providing general

education thanks to the announced calls for a number of measures. Data on the amount of co-funding and deadlines and a link to a website are provided: *"Zajęcia dodatkowe dla uczniów, kursy i szkolenia dla nauczycieli, szansa na wyposażenie szkolnych pracowni i poprawa warunków nauczania w szkołach i placówkach prowadzących kształcenie ogólne to perspektywy, które pojawiają się dzięki ogłoszonym naborom na poddziałania 10.2.2, 10.2.3 i 10.2.4. Aglomeracja Wałbrzyska, Wrocławski Obszar Funkcjonowania i Aglomeracja Jeleniogórska czuwają – nabór jest już ogłoszony. Ogólna kwota przeznaczona na dofinansowanie to: dla poddziałania 10.2.2 ponad 8,3 miliona złotych, dla poddziałania 10.2.3 przeszło 3,7 miliona złotych, a dla poddziałania 10.2.4 jest to ponad 2,6 miliona złotych! Wnioski można składać w dniach 22.06 - 6.07. Szczegóły na: http:[...]".* Topic 10, on EU grants, comprises 61% of this post.

The third most liked post was published on December 19, 2014 and collected 61 likes. It defines "a great gift for the holidays for Lower Silesians", the fact that "we have RPO WD 2014-2020!" The post announces that "On Thursday evening (December 18), the European Commission and representatives of the Lower Silesian Marshal's Office concluded negotiations on the Regional Operational Programme for the Lower Silesian Voivodship 2014-2020. This means that there are no obstacles for the first funds from over PLN 9 billion that our region will get in RPO WD 2014-20 to start flowing into Lower Silesia. [...]" The original text says "*Wspaniały prezent na Święta dla Dolnoślązaków: Mamy RPO WD 2014-2020! W czwartek wieczorem (18.12) Komisja Europejska i przedstawiciele Dolnośląskiego Urzędu Marszałkowskiego zakończyli negocjacje w sprawie Regionalnego Programu Operacyjnego Województwa Dolnośląskiego 2014-2020. Oznacza to, że nie ma już przeszkód do tego, by na Dolny Śląsk zaczęły płynąć pierwsze środki z ponad 9 mld zł, które nasz region dostanie w RPO WD 2014-20. Chcemy, aby pierwsze konkursy na projekty realizowane w ramach nowego RPO WD zostały ogłoszone już pod koniec drugiego kwartału przyszłego roku - powiedział na dzisiejszej konferencji prasowej Cezary Przybylski marszałek województwa."*

Comments

Both the first and the third most liked comments refer to the vehicle mentioned in the most liked post. A comment that received 3 likes points out that the description in the post is ambiguous, as it is not clear whether it "is finally an internal combustion or electric traction unit? The description excludes itself. Well. People who do not have the slightest idea about the turn write this profile" *("To w końcu spalinowy czy elektryczny zespól trakcyjny? Opis sam siebie wyklucza. No cóż. Piszą ten profil ludzie którzy nie mają zielonego pojęcia o kolei").* Another comment, that received 9 likes, points out that "it is an electric traction unit" ("*Impuls nie jest spalinowy! To elektryczny zespół trakcyjny").* Both comments were written on May 14, 2017, and both are based mainly on topic 18, which is about specific events.

The other most liked comment was published on December 19, 2014, is based mostly (45%) on topic 5, which is about EU funds, and complains that the largest part of the 2014-2020 funds were going to be used in 2015: "*ielki sukces! Środki na lata 2014-2020 będą wydatkowane od 3-4 kwartału 2015 roku. Sukces Polski i administracji.*"

In a nutshell

The Facebook profile of Dolnośląskie is mainly focused on Cohesion Policy. Yet it receives very low attention by citizens both in terms of likes and engagement in discussions.

3.1.6 Agentia pentru Dezvoltare Regionala Sud-Est (RO)

In reference to the Romanian case, we downloaded posts and comments from three sources, which are involved in the managing of EU funds, namely:

- Agentia pentru Dezvoltare Regionala Sud-Est (Sud Est Regional Development Agency)
- Ministerul Dezvoltarii Regionale, Administratiei Publice si Fondurilor Europene (Ministry of Regional Development, Public Administration and European Funds)
- Ministerul Fondurilor Europene (Ministry of European Funds)

The Regional Development Agency for Sud-Est published its first post on August 10, 2015. In about two years 551 posts were published: they generated only 22 comments. The profile has 689 page likes. On average, posts collects only 5,60 likes, while only two comments collected one like each.

Posts

The most liked post was published on August 31, 2016 and collected 36 likes. It announces that a day centre for the therapy of children with autism financed under the Regional Operational Programme 2007-2013 has opened in Galati on August 30. The 700,000-euro investment is being carried out by the municipality of Galaţi in partnership with the Multifunctional Centre for Social Services in Galati (as project beneficiary) and the Ministry of Regional Development and Public Administration (as Managing Authority) and the South Regional Development Agency-Est (as an Intermediate Body for ROP 2007 – 2013). The original post provides a picture and a link to external details as well: *"La Galaţi s-a deschis, din 30 august, un centru de zi pentru terapia copiilor cu autism finanţat în cadrul Programului Operaţional Regional 2007-2013. Investiţia în valoare de 700.000 de euro este realizată de municipalitatea gălăţeană în parteneriat cu Centrul Multifuncţional de Servicii Sociale Galaţi (în calitate de beneficiar al proiectului) şi Ministerul Dezvoltării Regionale şi Administraţiei Publice (în calitate de Autoritate de Management) şi Agenţia pentru Dezvoltare Regională Sud-Est (în calitate de Organism Intermediar pentru POR 2007 – 2013. Sursa: http:[...]"* 30% of this post comprises topic 16, that is about EU funded projects' dissemination, while 28% of the post comprises topic 10 referring to EU funding.

The second most liked post was published on April 18, 2016, and collected 35 likes, and is essentially a press release announcing that the Information Centre for European and National Funding - a helpdesk structure for the potential beneficiaries of structural and investment European funds - was held at the Tulcea County Council headquarters in the presence of Prime Minister Dacian Ciolos, together with other representatives of the central and local government. A photo is provided as well. The original text announces *"Astăzi, 18.04.2016, a avut loc inaugurarea Centrului de informare pentru finanțări europene și naționale - structură de tip helpdesk pentru potențialii beneficiari de fonduri europene structurale și de investiții, în sediul Consiliului Județean Tulcea, în prezența d-lui Prim-Ministru Dacian Cioloș, d-lui Vicepremier, Ministru al Dezvoltării regionale și administrației publice, Vasile Dîncu, d-lui Președinte al CJ Tulcea, Horia Teodorescu, d-nei Ministru al Fondurilor Europene, Aura Raducu, d-nei Director General ADR SE, Luminița Mihailov, alături de alți reprezentanți ai administrației centrale și locale."* The most important topic for this post is topic 5, that accounts for 44% of it, and is about Politics.

Similarly, the third most liked post, which received 33 likes, and was posted on August 9, 2016, is a sort of press release announcing that "today, at the ADR SE headquarters, the working meeting with the representatives of the five county seat villages in the South-East Region eligible to receive funding under Priority Axis 4 - "Sustainable Urban Development" [...] was held. We thank the participants." The original reads *"Astăzi a avut loc, la sediul ADR SE, întâlnirea de lucru cu*

reprezentanții celor 5 municipii reședință de județ din Regiunea de Sud-Est, eligibile pentru a primi finantare în cadrul Axei Prioritare 4 - „Dezvoltare urbana durabila", respectiv municipiile Brăila, Buzău, Constanța, Focșani și Galați. Mulțumim participanților". Topic 16, which is about the dissemination of EU funded projects, amounts to 51% of this post.

Comments

Only two posts received a comment. One is just a tag: one user is tagging another to catch their attention regarding the content. The other one, which was published on April 15, 2016, is a positive comment: "'Lower Danube' has an important role to play in promoting the neighbourhood policy of the European Union by creating an institutional framework for identifying strategic development projects for local communities. Good luck in the future! *("Dunarea de Jos" are un rol important in promovarea politicii de vecinatate a Uniunii Europene, prin crearea unui cadru institutional de identificare a proiectelor strategice de dezvoltare a comunitatilor locale. Succes in continuare!)"*. 23% of this comment is based on topic 7, which is about campaigns for specific projects.

In a nutshell

This Facebook profile appears to be launching press releases mostly. While they are informative, citizens do not seem to engage with this channel.

3.1.7 Ministerul Dezvoltarii Regionale, Administratiei Publice si Fondurilor Europene (RO)

The Ministry of Regional Development, Public Administration and European Funds published its first post on October 10, 2013. In about three years and a half, 4.687 posts were published: amounting to about the relatively high amount of 1,4 thousand posts per year on average. The posts collected 1.339 comments while the profile has 12.968 page likes. On average, posts collects 9,82 likes, while comments receive 0,33 likes.

Posts

The most liked post was published on May 29, 2017 and received 141 likes. It apprises the amount of funding allocated for 112,525 km of county roads in Mehedinti. Then it contains a statement by the deputy Vice Prime Minister Sevil Shhaideh, who signed the agreement: "The contract signed today is particularly important because it also comes in support of the students from Mehedinţi County and the neighbouring counties, [...] this achieves one of the targets set out in the Europe 2020 strategy - to reduce the early school dropout rate to be under 10%.[...]". The original post is: *"Peste 200 de milioane de lei alocaţi din Regio 2014-2020 pentru 112,525 km de drumuri judeţene, in #Mehedinti: cel de-al patrulea contract de finanţare din fonduri europene pentru îmbunătățirea infrastructurii rutiere de importanță regională a fost semnat astăzi de către doamna viceprim-ministru Sevil #Shhaideh, ministrul dezvoltării regionale, administraţiei publice şi fondurilor europene. [...] www.[...]"* It is mostly constituted by topic 10 (52%), which is about EU funding.

The second most liked post is just the cover image for the page, published on January 7, 2017. It has received 91 likes. The third most liked post is the previous cover image, published on December 11, 2016 with 75 likes.

Comments

All three most liked comments are related to EU funding and are not generic comments. A comment published on September 7, 2016 received 8 likes and responds to a a post saying that "technically

speaking the image is on the inside, and the news refers to a systematic out-of-town cadastre". Its most important topic is number 12 (30%), which refers to problems in accessing EU funds: *"tehnic vorbind imaginea este pe intravilan, iar stirea se refera la cadastru sistematic extravilan".*

A comment posted in the same discussion, that received 5 likes, is based on topic 12 (25%). This comment reads that "theoretically speaking, UAT has concluded contracts with OCPI, this does not mean that the UAT has also signed a service contract!" The original comment is: *"Teoretic vorbind UAT au incheiat contracte cu OCPI asta nu inseamna ca si UAT-ul a semnat contract de prestari servicii !!"*

Another comment, which received 6 likes was published on May 26, 2016. This comment is based on topic 1 (28%), referring to complaints asking to accelerate the process of EU funding, and is very technical: "Hello, please answer the questions about the ROP 2.1 launch that is the subject of this conference." *("Buna ziua, va rugam sa raspundeti la intrebarile referitoare la lansarea POR 2.1 care face obiectul acestei conferinte")*.

In a nutshell

The Ministry of Regional Development, Public Administration and European Funds widely uses its Facebook page. There are not many likes per post, when compared to other cases, but it might depend on the high number of posts. Indeed, comments tend to not be generic but focused on Cohesion Policy-related issues.

3.1.8 Ministerul Fondurilor Europene (RO)

The Ministry of European Funds published its first post on February 7, 2013. In more than four years, 1.634 posts were published, which generated 1.143 comments. The profile has 23.027 page likes. On average, posts collect 22,8 likes, while comments receive 0,47 likes.

Posts

The most liked post was published on May 22, 2017 and received 3.559 likes. It regards the announcement of a contest: "Europa blogging contest in my region / Europe in my Region. Write a blog post in any language until June 27, any EU-funded project and you could be one of the four winners invited to the European Week of Regions and Cities in October this year as fully accredited journalist benefiting from courses in mobile and narrative journalism". A link to external details is provided, and hashtags are used. This is the original post: *"Concurs de blogging Europa în regiunea mea / Europe in my Region. Scrieți până la 27 iunie o postare de blog în orice limbă, despre orice proiect finanțat de UE și v-ați putea număra printre cei patru câștigători invitați la Săptămâna europeană a regiunilor și orașelor în luna octombrie a acestui an, ca jurnaliști complet acreditați, beneficiind și de cursuri de formare în domeniul jurnalismului mobil și narativ. Găsiți aici:* http:[...] *regulamentul și detalii despre participarea la concurs. #EUinmyRegion #UEinregiuneamea #fondurieuropene".* It is mostly composed by topic 19, that is miscellaneous, and accounts for 74% of the post.

The second most liked post is about a contest too. It was published on May 24, 2017 and has received 3.369 likes. In the text, a picture and necessary links for the contest are provided: ""Europe in my region" contest - Project hunt. Do you recognize European sites and monuments in this illustration? Participate in the contest and you can win a trip for two people in a European capital to discover EU

projects. [...]". Hashtags are included as well. This is the original post: *"Concurs „Europa în regiunea mea" / "Europe in my Region" – Vânătoarea de proiecte. Recunoașteți în această ilustrație situri și monumente europene? Participați la concurs și puteți câștiga o excursie pentru două persoane într-o capitală europeană, pentru a descoperi proiecte UE. [...] #EUinmyRegion #UEinregiuneamea #concurs"*. 56% comprise topic 19.

The third most liked post was published on June 6, 2016 and collected 1.742 likes. It is the announcement of a concert: "Sunday, May 8th, we are waiting for you in St. Anthony Square to spend the day of Europe together. ANTONIA, NICOLETA NUCĂ And ALB & NEGRU meet you at a super concert starting at 18.00 and we are launching the challenge of participating in a treasure hunt where you can win a trip to one of the European capitals! Sunday 8 May, 18.00-21.00, St. Anton - Old Town Square. FREE ENTRY". It is clearly stated that the project is co-financed by the European Regional Development Fund under the 2014-2020 Technical Assistance Operational Programme: *"Duminică, 8 mai, vă așteptăm în Piața Sf. Anton să petrecem împreună de Ziua Europei. ANTONIA, NICOLETA NUCĂ și ALB&NEGRU vă dau întâlnire la un super concert începând cu ora 18.00, iar noi vă lansăm provocarea de a participa la o vanatoare de comori unde puteți câștiga o excursie într-una din capitalele europene! Duminică 8 mai, 18.00-21.00, Piaţa Sf. Anton – Centrul Vechi. INTRAREA LIBERĂ. Proiect cofinanţat din Fondul European de Dezvoltare Regională prin Programul Operaţional Asistenţă Tehnică 2014-2020."*

Comments

The most liked comment received 11 likes and was published on September 12, 2016. It is a negative comment, going very much into depth: "I sent a budget structure well-structured on categories, partners, activities, with a sheet separate from the UK, on Thursday evening to check the 15%. I have even picked up formulas from one sheet to another. I sent it to: [...] and [...]. Nothing, no answer, of minimal sense [...] This is not possible, no programme in this world is doing this. You constantly put strains on the nerves of hundreds and thousands of people. MySMIS continues to produce "page not found" errors. If you do not prolong calls and catch up with unfinished projects because of this - which we can objectively find with print-screens and dozens of witnesses, expect to receive damages claims for 36-month wages - inaction caused by inaction [...] and I cannot sue you but others will do it". The original reads *"-am trimis de joi seara pe mail o macheta de buget f bine structurata pe categorii, parteneri, activitati, cu sheet separat de RU, ca sa se poata verifica cei 15 %. Am bagat pana si formule de preluare dintr-un sheet in altul. Am trimis la :Cristian Ghinea, Ciprian Necula, Dinu Adam si Dragos Dinu. Nimic, niciun reply, de minim bun-simt, iar vineri ati publicat batjocura aia de cap de tabel! Nu este posibil asa ceva, la niciun program de pe lumea asta nu se procedeaza in halul asta. Va bateti joc constant de timpul, energia si nervii a sute si mii de oameni. MySMIS in continuare produce erorile "pagina nu a fost gasita". Daca nu prelungiti apelurile si ne prinde cu proiectele neterminate din aceasta cauza- pe care o putem dovedi obiectiv cu print-screen-uri si zeci de martori, asteptati-va la procese cu daune cerute pt salariile pe 36 de luni -prejudiciu provocat prin inactiune, pentru sutele de experti care muncesc si de 2,3 luni si nu putin. Amaratii aia din GT din pacate nu stiu si nu va pot da in judecata dar altii or sa o faca.")*. 80% of this comment is constituted by topic 1, which is the topic mostly used by comments, and focuses on the need to accelerate infrastructure in order to obtain approval for European funding for public projects.

Then there are three comments that received six likes each. They were published between May and August 2016 and they all are based on topic 1, as well. All of them are complaints, which specifically

refer to the technicalities of project funding. Or, at least, do not account for generic complaints, but very specific ones. The first one is about the usage of the Facebook profile: "Do not be upset, but I liked this page waiting to read about schedules, guides, projects, etc. ... you are the Ministry of European Funds! It seems to me unacceptable that the only information you posted one day would be two posts with some concerts! [...]" *("Nu va supărați, dar eu am dat like acestei pagini asteptandu-ma sa citesc despre programări, ghiduri, proiecte etc.... sunteți totuși Ministerul Fondurilor Europene! Mi se pare inadmisibil ca singurele informații postate de voi intr-o zi sa fie doua postări cu niște concerte! [...]").*

The second one points out rules supposedly bypassed: "And if we are still talking about transparency: General Terms and Conditions, page 44: "" For the rental of premises the maximum eligible ceiling is 75 lei / sq m / month, including VAT. "". http:[...] In this acquisition we talk about: "" II.8. Estimated contract value: Estimated contract value over a 24-month period: € 3,643,200 excluding VAT. " Mathematics would say that we are talking about 25 euro / sqm without VAT. Also the winning bid is designated based on the "lowest price". Well, is not that why Romania changed the law on public procurement? Why not apply the same rules to everyone?" *("Si daca tot vorbim de transparenta: Ghid POCU conditii generale, pag 44: "" Pentru închirierea de spaţii plafonul maxim eligibil este de 75 lei/mp/lună, inclusiv TVA. "". http:[...] In aceasta achizitie vorbim despre: ""II.8. Valoarea estimată a contractului: Valoarea estimată a contractului pentru o perioadă de 24 de luni: 3.643.200 euro fără TVA."". Matematica ar zice ca discutam de 25 euro/mp FARA TVA. De asemenea oferta castigatoare se desemneaza pe baza ""pretului cel mai scazut"". Pai nu acesta este motivul pentru care Romania a schimbat legea achizitiilor publice? De ce nu se aplica aceleasi reguli tuturor?"*

The third one is complaining about the waste of time: "The guide to reducing school dropout, where is it? Can we submit projects? Two weeks have elapsed since the debate. Is [...] aware of the real situation or are they drafting guides as concrete achievements? [...] *("Si ghidul de reducerea abandonului scolar unde e? Putem depune proiecte? Au trecut 2 sapt de la dezbaterea respectiva. Dl Ciolos stie oare de situatia reala sau i se prezinta drafturi de ghiduri ca si realizari concrete? [...]").*

In a nutshell

This Facebook profile publishes an average number of posts which are directly related to European funds. Citizens' engagement is high, but comments mostly comprise complaints.

3.1.9 Tillväxtverket (SE)

The Swedish LMA's Tillväxtverket's Facebook page (https://sv-se.facebook.com/Tillvaxtverket/) published its first post on February 22, 2012. Since then 540 posts and 380 comments were published on the page that has 2.879 likes. On average, posts collects 10,04 likes, while comments collect 0,87 likes.

Posts

The most liked post led to 137 likes and was published on March 22, 2016 and advertises applications: the second round of Sweden's most promising digital start-ups: *"Du hinner söka till Startup-Sweden! Den 10 april är ny sista dag för att ansöka till den andra omgången för Sveriges mest lovande digitala startups. [...] http:[...]"* This post is composed especially of topic 7 (64%), which emphasises start-ups, and in particular gaming and digital start-ups.

Then, a post published on February 10, 2016 received 87 likes. It comprises an announcement of the same webpage, dedicated to digital entrepreneurs. The ad says that the LMA is pleased to introduce some of its partners such as the PR Newsstand, Almi Invest, and others *("Är du en digital entreprenör? Missa inte att söka till Startup-Sweden senast den 14 februari 2016! Vi är glada att kunna presentera några av våra partners som PR-kiosken, Almi Invest, NorthZone, Industrifonden, Springfield, SynchLaw, Jansson&Norin, Berghs och Mercuri Urval. www.[...]")* This post, also, is especially composed of topic 7 (28%).

The third most liked topic amounted to 76 likes and was published on February 18, 2016. This is a post that advertises other funding opportunities related to the development of sustainable natural and cultural products and experiences for international visitors in Sweden. A link to a website dedicated to this funding opportunity is provided: *"Vill du vara med och stärka utvecklingen av hållbara natur- och kulturbaserade produkter och upplevelser för internationella besökare i Sverige? Då kan du söka projektmedel hos Tillväxtverket. [...]".* The most important topic for this post is topic 6, which accounts for 23% of it, and is dedicated to tourism and growth.

Comments

There are three comments with seven likes each. The first among these three comments was published on July 30, 2012 and is a complaint regarding the "shameful" management of taxpayers' money: "*GD känner inte till skattelagstiftningen vad gäller representation - henne är det synd om, tillika övriga ansvariga chefer i organisationen som inte ens kan läsa innantill. Skamligt handhavande av folkets skattemedel."* Indeed, this comment is composed of 25% of topic 0, that regards misuse of tax money, and of 25% of topic 16 regarding questions from the public on infrastructures and safety.

The second comment with seven likes, published on July 31, 2012, is an attack on Christina Lugnet, the Director General and Head of the Swedish Agency for Growth from 2009-2012. She had to resign after it was revealed in July 2012 that she, in the role of Director General of Tillväxtverket, approved the fact that, from January 2010, it was allowed to spend almost 7.5 million krona on internal seminars and representation, and other 7.5 million krona in internal training and other conferences[8]. The commentator hopes for Christina Lugnet's resignation or for her being fired. Then the comment complains that she spoiled the whole growth effort enacted by business people: *"Avgå Christina Lugnet. Annars hoppas jag du får sparken av ansvarig minister för stöld. Med ert agerande svärtar ni hela tillväxtarbetet, det som vi företagare på riktigt ägnar oss åt hela dagarna genom idogt arbete inom försäljning och leverans. Det känns då genuint ledsamt när ni äter och dricker upp vår bolagsskatt. Och kommentaren om att Grand Hôtel var det billigaste alternativet är ju under all värdighet. Såklart finns det mer prisvärda alternativ. I alla fall i deb värld jag lever i. Avgå nu Christina Lugnet och ta din ledningsgrupp med dig!"* As expected, topic 1, which comprises the misuse of tax money, accounts for 75% of this comment.

The third most liked comment collects seven likes and was published on August, 1 2012 by the same commentator of the previous comment. It is another comment on Christina Lugnet, saying that taxpayers' money were spent on useless luxuries, while normal people are struggling with their lives: *"inte så märkligt att ideella ambassadörer hoppar av, då ni som arbetar heltid sitter på lyxkrog*

8 Source: https://www.dn.se/nyheter/sverige/de-lagger-miljoner-pa-vin-och-middagar/

och super, medan de som gör ett viktigt jobb sliter livet ur sig. Avgå Christina Lugnet!". The main topic for this comment is again topic 1, which accounts for 39% of this text.

In a nutshell

Tillväxtverket publishes about 100 posts per year, which mostly point to external sites and resources for advertisings regarding calls and funding opportunities. Despite the quite high number of comments per post – 0,70 – these posts do not generate a great discussion. Commentators tend to focus on scandals and the misuse of taxpayers' money.

3.1.10 Junta de Extremadura (ES)

In the Spanish case, we downloaded posts and comments from the Facebook profile of Junta de Extremadura. Similarly to the case of Emilia-Romagna, this Local Managing Authority does not have a Facebook profile devoted to communication regarding ERDF and ESF. Junta de Extremadura published its first post on January 20, 2012. In five years and a half, 16.134 posts were published: this means about 3.000 posts a year, which is by far the highest number in our sample. These posts received 4.265 comments, that is 0,26 comments per post. This might appear to be a low number, but this might very well depend on the number of posts. The profile has indeed 18.787 page likes. On average, posts collect 22,03 likes, while comments receive 0,44 likes.

Posts

The most liked post collected 1.001 likes and was posted on June 22, 2017. It is a video accompanied by a small caption saying that more than 50 professionals firemen and 20 vehicles are going from Extremadura to Portugal to help extinguishing fires: *"Más de 50 profesionales extremeños y 20 vehículos parten hacia Portugal como apoyo en el incendio forestal https:[...]".* 28% of this post is composed of topic 12, which is about agricultural and environmental issues.

The second most liked post is a picture post card of Extremadura, published on August 31, 2015. It received 702 likes and the caption reads "Today's postcard of Extremadura is the green landscape of the Sierra de Gata" *("El cartel del Día de Extremadura refleja el paisaje verde de la Sierra de Gata"*).

The third most liked post is a post card to, celebrating Los Barruecos as the best corner in 2015: *"Junta de Extremadura Felicidades a Los Barruecos, desde hoy el #MejorRincón2015 ¡Enhorabuena!"*. It was published on September 10, 2015 and has collected 538 likes.

Comments

The most liked comment is part of a discussion on a high speed train, complaining that the promised railways does not exist yet*: "Y tu que dejastes?una ruina,y donde está el AVE prometido en 2010,deja de decir sandeces y ponte a trabajar".* It was published on July 24, 2015 and has collected 23 likes while it is of 59% composed of topic 16, comprising general complaints.

The second most liked comment was published on August 2, 2016 and collected 23 likes. It is a post by the association 'Fef Folklore de Extremadura' thanking Junta de Extremadura after being awarded the highest award of the Autonomous Community: *"Fef Folklore de Extremadura ¡¡¡¡MUCHAS GRACIAS!!!!! Es el máximo reconocimiento a nuestro trabajo de 32 años. Trabajo altruista y mucho tiempo dedicado a investigar, recuperar, divulgar, difundir, defender, promocionar y mantener vivo nuestro folklore. Nada sería posible sin las 87 Asociaciones de Folklore que formamos la*

Federación Extremeña de Folklore. Hoy sí podemos decir, que el FOLKLORE EXTREMEÑO está de enhorabuena. Gracias a la Junta de Extremadura por concedernos el máximo galardón de nuestra Comunidad Autónoma."

The third most liked comment is a comment from a Portuguese citizen, who affirms to be proud of living near Extremadura: *"Muchas gracias.. Que orgulloso me siento por poder decir que he nacido junto a la frontera (Campo Maior) con España y mas aun con Extremadura. Que orgullo siento por tener tan buenos vecinos y que orgulloso por tener tan buenos amigos en Badajoz y en España. Muchas gracias. Viva a España Viva Portugal."* It was posted on June 22, 2017 and it collected 19 likes.

In a nutshell

Junta de Extremadura has a Facebook profile that is very lively: several posts are published and receive likes and comments. Yet, communication related to Cohesion Policy does not stand out through this channel.

3.2 European Institutional Profiles

Finally, we are analysing posts and comments from six European institutional sources, namely:

- EU Regional and Urban Policy (www.facebook.com/EUinmyregion)
- Interreg Europe (www.facebook.com/interregeurope)
- Assembly of European Regions – AER (www.facebook.com/EuropeanRegions)
- European Committee of Regions (www.facebook.com/European.Committee.of.the.Regions)
- Interreg Central Europe (www.facebook.com/InterregCE)
- Perceive Project (www.facebook.com/perceiveproject)

3.2.1 EU Regional and Urban Policy

The Facebook profile of European Regional and Urban Policy published its first post on February 13, 2015. It publishes about 400 posts a year: 970 posts were published, and they collected 1.027 comments with slightly more than one comment per post. The profile has a high number of page likes, namely 23.440. On average, posts collect the very high amount of 122,34 likes, while comments receive 0,73 likes.

Posts

The most liked post is the announcement of a blog contest, accompanied by hashtags and the link to an external resource: "Enter the #EUinmyRegion #BlogContest and win a training in mobile and #storytelling-based #journalism! Write a blog post in any language about any EU-funded project by 27 June and you might be one of four Winners invited to the European Week of Regions and Cities this October as a fully accredited journalist! Complete information: http:[...]" The post was published on May 23, 2017, collected 7.995 likes, and is mostly composed by topic 15 (43%), which is about contests organised with regard to 'Europe in my region'.

The second most liked post, which was published on March 19, 2015 and collected 6.099 likes is related to a contest too. In this case the post announces that votes are open for a programme celebrating cross-border stories: "The votes are open! Take a look at the photos and captions and "like" your favourite cross-border story in the #EUlovewithoutborders competition here: http.[...]. We're

celebrating 25 years of Interreg, the EU's cross border programme. Voting is open until April 3. The most popular twenty entries (plus 5 wildcards picked by the jury) will compete for the prize: a romantic stay for 2 in the Moselle region. Go for it!"

The third most liked post promotes a blog post on the website of the European Commission. It synthesises it, provides a picture of the author, and asks for comments: "'Organic farming through winegrowers' eyes' by Laura Siepmann for the #EUinmyRegion blogging contest. One aim of organic farming under European legislation is to 'combine best environmental practices, a high level of biodiversity, [and] the preservation of natural resources'. Moreover, a recent study showed that organic farming beats conventional farming in social benefits, profitability, and offers more ecosystem services. Sounds good, right?! What do you think? Rate and Share! http.[...]".

Comments

All three most liked comments are mainly related to topic 11, which we described as dealing with European Politics. More specifically, topic 11, which is mostly used for comments overall, concerns EU political governance under a variety of viewpoints. For instance, discourse in the collected texts spans from the loss of sovereignty of countries to the analysis of the Greek crisis. It is a topic used in discursive fights in comments. And all the three most liked comments are attacks on enterprises and the economic system. They are in reply to the same post and were published between June 16, 2017 and the following day. The most liked comment received 79 likes and reads "Of course it is ... just look at how companies from rich countries exploit poor(er) markets. Germany is the best example, not only in Europe but throughout the world." The second got 46 likes and reads "In what way they give money, if the natural resources are in the hands of western companies? In essence, it's money laundering, you give free money to a corrupt government to buy his silence and grab all the good things from poorer nations for free". The third most liked comment received 36 likes and reads "Not just in countries but in society generally. We cannot give big tax cuts and benefits to the better off and big business and then say we do not have money to install sprinklers in tower blocks.". The three comments are published by citizens of different countries, maintaining to be Russian, Romanian, and English. The original post, which received these comments, is: "Is it fair that rich EU countries pay for the development of poorer EU countries? Has EU cohesion policy been effective? Should cohesion funds be cut if a country breaks EU rules or values? Let us know your thoughts and comments in the form on Debating Europe webpage and we'll take them to policymakers and experts for their reactions!".

In a nutshell

This Facebook profile seems to be effective in stimulating debates regarding EU and Cohesion Policies. The most liked posts are not supporting the actual economic status quo.

3.2.2 Interreg Europe

The Facebook profile of Interreg Europe published its first post on October 6, 2014. It publishes about 120 posts a year: 328 posts were written, and they collected 217 comments. The profile amounts to 6,966 page likes. On average, posts collect 21,22 likes, while comments receive 0,27 likes.

Posts

The most liked post was published on October 5, 2016 and received 160 likes. It announces newly approved projects: "66 new projects were approved today by the Interreg Europe monitoring

committee. Congratulations! Full list available on our website. The lead partners of the projects approved under conditions will shortly be notified directly with details on the conditions to fulfil and information on the next steps to start their project." The post is composed of topic 17 (64%), which refers to Interreg Europe and pulls together issues surrounding the administration of project applications to Interreg.

The second most liked post received 151 likes and was published on October 9, 2015. It comprises the advertisement for a new video: "Check out the new Interreg Europe video where you'll find out how we can help you save time, money and plug into our new and expanded services. Spread the word!". It also refers to topics 17 by 35% .

The third most liked post got 135 likes and was published on February 10, 2016. Again, it is about projects' approval: "64 projects were approved under conditions by the Interreg Europe monitoring committee. Notifications will be sent shortly to the lead partners, so please wait for that before getting in touch with us! Check the full list on http:[...]". Topic 17 constitutes 41% of this post.

Comments

There are no comments with a large amount of likes. In fact, there are ten comments that received two likes each. One is an answer from Interreg to a specific question: "Yes! All presentations will be available.". Two are just users tagging other users. The other comments, interestingly written in different languages, are generic comments referring to Interreg events: "Was a wonderful and useful event...", "Great session!!! Congratulations!!!". Other comments include "Greetings from Riga, Latvia! Looking forward to explanations regarding what kind of projects this Programme will support and the financial details for public authorities. Thank you for this opportunity!", and "I work for a public institution around 50 km from Bologna [...] but today I am in Brussels for a project at the Committee of Regions [...] What a pity, but you are doing a really good job guys. !!!".

In a nutshell

The Facebook profile seems to be an effective means of advertisement for funds related to Interreg Europe. It seemingly does not generate heated debates, but citizens are engaging with the profile.

3.2.3 Assembly of European Regions

The Facebook profile of the Assembly of European Regions published its first post on August 10, 2010. Since then, 1.854 posts were published (about 260 a year), that received 258 comments. The profile has 3.374 page likes. On average, posts collect 7,80 likes, while comments receive 0,43 likes.

Posts

15 out of the 16 most liked posts are photos taken during events. In particular, the four most liked posts are pictures taken during the AER General Assembly 2016 in Nordland (198 likes each), Norway. The only post that is not a picture points at a blog post written by an intern at the end of her six-month internship.

Comments

Also the four most liked comments (4 likes each) are short comments to photos.

In a nutshell

This Facebook profile essentially seems to be a photo log of AER events and staff meetings. It generates a number of comments.

3.2.4 European Committee of Regions

The Facebook profile of the European Committee of Regions published its first post on January 22, 2014. It publishes about 260 posts a year: 920 posts were published, and they collected 562 comments. The profile has 12.920 page likes. On average, posts generate 14,82 likes, while comments receive 0,44 likes.

Posts

The 15 most liked posts are all photos and videos (3 out of 15), that present people working at the Committee, or announce specific events. In particular, the five most liked photos (231 likes) were published on June 21, 2016 and have the caption "Want to see the Committee of the Regions from the inside and better understand how it works as part of the EU? Then come visit our office in Brussels. See how happy these groups are that they did. You can book your visit here: www[...]".

Comments

Among the comments with more likes, two were written by the same profile of the European Committee of Regions: one details information on a conference: "If you want to know more about the conference: http:[...]". The other is just a caption: "Here's José Luis Carneiro, NAT President, now Secretary of State". They received four and five likes respectively. The most liked comment is just a joke by someone in a picture published on the profile: "I look serious there!". It got six likes. The fourth most liked comment got fpour likes and refers to substantive content: "My personal advise: Just be as detailed as possible when describing your experiences and expectations. Don't hesitate to also explain your interests, even though they are not strictly connect to regional policy ;)"

In a nutshell

The Facebook profile of the European Committee of Regions seems to showcase events and people working for the institutions. They receive comments, but substantive debates are not emerging in the commentary section.

3.2.5 Interreg Central Europe

The Facebook profile of Interreg Central Europe published its first post on October 27, 2011. It publishes about 120 posts a year: 681 posts were published, and they collected 226 comments. The profile has 3.472 page likes. On average, posts receive 8,47 likes, while comments receive 0,44 likes.

Posts

Eight out of the nine posts with more comments are pictures submitted to the photo competition "Take a closer look at CENTRAL EUROPE". They were posted at the beginning of 2012. This was the contest: "Enter our Photo Competition 2012: 'Take a closer look at CENTRAL EUROPE'. Can you tell the story of your project in a single picture? Then tag us in your compelling high quality photos that will grab our attention. We are looking for photos that most appropriately capture the essence of your CENTRAL EUROPE project. Be creative, don't just think of the obvious when choosing a perspective!

The contest is open to all CENTRAL EUROPE projects from 1 December 2011 until 30 April 2012. [...]". Likes generated here are votes for a specific picture: the winning picture received 312 likes.

The only post among the nine with more likes, which is not a picture, is the announcement of "50 new cooperation projects funded by Interreg CENTRAL EUROPE will help regions in addressing their needs and challenges". It got 96 likes and was posted on May 3, 2012.

Comments

The most liked comment is an answer to a question and was published by the profile of Interreg Central Europe on the May 22, 2015: "Dear Renata, lead applicants of selected (as well as those of non-selected) applications are going to be officially informed by letter by the end of the week.". It received five likes. The other most liked comments are just comments related to pictures posted for the photo contest.

In a nutshell

Page likes are quite low considering the page has existed for six years. Comments and likes are clustered on events.

3.2.6 Perceive Project

We decided to include our own Facebook profile in the analysis in order to compare discussions launched by our posts with the ones presented in other institutional profiles. Perceive's Facebook profile published its first post on September 19, 2016, less than three weeks after the beginning of the project. From then to July 2017, it published 36 posts, with a projection of about 50 a year. Despite being a very new profile, it has generated 2.094 page likes. Each post receives 9,22 likes on average, while each comment receives 0,36 likes on average. Yet, the most interesting number surrounds the debate launched: 136 comments were posted on the website during its first ten months, meaning that each post received almost four comments on average.

Posts

The post that received more likes (41) was published on July 7, 2017, just before we downloaded data. The post reads "Do you feel #European and a citizen of the European Union? Do they mean the same thing to you? How is this answer related to what the #EU is doing for you? Do you know what it's doing in your #region? EU Cohesion Policy promotes greater cohesion by reducing disparities and differences between member countries' regions. PERCEIVE studies the effects of Cohesion Policy in creating a shared sense of European Identity". The post is accompanied by a picture and is composed of topic 10 (42%), that is especially about Cohesion and Regional Policy.

The second most liked post was published on June 15, 2017 and generated 29 likes. This is a post that announces a blog post on our website, referring to an interview to Gianpiero Torrisi, from Portsmouth Business School. This is the post: "What can we learn from #Brexit? Why some regions vote 'leave' despite millions in EU support that have been used to improve infrastructures, urban regeneration and access to culture? Prof. Gianpiero Torrisi, Senior Lecturer at Portsmouth Business School, will give you a hint of how Perceive Project will provide answers. Read the full interview ⬇ #Horizon2020 #EU #European #EUinmyregion University of Portsmouth European Committee of the Regions Europe in my region Essex County Council Chelmsford City Life Office for National Statistics".

The third most liked post was published on May 30, 2017 and amounted to 25 likes. This is the announcement of another blog post: an interview with Jordi Suriñach, from Universidad de Barcelona. This is the post: "Just a research project? Find out how you can benefit from Perceive Project. Jordi Suriñach, professor at the University of Barcelona, explains why it is so important to explore citizens' perception and understanding of #CohesionPolicy. Read the full interview below ⬇. #Horizon2020 #EU #European #EUinmyregion Horizon2020 Universitat de Barcelona Regional Quantitative Analysis Group Extremadura, España ACCIÓ Europe in my region Corina Cretu"

Comments

The three comments that received more likes are answers to a post published on July 7, 2017. This is the original post: "Do you feel #European and a citizen of the European Union? Do they mean the same thing to you? How is this answer related to what the #EU is doing for you? Do you know what it's doing in your #region? EU Cohesion Policy promotes greater cohesion by reducing disparities and differences between member countries' regions. PERCEIVE studies the effects of Cohesion Policy in creating a shared sense of European Identity. www.[...]". The most liked comments received three or four likes and are direct answers: "Both", "And what if I feel part of both?", "I am definitely European and I support the EU all the way".

In a nutshell

The analysis of our Facebook profile captures only the first ten month of its existence. Yet, we can see a high engagement by citizens, with heated comments that are either pro or against Europe and the EU.

3.3 Comparative description of LMAs on Facebook

To summarise the results of the use of Facebook made by LMAs, we provide the following Table 2 and some figures. The following table summarises the data we analysed in the previous chapter: for each LMA, the table collects the date of the first post, the number of posts published, the number of comments received, the page likes, the approximate number of post per year, the average number of likes per post, the average number of likes per comment, the number of comments per post. We already discussed these, case by case. In this last paragraph we provide a comparison by means of four figures.

Table 2 – Facebook data summary

	Facebook profile	first post	posts	comments	page likes	approx. posts/year	likes/ post	likes/ comment	comments/ post
Italy	Emilia-Romagna	27/08/2009	3.379	5.210	41.132	422	27,45	0,60	1,54
	Calabria	12/05/2016	428	339	5.569	428	16,10	0,30	0,79
Austria	Burgenland	14/06/2014	578	68	268	193	3,76	0,40	0,12
Poland	Warmińsko-mazurskie	14/06/2012	1.777	8.319	24.527	355	30,93	0,53	4,68
	Dolnośląskie	10/06/2011	831	117	2.620	139	2,21	0,33	0,14
Romania	Regional level: Agentia pentru Dezvoltare Regionala Sud-Est	10/08/2015	551	22	689	276	5,60	0,00	0,04
	National level: Ministerul Dezvoltarii Regionale, Administratiei Publice si Fondurilor Europene	10/10/2013	4.687	1.339	12.968	1.339	9,82	0,33	0,29
	National level: Ministerul Fondurilor Europene	07/02/2013	1.634	1.143	23.207	384	22,80	0,47	0,70
Sweden	Tillväxtverket	22/02/2012	540	380	2.879	108	10,04	0,87	0,70
Spain	Junta de Extremadura	20/01/2012	16.134	4.265	18.787	2.933	22,03	0,44	0,26
EU Institutional	EU Regional Policy	13/02/2015	970	1.027	23.440	388	122,34	0,73	1,06
	Interreg Europe	06/10/2014	328	217	6.966	121	21,22	0,27	0,66
	Assembly of European Regions	10/08/2010	1.854	258	3.374	265	7,80	0,43	0,14
	European Committee of Regions	22/02/2014	920	562	12.290	263	14,82	0,44	0,61
	Interreg Central Europe	27/10/2011	681	226	3.472	119	8,47	0,44	0,33
	Perceive Project	19/09/2016	36	143	2.094	43	9,22	0,36	3,97

Figure 1 indicates the average number of posts per year published by each profile. The number is approximated, as we want to look at the bigger picture. Junta de Extremadura and Ministerul Dezvoltarii Regionale are the institutions that publish more posts. Yet we must note that the Facebook profile of the former is used for the whole institutional communication of Spanish institutions, and not only for communication related to European Funds. Between the LMAs, Tillväxtverket, Dolnośląskie, and Burgenland are the ones publishing fewer posts. Yet, as we saw in the analysis of cases, less posts do not mean indicate worse communication, as the number of posts does not ensure effectiveness.

Figure 1 - Approximate number of posts per year

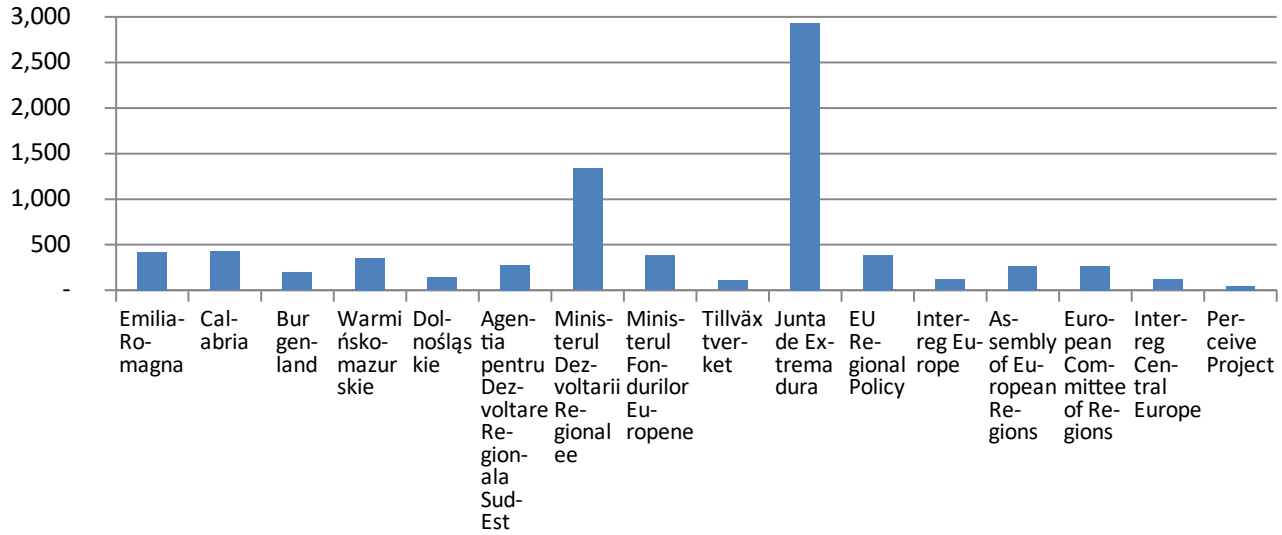
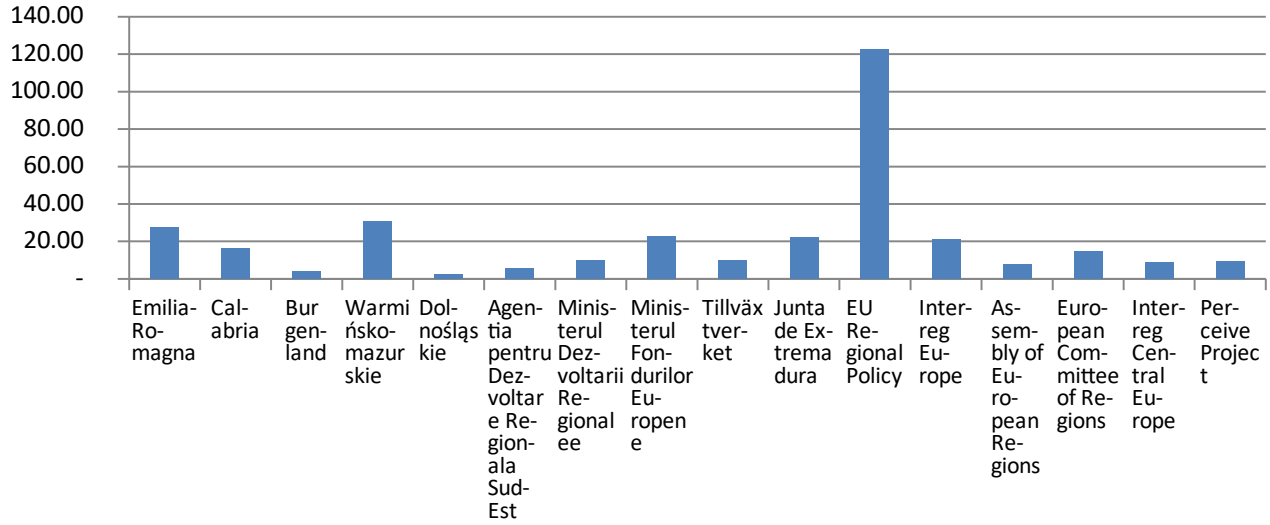


Figure 2 indicates the number of likes per post. EU Regional Policy is by far collecting more likes per post than any other profile, Among the Local Managing Authorities, Warmińsko-Mazurskie and Emilia-Romagna are the ones collecting more likes. Yet, the latter, exactly as Junta de Extremadura, denote a generalist Facebook profile. Profiles receiving less likes are Burgenland and Dolnośląskie.

Figure 2 – Average number of likes per post



The numbers of likes per comment are generally more balanced (Figure 3). Here, Tillväxtverket is the Facebook profile collecting more likes per comment, with an average of almost one. The second Facebook page in this ranking is EU Regional Policy. The opposite extreme is occupied by Agentia pentru Dezvoltare Regionala Sud-Est: comments got so few comments, that the average amounts to just about zero likes per comment.

Figure 3 – Average number of likes per comment

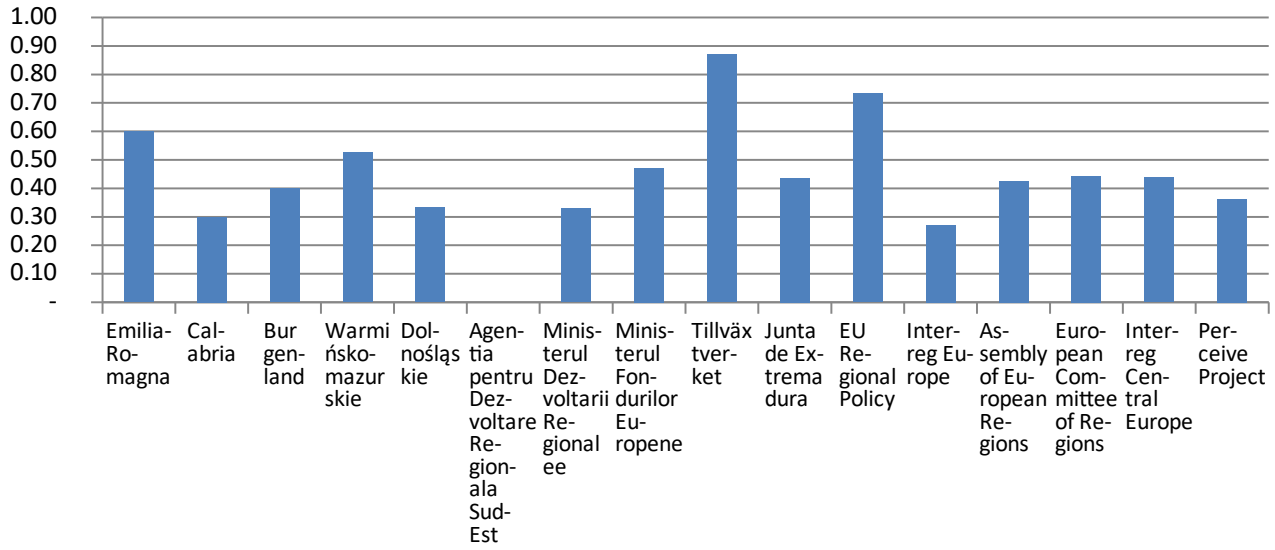
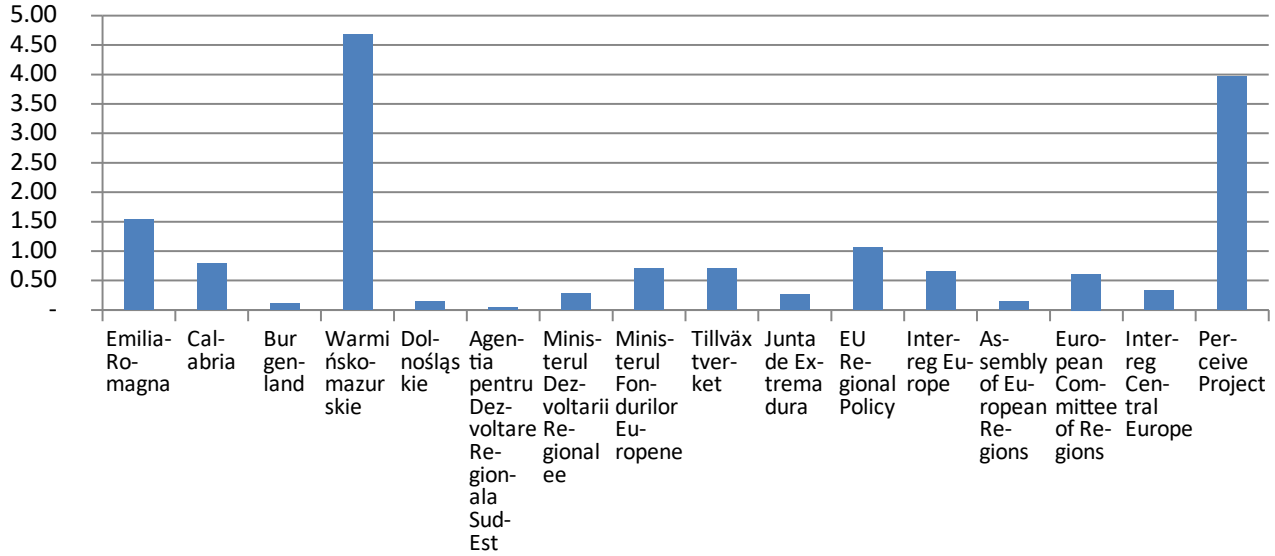


Figure 4 portrays the number of comments per post. The Facebook profiles of Warmińsko-Mazurskie and the Perceive Project are ones where debates are more populated by commentators. Then, among the LMAs, Emilia-Romagna too has more than one comment for each post on average.

Figure 4 – Average number of comments per post



3.4 Sentiment analysis of Facebook topics

In this section we illustrate the result of an analysis describing the sentiments associated with the most used topics in posts and comments appearing on the LMAs' Facebook pages.

3.4.1 National case studies

For **Italy,** we selected topic 8 and topic 15. Topic 15 is the most used in posts and refers mostly to the use of structural funds in the region of Calabria. Topic 8 is the most used in comments and comprises specific complaints regarding the use of funds with a focus on the region Emilia-Romagna. In line with the qualitative interpretation of the topics, topic 8 has the highest NEGATIVE/POSITIVE lexicon ratios.

Table 3 – Sentiment analysis Italy

LEXICON	TOPIC	POSITIVE	NEUTRAL	NEGATIVE	NEG/POS	NEUT/POS
VADER	T15	4	0	1	0.250	
	T8	12	0	7	0.583	
SUBJECTIVE CLUES	T15	6	3	0	0.000	0.500
	T8	17	12	8	0.471	0.706
LIU	T15	4	0	0	0.000	
	T8	9	0	5	0.556	
SENTICNET4	T15	29	20	7	0.241	0.690
	T8	31	27	11	0.355	0.871

For **Austria,** we selected topic 2 and topic 6. Topic 2 is the most used in posts and centres on advertising events related to the EU. Topic 6 is most used by comments and comprises events for EU Cohesion Policy communicators and implementers. The observed distribution of sentiment lexicons makes sense in view of the interpreted content of topics. Topic 2 tends to be one with a prevalently EU-enthusiastic vocabulary, while topic 6 tends to be less positively loaded. In the case of the SENTICNET4 lexicon the neutral vocabulary is even higher than the one for topic 2.

Table 4 – Sentiment analysis Austria

LEXICON	TOPIC	POSITIVE	NEUTRAL	NEGATIVE	NEG/POS	NUTR/POS
VADER	T2	19	0	1	0.053	
	T6	7	0	0	0.000	
SUBJECTIVE CLUES	T2	23	4	1	0.043	0.174
	T6	7	3	0	0.000	0.429
LIU	T2	22	0	1	0.045	
	T6	5	0	1	0.200	
SENTICNET4	T2	28	18	8	0.286	0.643
	T6	23	19	4	0.174	0.826

For **Poland,** we selected topics 13 and 14. Topic 13 is most used by comments and is about "how great it is to live in the region Warmia and Mazury". Topic 14 is the most used by posts and is about a photo competition: "EU funds in a camera lens". In this case, the vocabulary is very positively oriented for both topics, which is in line with the qualitative interpretation of the topics' content. The high neutrality of vocabulary for topic 13 is potentially explained by the fact that natural and geographical connotations are generally expressed through neutral words.

Table 5 – Sentiment analysis Poland

LEXICON	TOPIC	POSITIVE	NEUTRAL	NEGATIVE	NEG/POS	NUTR/POS
VADER	T13	24	0	1	0.042	
	T14	16	0	1	0.063	
SUBJECTIVE CLUES	T13	27	11	3	0.111	0.407
	T14	8	2	2	0.250	0.250
LIU	T13	22	0	2	0.091	
	T14	11	0	1	0.091	
SENTICNET4	T13	27	37	7	0.259	1.370
	T14	29	27	8	0.276	0.931

For **Romania,** we selected topics 1 and 16. Topic 1 is the most used in comments and refers to the need to accelerate the completion of infrastructure in order to obtain EU approval for public projects. Topic 16 is the most used in posts and concerns the dissemination of the results of financed projects for the programming period 2007-2013 in the Sud-Est region. Generally, a positive vocabulary is observed in this case for both topics.

Table 6 – Sentiment analysis Romania

LEXICON	TOPIC	POSITIVE	NEUTRAL	NEGATIVE	NEG/POS	NUTR/POS
VADER	T1	7	0	1	0.143	
	T16	3	0	0	0.000	
SUBJECTIVE CLUES	T1	11	5	2	0.182	0.455
	T16	2	2	0	0.000	1.000
LIU	T1	5	0	1	0.200	
	T16	2	0	0	0.000	
SENTICNET4	T1	29	20	6	0.207	0.690
	T16	20	24	5	0.250	1.200

For **Sweden,** we selected topics 0 and 14. Topic 0 is the most used in comments and comprises the dismissal of the Director General of the Swedish Agency for Economic and Regional Growth (Tillväxtverket) following revelations in the newspaper Dagens Nyheter that the agency was treating employees to lavish dinners at expensive restaurants. Topic 14 is the most used in posts and concerns the environment and poverty reduction programmes focusing on the Swedish Council for regional economic growth. Clear cut distinctions in terms of sentiments are observed regarding the two topics constituting the Swedish case. Coherent with the interpreted content, the topic on the misuse of public money is characterised by highly negative vocabulary, while the topic about development programmes is characterised by positive vocabulary.

Table 7 – Sentiment analysis Sweden

LEXICON	TOPIC	POSITIVE	NEUTRAL	NEGATIVE	NEG/POS	NUTR/POS
VADER	T0	9	0	13	1.444	
	T14	12	0	1	0.083	
SUBJECTIVE CLUES	T0	9	11	13	1.444	1.222
	T14	9	3	1	0.111	0.333
LIU	T0	6	0	13	2.167	
	T14	6	0	1	0.167	
SENTICNET4	T0	20	26	20	1.000	1.300
	T14	18	44	4	0.222	2.444

For **Spain,** we selected topics 9 and 16. Topic 16 is the most used by comments and refers to general complaints people express about politicians and the political system in a rather indefinite way. Topic 9 is the most used by posts and is about different programmes, projects, and conferences concerning the business sector and entrepreneurship in Extremadura and related innovation strategies to deal with new challenges. Results of this case are coherent as far as the topic about criticisms is concerned – we observe agreement among lexicons on highly negative vocabulary for this topic. As regards the topic on the business sector in Extremadura, we would have expected a prevalence of positive vocabulary which is however clearly indicated only by the VADER lexicon.

Table 8 – Sentiment analysis Spain

LEXICON	TOPIC	POSITIVE	NEUTRAL	NEGATIVE	NEG/POS	NUTR/POS
VADER	T16	10	0	9	0.900	
	T9	12	0	0	0.000	
SUBJECTIVE CLUES	T16	11	5	10	0.909	0.455
	T9	8	2	0	0.000	0.250
LIU	T16	6	0	9	1.500	
	T9	4	0	0	0.000	
SENTICNET4	T16	28	15	12	0.429	0.536
	T9	22	24	9	0.409	1.091

All results of the different national cases will be discussed in a comparative way in the conclusive section of this report. There, we will further elaborate them and come up with implications for EU Cohesion Policy communication.

3.5 Cohesion Policy on Twitter

In this section we present results of the analysis we performed on Twitter data. The data is argued to describe a relevant portion of social media discourse on EU Cohesion Policy[9]. We start this section by considering activity levels for twitter users or accounts (3.5.1 to 3.5.3), then we look at the content of the most popular tweets (in terms of the absolute amount of re-tweets), and conclude with a report on the most popular hashtags (#) and mentioned accounts (@). A second cluster of results concerns structural characteristics of the social network created by re-tweets as observed in our sample (3.5.4). Finally, a time dynamic description is offered regarding a number of the previously illustrated twitter traffic indicators (3.5.5).

3.5.1 Activity

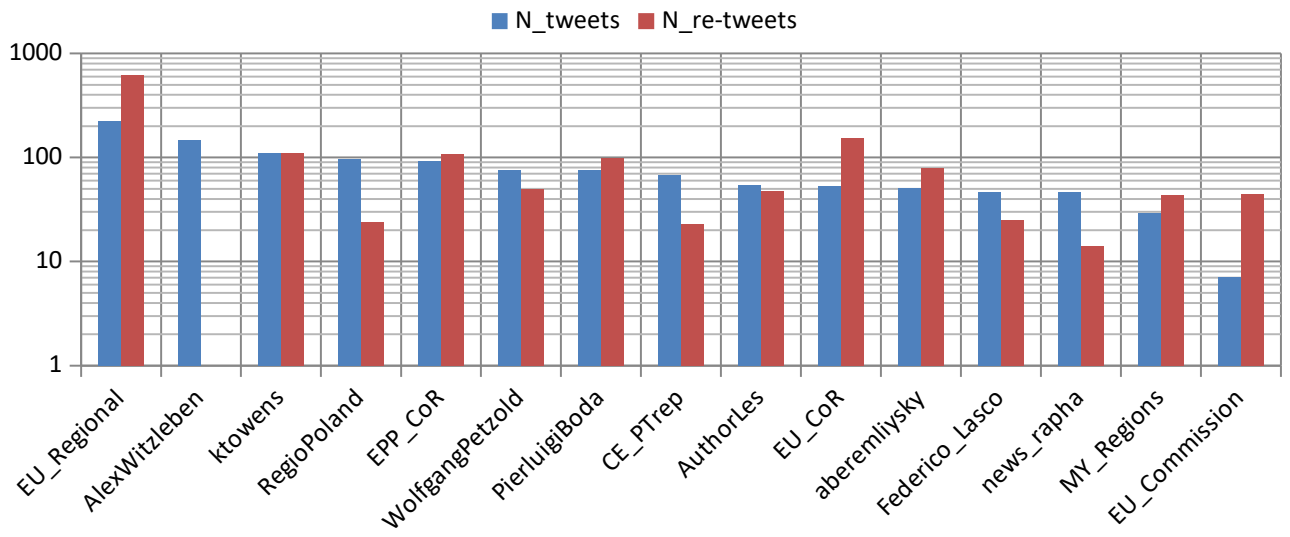
As regards user activity we observed that minimum levels for both tweeting and re-tweeting behavior were 0 (i.e. inactivity of the actor) over the observed period, while maximum values amounted to 225 and 1.532 for tweeting and re-tweeting respectively. On average, an actor tweeted 3.2 times (std. dev. = 8) and re-tweeted 2.7 times (std. dev. = 17) in the observed period. In view of this, we assumed a rather skewed distribution of activity levels in which a few top users tend to be exponentially more active than a large majority of rather inactive users. In fact, there were 2.587 users who had posted just one tweet (61% of the total with at least one tweet) and 3.994 users who had

9 As anticipated in the methodological section, we base the current inquiry on results which are relative to the institutional search string only (see Deliverable 5.2).

posted less than 10 tweets (94% of the total number of users posting at least one tweet). This was similar for re-tweets, where 7.526 users re-tweeted just once (70% of those who re-tweeted at least once) and 10.362 users re-tweeted less than 10 times (96% of those who re-tweeted at least once) in the observation period.

We now complement this description by zooming-in on the top 15 'tweeting' users (see this ranking in figure 5 below paired with re-tweeting levels for the same actors). By displaying both the amount of original tweets (indicated in blue) and re-tweets (red), Figure 5 (and the following Figure 6) allows for a comparison of the active writing of text vs. the sharing of pre-fabricated texts during the two-month period of observation.

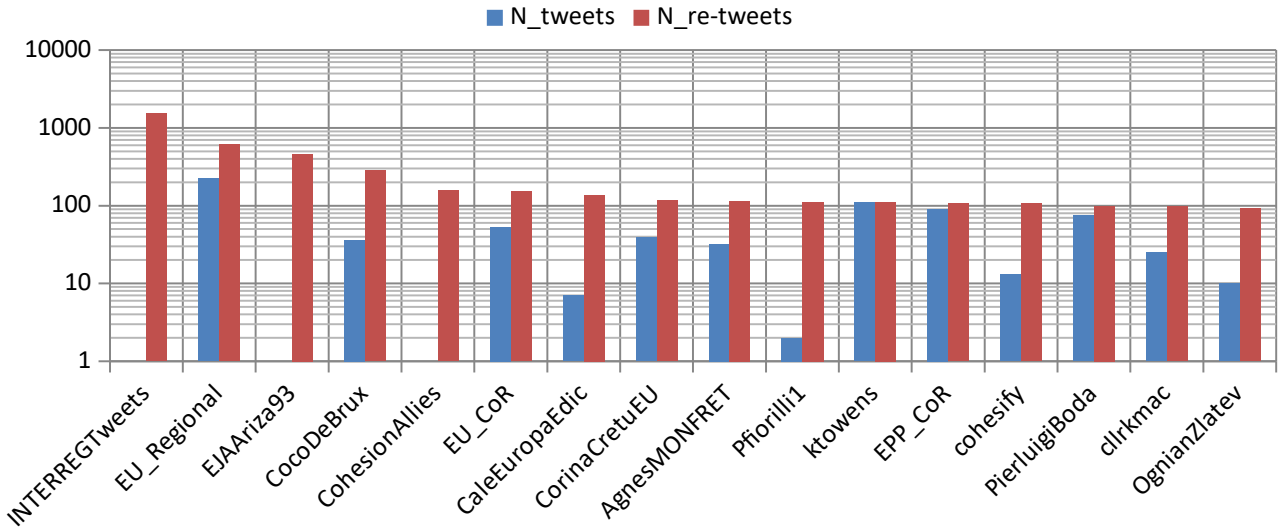
Figure 5 – Absolute number of tweets and re-tweets for the top 15 'tweeting' users



@EU_Regional (EU Regional and Urban Policy) denotes the most active channel in terms of tweets sent (225), while the amount of re-tweets posted is the highest in the sample too (613). The European Commission (@EU_Commission), by contrast and despite their active role as 're-tweeting' user (see the following figure), is less of a 'tweeting' user. The European Committee of the Regions (@EU_CoR), similarly to @EU_Regional, is an active user both in terms of tweets and re-tweets (despite a prevalence regarding re-tweets). A particularly interesting case is visible in the second top ranking actor (@AlexWitzleben). This account appears to belong to an economic historian interested in EU competitiveness, the economic crisis, promoting Europe, start-ups, smart and innovative green policies. So, while his profile matches the field characteristics and he seems to be very actively contributing to the discourse about Cohesion Policy and the future of Europe in general, he does not receive re-tweets, at least in the considered observation period. @ktowens, the third most active account belongs to an advisor working for the European People Party group in the EU Committee of Regions. Other active private citizens are also present, @Federico_Lasco's profile for example reads: "Economist, Public Manager and Executive, enthusiastic for Open Innovation and Innovative Public Administration", while @news_rapha's reads: "Lawyer. Environmentalist. Democrat. Weltretter. Tweeting in English, German and sometimes in French. #Sustainability#FutureofEurope #ruleofLaw"

In a similar fashion, figure 6 below displays a ranking of the top 15 re-tweeting users (i.e. how many tweets they generated in the observation period, complemented with the number of tweets).

Figure 6 – Absolute number of tweets and re-tweets for the top 15 're-tweeting' users



@INTERREGTweets, a twitter handle dedicated to "EU supported actions by European regions and cities to tackle common challenges", showcases the highest amount or re-tweets made over the period in question. At the same time, the account has not posted a single tweet. In fact, a handful of twitter accounts listed are re-tweeting posts, but not actively tweeting themselves. A similar case is the one of @CohesionAllies (the account is currently suspended). As has been touched upon, @EU_Regional has been actively 're-tweeting', finding itself upon second place in terms of the quantity of re-tweets posted. Other twitter handles listed denote individual users (e.g. @EJAAriza93, @CocoDeBrux), often linked to institutional accounts. For example, @CocoDebrux handles @EU-Regional as Communication Officer for DG REGIO, while the account @EJAAriza93, the third most active re-tweeting user (460) is associated with a law student at the University of Barcelona who has never produced an original tweet in the observation period matching our search string. Mentionable, too, is the presence of a H2020-financed research project (@cohesify) in the list of the most active re-tweeters with an activity of 13 tweets and 107 re-tweets.

3.5.2 Most popular tweets

As for the most popular tweets, for the sake of clarity, we only look at the 15 most popular tweets – in which case popularity is measured as the absolute amount of re-tweets received over our two month observation period (see Table 9 below).

Table 9 – Most popular tweets (in terms of re-tweets)

Tweet	Occurrences
RT @EU_Commission: What's your vision for the #FutureofEurope? Our #EUdialogues reached approx 30 million. We want to hear from you	268
RT @JunckerEU: Very encouraged to see so many people engage in the debate about the #FutureOfEurope. Make your voices heard! #EU60	261
RT @EU_Commission: Citizens' optimism on #FutureofEurope increased by 6% in the last 6 months according to latest #Eurobarometer	240
RT @EU_Commission: How do you see the #FutureofEurope? What do you want and expect? Every voice should be heard?	151
RT @EU_Commission: There are many ways for citizens to participate in the debate on the #FutureOfEurope. Make your voice be heard!	134
RT @EU_Regional: How does your region compare its #innovation performance level to others? See analysis for 220 #EURegions	114
RT @EU_Social: How are #EUFunds being used in your country? Find out in the #opendata platform for #ESIFunds! Explore ??by country	105
RT @Moedas: It's not just about research & innovation that we are here, it's about the #FutureofEurope! #H2020Future #Innov4Impact	103
RT @EU_Commission: We face great many challenges.We must seize opportunities. Time for united #EU27 to shape vision for #FutureOfEurope	99
RT @EU_Commission: Support #EUdefence from citizens. In almost all EU countries, security priority. #Eurobarometer #FutureofEurope	95
RT @RegioInterreg: Would you like to know how innovative is your region? Then have a look at the latest Innovation Scoreboard ??	93
RT @EU_Commission: A Europe that defends. A Europe that protects. #EUDefence #FutureOfEurope	80
RT @EU_Commission: We continue the ongoing discussion on the #FutureofEurope & the way forward - tomorrow we share our last reflection pape	80
RT @EU_Commission: @CorinaCretuEU @GOettingerEU #FutureofEurope - Just published: reflection paper on the Future of European EU Finances	76
RT @EU_Regional: @EurobarometerEU shows more than 3 in 4 citizens believe in the positive impact of EU projects in their city/region	75

A quick glance at Table 9 indicates that nine out of the top 15 tweets that garnered the most re-tweets were posted by the European Commission (@EU_Commission). While the Commission's twitter handle itself is not amongst the most active re-tweeting users (see Figure 5 and 6), its posts are popularly re-tweeted by others. Two of the remaining original tweets were posted by @EU_Regional (representing EU Regional and Urban Policy).

As regards the content of the re-tweeted posts, the strings of tweets by the European Commission and @JunckerEU, the President of the European Commission, for instance are largely concerned with discourse on the future of Europe (indicated by the use of the hashtag #FutureofEurope). The posts featured touch upon European values as well as their role in coping with both contingent issues and current to perspective developments (indicated for instance by the use of #EUdefence) regarding the governance and identity of the EU (for more on the hashtag use of #FutureofEurope, see below Section 3.5.3).

3.5.3 Most popular hashtags and mentions

The following table (10) comprises the top 10 most popular hashtags as well as the top 10 most popular mentions; both of which are ascribed by means of occurrence. While hashtags (#) comprise

keywords or phrases facilitating the aggregation of texts with similar topics, mentions (@) tag other persons or organisations in the post.

Table 10 – Most popular hashtags and mentions

Hashtag	Occurrences	Mention	Occurrences
#FutureofEurope	2192	@EU_Regional	1417
#ESF	1620	@EU_CoR	1408
#CohesionPolicy	1126	@interregeurope	498
#Interact	807	@EU_Commission	430
#Interreg	804	@CorinaCretuEU	424
#EUinmyRegion	630	@CoR_President	352
#eu7cf	459	@INTERREGTweets	255
#EU	404	@jyrkikatainen	179
#ERDF	316	@JunckerEU	176
#SmartRegions	233	@europeanregions	152

The most popular hashtag used was #FutureofEurope with 2192 occurrences, followed by #ESF (1620 occurrences) and #CohesionPolicy (1126 occurrences). In line with the most popular (most re-tweeted) texts, #FutureofEurope was used for discussions concerning the near and more remote future of the European Union. Related topics included calls for action, the inviting of citizens to participate in the debate, the announcing of change, or the picturing of a generally positive upbeat mood. #ESF (also used as acronym for non-Cohesion Policy-related posts) and #CohesionPolicy on the other hand account for more general hashtags. The same is true for the general usage of #Interact (also used in non-Cohesion Policy-related tweets), #EU, or #ERDF. #EUinmyRegion comprises discourse on the very EU-wide campaign designed to encourage EU citizens to explore EU-funded projects around them. Further hashtags were more event-based: #eu7cf was used to announce the 7th EU Cohesion Forum taking place in Brussels from June 26-27, 2017 – hence around the middle of our timeline – while #SmartRegions was linked to the Smart Regions 2.0 Conference in Helsinki from June 1-2, 2017.

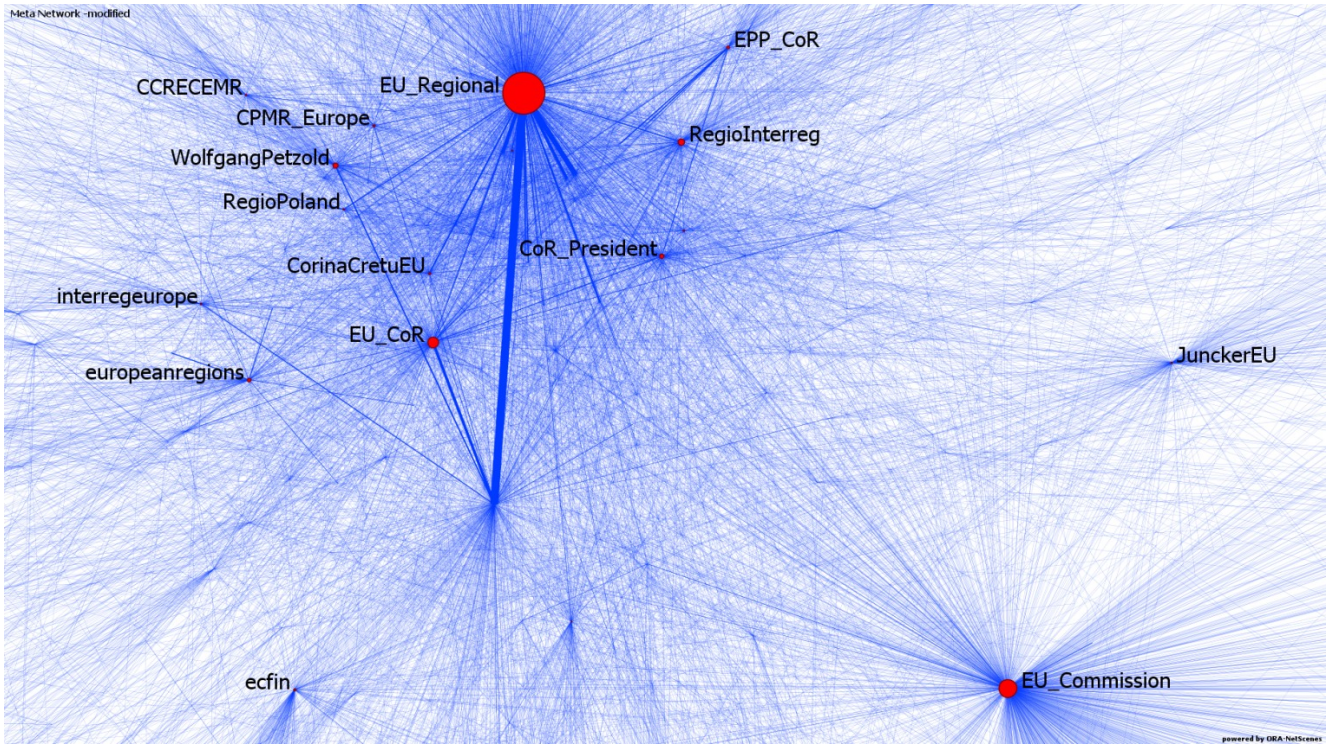
As regards mentions, the most popular account mentioned was @EU_Regional (with 1417 occurences), closely followed by @EU_CoR (1408 occurences). Both accounts denote official EU institutions, with the first – as said before - representing EU Regional and Urban Policy, and the latter representing the European Committee of the Regions. @interregeurope (representing an EU programme encouraging territorial cooperation in Europe) was closely followed by institutional accounts of the European Commission (@EU_Commission), as well as its Commissioner for Regional Policy, @CorinaCretuEU. Further representatives include @CoR_President (held by Karl-Heinz Lambertz at the present time), @JunckerEU, and @jyrkikatainen, the Vice-President of the European Commission.

3.5.4 The re-tweet social network

An underlying assumption in this section is that as re-tweeting behavior repeats over time, a sense of social patterns becomes observable. In other words, re-tweets do not occur in a random way over time, rather, they are constitutive of social patterning. The latter here is understood as a more or less stable structure whose properties can be measured.

In line with this assumption, some basic descriptive statistics of the re-tweet network are reported in table below as the size and density of the network does not allow for a visual examination. First of all, we observe that, on average, each account connects with other accounts (i.e. see the simple counts of nodes and links not valued). We can also see that the strongest relationship entails 321 re-tweets between the same pair of accounts, but that the average relationship is around 1 re-tweet (std. dev. = 2.3). Finally, a count of components is reported stating that there are 18 components larger than 3 nodes.

Figure 7 – Top 15 most central users



General	Measure	Value
	Count of nodes (users)	12010
	All links	38336
All link values		
	Min	0
	Max	321
	Mean	1.259
	Stddev	2.674676
	Sum	48282
Components		
	Isolates	0
	Dyads	379
	Triads	94
	Larger	18

While this measures give us some impressions about the overall characteristics of the network, in order to provide a more visually interpretable description of the key indices we produced a so-called reduced network – i.e. links with low values and disconnected nodes are iteratively removed until a readable pattern emerges. For example, in order to perform a further inquiry on the key actors we

have built a network reduction including only the top 30 ranking users in terms of being re-tweeted more so than the rest – and the connection they have with each other. This reduced network of course has 30 nodes, as well as 182 links and a density of which 6 are reciprocated (i.e. the two connected accounts re-tweet each other).

Let us start the inspection of the reduced network from the strongest links among its members. Table 11 below indicates the 30 strongest ties (out of 182) in the reduced network. @EU_Regional prominently emerges as both re-tweeted and re-tweeting users: @EU_Regional was re-tweeted the most by @CorinaCretuEU (58 re-tweets), the Commissioner for Regional Policy, as well as @AgnesMONFRET (52 re-tweets), the Head of Communication for DG REGIO (also @aberemliysky), but also by further institutional accounts such as @RegioEvaluation (32 re-tweets), the DG Regional and Urban Policy unit for monitoring, or the European Committee to the Regions (@EU_CoR, 31 re-tweets). As an active re-tweeting user, @EU_Regional mostly re-tweeted @RegioInterreg (35 re-tweets), an INTERREG twitter handle, followed by @RegioPoland (31 re-tweets), representing Regional and Urban Policy in Poland.

Table 11 – Strongest relations among the top 30 users (in terms of received re-tweets)

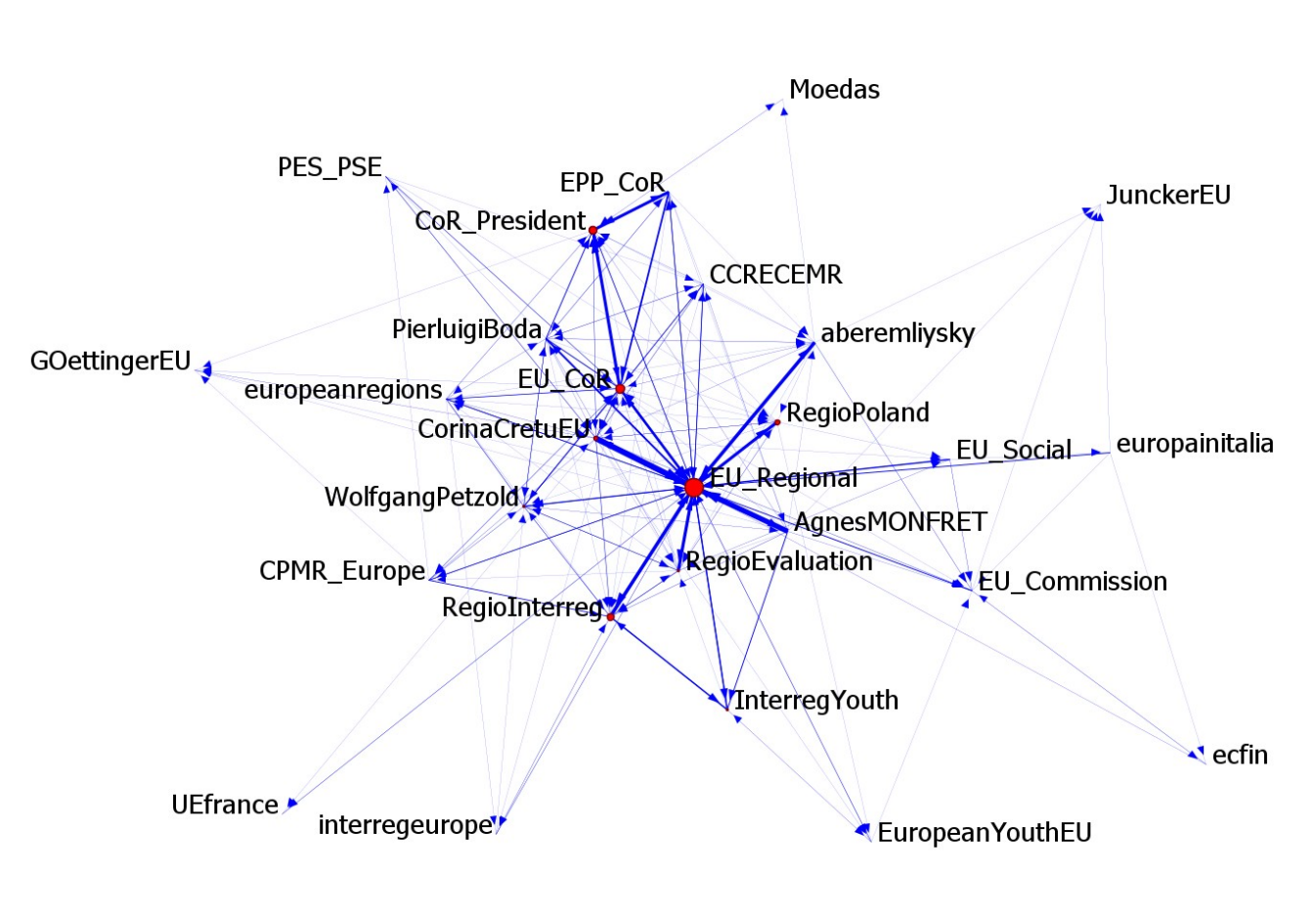
Sender	Receiver	Re-tweets	Sender	Receiver	Re-tweets
@CorinaCretuEU	@EU_Regional	58	@EU_Regional	@InterregYouth	14
@AgnesMONFRET	@EU_Regional	52	@EU_Social	@EU_Regional	14
@EU_Regional	@RegioInterreg	35	@EU_Regional	@RegioEvaluation	13
@aberemliysky	@EU_Regional	35	@EU_Regional	@WolfgangPetzold	12
@RegioEvaluation	@EU_Regional	32	@EU_Regional	@aberemliysky	12
@EU_CoR	@CoR_President	31	@EU_Regional	@CorinaCretuEU	11
@EU_Regional	@RegioPoland	31	@WolfgangPetzold	@EU_CoR	11
@EPP_CoR	@CoR_President	30	@PierluigiBoda	@EU_CoR	10
@EU_CoR	@EU_Regional	25	@PierluigiBoda	@CoR_President	10
@RegioInterreg	@EU_Regional	24	@RegioPoland	@EU_Regional	10
@EU_Regional	@EU_CoR	22	@EU_Regional	@EU_Commission	10
@PierluigiBoda	@EU_Regional	19	@AgnesMONFRET	@InterregYouth	10
@EPP_CoR	@EU_CoR	18	@europainitalia	@EU_Regional	10
@RegioInterreg	@InterregYouth	15	@InterregYouth	@EU_Regional	10
@CoR_President	@EU_CoR	15	@CPMR_Europe	@RegioInterreg	9

Finally, we want to complete the description of the network connecting the most re-tweeted actors, by shortly discussing a particular structural property that is called *centrality:* a concept entailing that some users will be 'positioned better' than others. The concept of being better positioned is intentionally very ambiguous because the connected assumptions and implications change a lot depending on different concepts of centrality. We hereby explore a number of these centrality concepts.

In-degree

In a first instance it is rather intuitive in the context of Twitter, to think of centrality as a simple count of re-tweets received by a focal account (the scientific name of this measure is *in-degree centrality*, see methodological note). The figure below shows the 15 most central users in this sense and makes clear that we can think of in-degree centrality as a proxy for popularity of an account in this setting.

Figure 8 – In-degree centrality (nodes' size is scaled accordingly) in reduced network



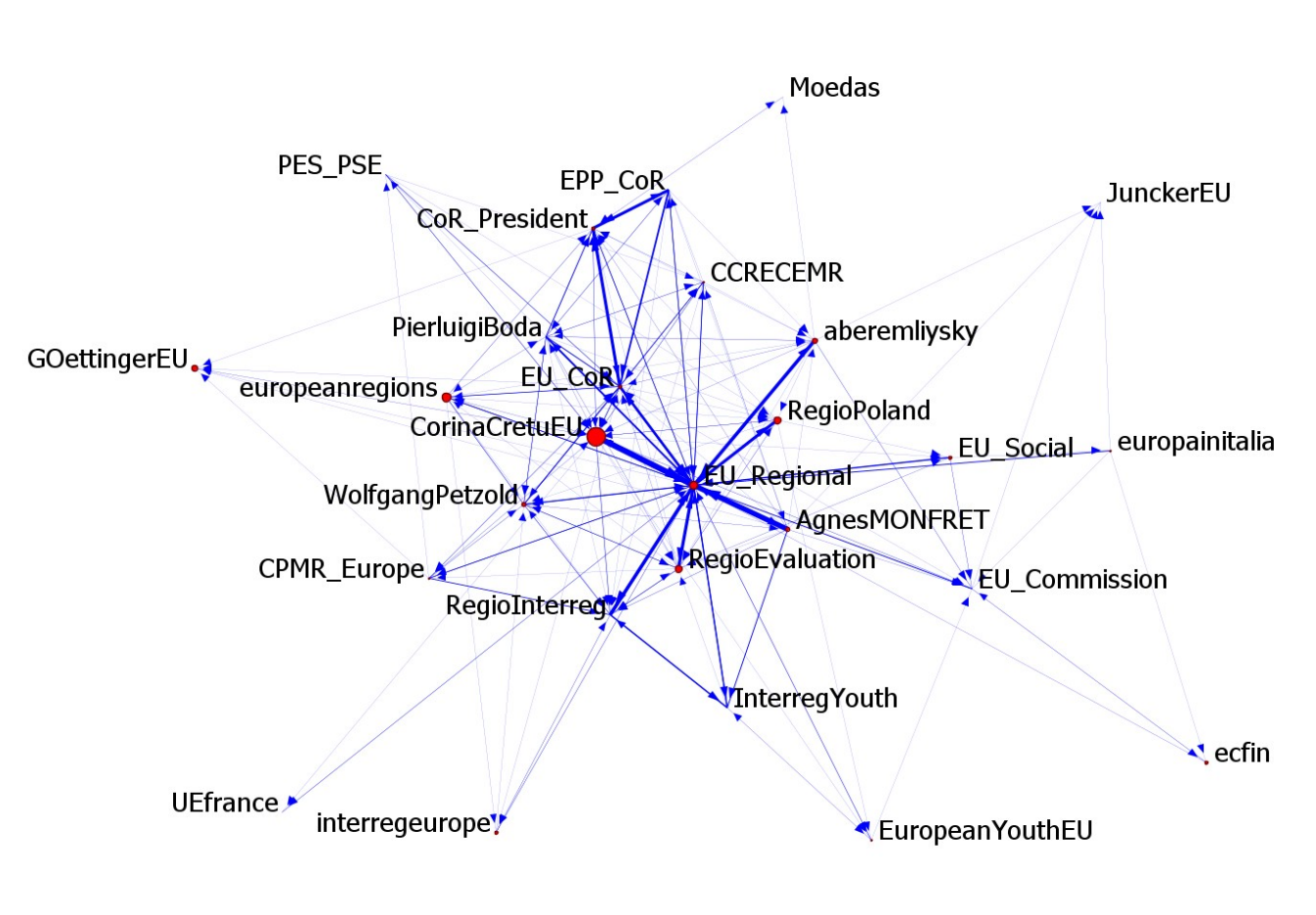
Rank	Agent	Value	Rank	Agent	Value
1	EU_Regional	339.0	6	CorinaCretuEU	41.0
2	EU_CoR	110.0	7	InterregYouth	40.0
3	CoR_President	98.0	8	WolfgangPetzold	38.0
4	RegioInterreg	76.0	9	RegioEvaluation	32.0
5	RegioPoland	45.0	10	EU_Commission	30.0

@EU_Regional, @EU_CoR, @CoR_president and @RegioInterreg result very in-degree central in the network including only top-retweeted actors. EU_Commission is again (i.e. see section 3.5.1) not re-tweeted as much even if its contents provide the base for most of the popular re-tweets.

Betweenness

A different conception of network centrality is the one of betweenness (see methodological note) which tends to highlight the possibility of a node (Twitter user in our case) to act as a broker mediating between otherwise purely connected (or even disconnected) groups. In figure 9 below the size of nodes reflects this centrality indicator as measured in the reduced (top 30 re-tweeted actors) network.

Figure 9 – Betweeness centrality (nodes' size is scaled accordingly) in reduced network



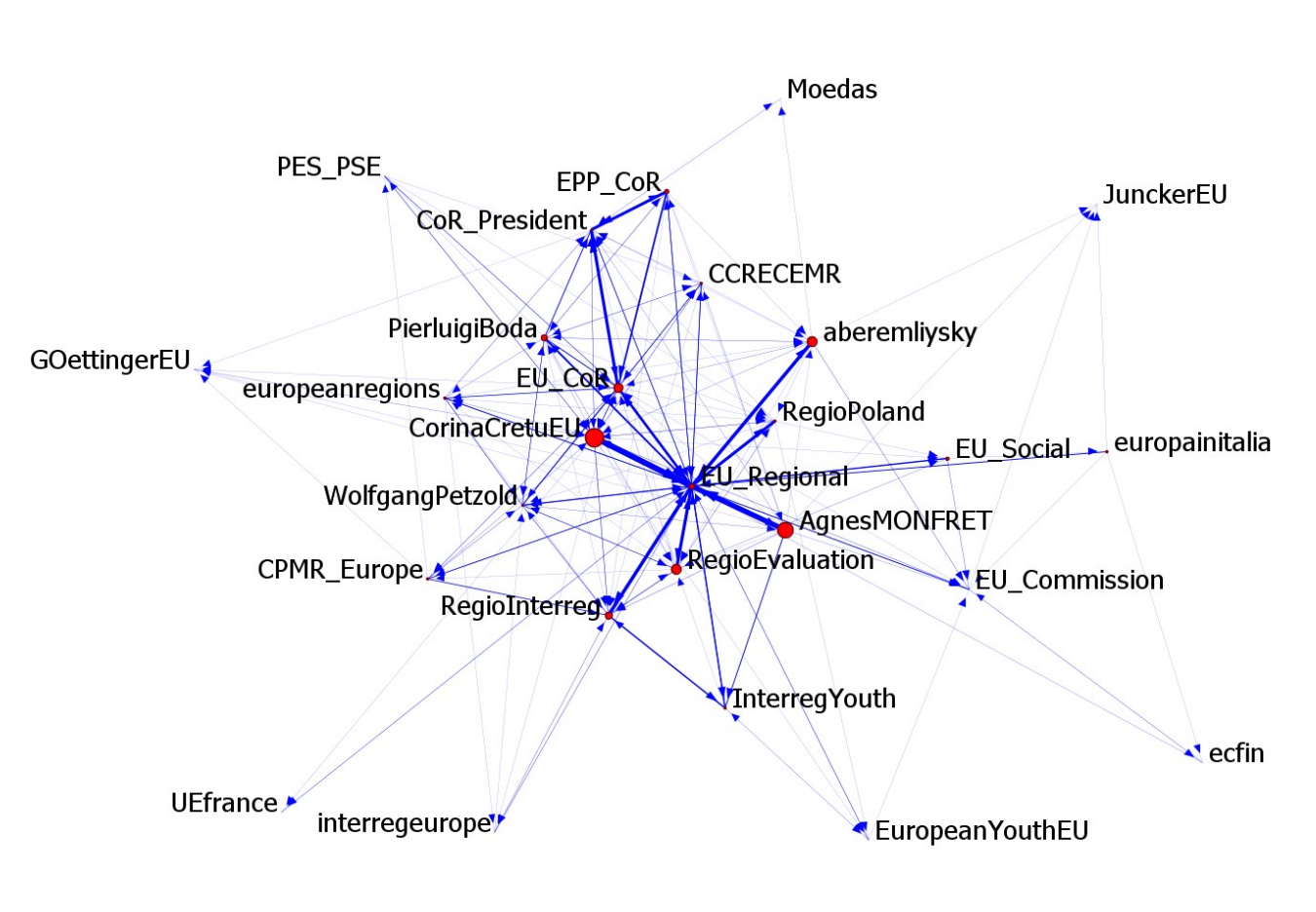
Rank	Agent	Value	Rank	Agent	Value
1	CorinaCretuEU	0.252	6	GOettingerEU	0.089
2	europeanregions	0.129	7	aberemliysky	0.086
3	EU_Regional	0.118	8	AgnesMONFRET	0.073
4	RegioEvaluation	0.105	9	WolfgangPetzold	0.064
5	RegioPoland	0.104	10	EU_Social	0.062

It is highlighted that Corina Cretu, the European Commissioner for Regional and Urban Policy, occupies a highly central position according to this indicator. From a visual examination of the network picture it appears that the 'in between' position occupied by this actor gives her a potential advantage over others to mediate between the region of the network that develops around the @EU_Commission on the one hand, and the group that seems to develop around the @EU_CoR on the other hand.

Hub centrality

Finally we shortly examine the idea of hub centrality (see methodological note) entailing the idea of being well positioned when connected (i.e. re-tweeting) with people who in turn are well connected (i.e. receiving a lot of re-tweets).

Figure 10 – Hub centrality (nodes' size is scaled accordingly) in reduced network



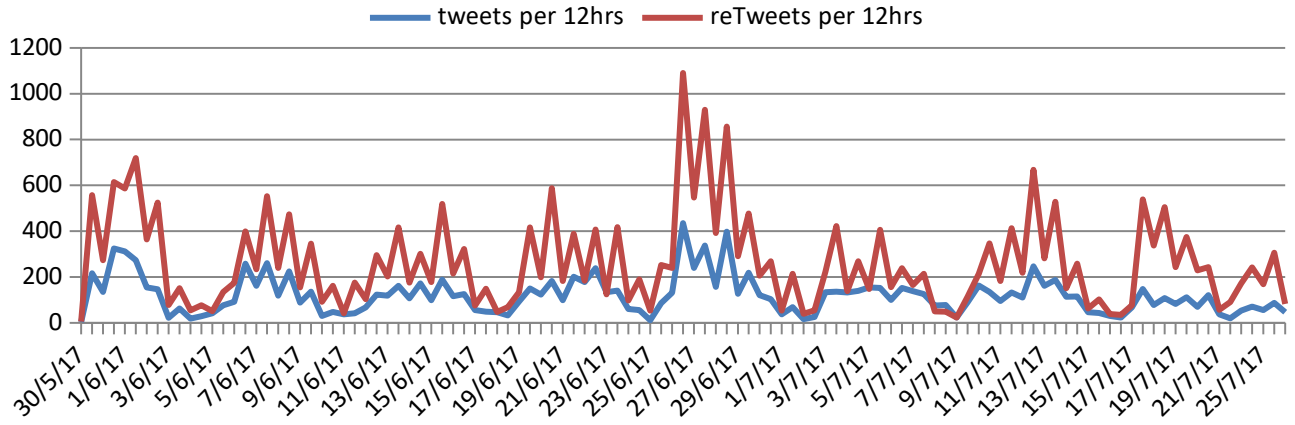
Rank	Agent	Value	Rank	Agent	Value
1	CorinaCretuEU	0.463	6	RegioInterreg	0.195
2	AgnesMONFRET	0.415	7	PierluigiBoda	0.183
3	aberemliysky	0.273	8	EU_Regional	0.149
4	RegioEvaluation	0.256	9	EPP_CoR	0.117
5	EU_CoR	0.245	10	EU_Social	0.108

In the context of the reduced network this tells us who is positioning close to the centre of the overall network. In fact, a sort of close circle around @EU_Regional is highlighted by resizing nodes according to the scores in hub centrality. This is an interesting picture in terms of producing and reproducing legitimacy. Or in other words, hub central nodes are pushing up the centrality of nodes such as @EU_Regional, while at the same time becoming more visible than others in doing so.

3.5.5 Daily traffic

Figure 11 below displays the number of distinct tweets per day (indicated in blue) as well as the cumulative number of tweets (hence including re-tweets) over the period of observation.

Figure 11 – Absolute amount of tweets and re-tweets over the period of observation

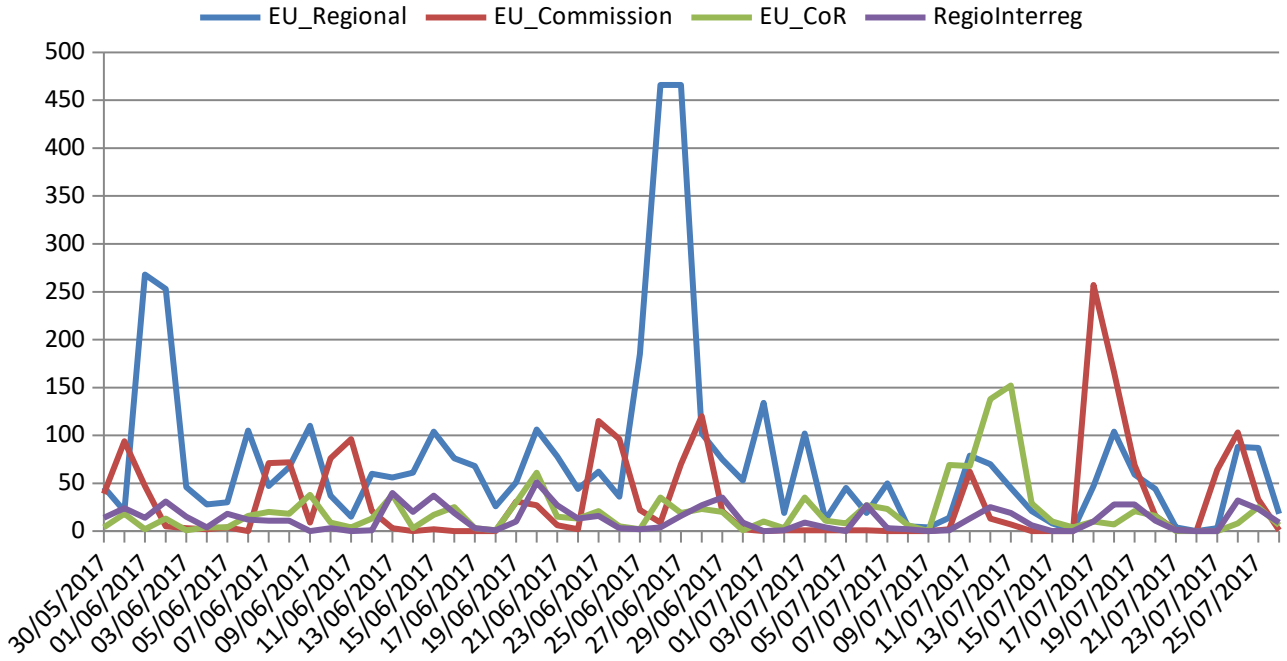


A time-based analysis of both tweets and re-tweets indicates an event-based linkage in which tweets either announce (before), live-report (during), or recapitulate (shortly after) Cohesion Policy-related events. A glance at the tweets posted over the two-month period signal a peak on June 26, 2017, concurrent with the 7th EU Cohesion Forum from June 26-27 in Brussels. The tweets posted announce the event by saying "#EU7CF opens today in Brussels [...]", "'FutureofEurope to be discussed during today and tomorrow's debates at Cohesion Forum! [...]", or ".#EU7CF started today to discuss the biggest challenges of #CohesionPolicy. Are you one of more than 700 attendees? [...]". During the event, tweets made use direct quotes of speakers such as "'Cohesion policy is a concrete expression of European solidarity' @jyrkikatainen opens the 7th Cohesion Forum #eu7cf @EU_Regional" or "'Coordination function relies in Member States but need to give more direct role to regions'"@pierremoscovici #EU7CF #CohesionPolicy". Moreover, general statements regarding Cohesion Policy were made (potentially referring to keynotes or topics touched on at the forum), such as "Citizen's optimism on #FutureofEurope increased by 6% in the last 6 months according to latest #Eurobarometer [...]" or "Did u know first EDF was more than 10x bigger than European Communities budget in early 60s ? #FutureofEurope @NadiaCalvino @EU_Budget". Irrespective of that, non EU Cohesion Forum-related tweets (such as "Apply for #EuinmyRegion blog contest by TOMORROW for a chance to win journalism training in Brussels! [...]"), and non-Cohesion Policy-related tweets ("Want to #ENGAGE & #INTERACT with your #Event #Audience? #Technology #Toolbox #mobile [...]") were posted too.

As regards re-tweets, three peaks were observable over the relevant time period: First, and in accordance with the tweets posted, June 26 marks the maximum peak with 1.090 re-tweets made – drawing a similar picture with numerous amounts of re-tweets made with reference to the 7th EU Cohesion Forum. Second, an earlier peak is evident on June 1, partially linked to the Smart Regions 2.0 Conference in Helsinki, in which re-tweets for instance refer to speakers at the event (("RT @AnttiTimonen: Speakers @CoR_President @MikaLintila @CorinaCretuEU @Jyrkikatainen ready for #SmartRegions conference, with 900 participants [...]", "RT @EU_Regional: #SmartRegions 2.0: @CorinaCretuEU sees first-hand the benefits of #smartspecialisation in Pasila. @TriplabyYIT"). Another section of re-tweets was linked to the Brussels Economic Forum 2017 on June 1, with examples such as "RT @ecfin: Europe should be 'multi track' not 'multi speed' -@georgesoros #eubef2017 #FutureofEurope", or the EU Enlargement Day from May 31 to June 1 ("RT @EPP_CoR: Commissioner @JHahnEU calls @EU_CoR key partners contributing to #EUenlargement process in his video message #EnlargementDay [...]", "RT @EPP_CoR: Celebrating #EnlargementDay with

@EU_CoR Key photos from yesterday's Joint Consultative Committees & Working Groups [...]"). Third, a later peak becomes evident on July 12, on which the Presidency of the European Committee to the Regions was announced and handed over from Markku Markkula to Karl-Heinz Lambertz. Re-tweets are accompanies by expressions of thanks to the prior, and congratulations to the new President. These include "RT @dkrakowiak_eu: 2,5 years passed so quickly #ThankYouMarkku for raising @EU_CoR profile & establishing it as important place in Brussels [...)" and "RT @EPP_CoR: Round of applause as @CoR_President @mmarkkula reports on his 2,5yrs term as @EU_CoR President to his political family ahead [...]", with a larger proportion dedicated to the new President ("RT @PhilippeClose: Congratulations to my colleague and friend Karl-Heinz Lambertz for his election to the presidency of @EU_CoR, great news [...]", "RT @PES_CoR: Newly elected @EU_CoR President Lambertz underlines importance of empowering #eucities #euregions #CoRplenary #invest4regions [...]", or "RT @CorinaCretuEU: Congratulations Karl-Heinz Lambertz. I look forward to working with you. @EU_CoR [...]". Albeit less pronounced, further re-tweets during the peak include announcements of the registration for EU Regions Week from October 9-12, 2017 ("RT @EU_CoR: The registrations for #EURegionsWeek are officially open! APPLY NOW [...]" and "RT @RegioInterreg: Registration for the #EURegionsWeek 2017 is now OPEN! Don't put it off! Register NOW or regret LATER!). In this sense, while discourse over the two-month time period might include various further events, the very linkage to relevant EU events becomes apparent.

Figure 12 – Popularity (by absolute amount of re-tweets) per day



The twitter handles @EU_Regional, @EU_Commission, @EU_CoR, and @RegioInterreg were chosen on the following criteria: first, the absolute daily amount of re-tweets (i.e. of being re-tweeted) had to be above zero. Second, both the absolute daily amount of re-tweets and the average daily amount of re-tweets had to be considerably higher than those of their counterparts.

@EU_Regional, the twitter account for Regional and Urban Policy, reached its peak on June 26 with a total amount of 466 re-tweets. The date, again, corresponds to the 7th EU Cohesion Forum taking

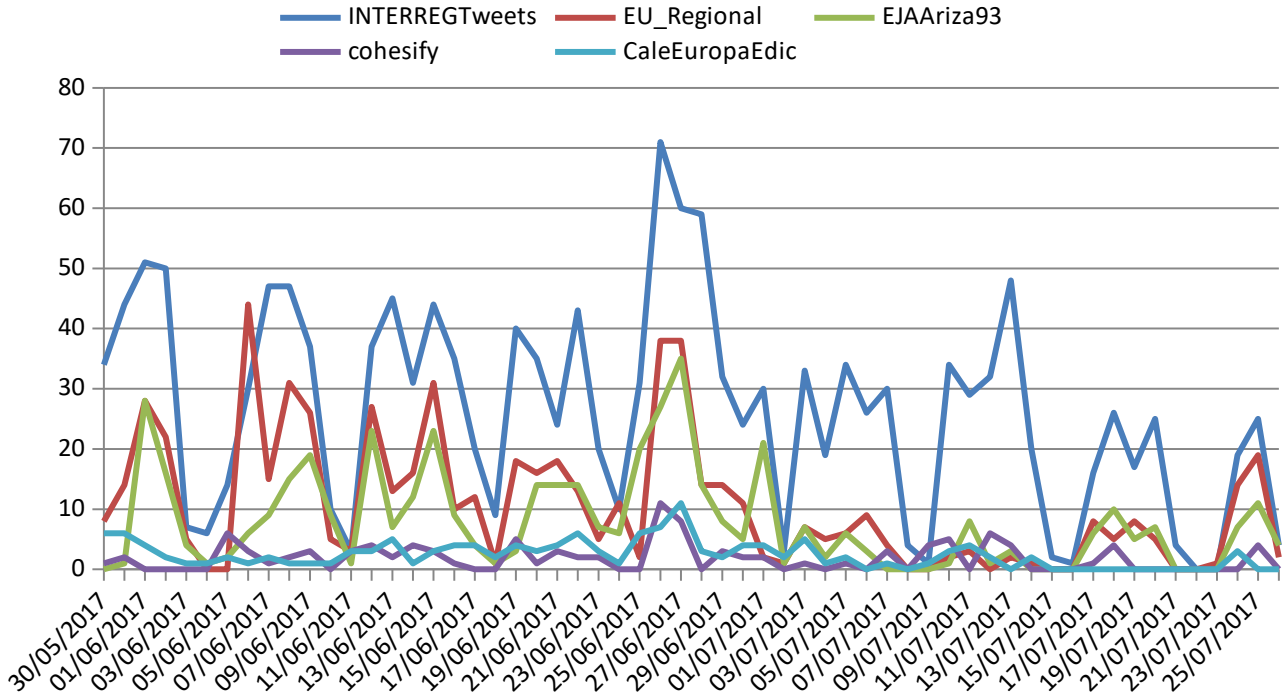
place in Brussels. Re-tweets made are largely centred on #CohesionPolicy in connection with #EU7CF, connecting the topic of the forum with the very event. Examples include direct quotes from presenters (such as "RT @EU_Regional: "This is the moment when we have to reform the European Union and #CohesionPolicy" @jyrkikatainen #EU7CF [...]" or invitations to follow livestreams of the event ("RT @EU_Regional: What #CohesionPolicy beyond 2020? Follow the debates live streamed at the Cohesion Forum next week! [...]". The second highest peak was reached on June 1, in line with numerous events around the beginning of June (i.e. Smart Regions 2.0 Conference in Helsinki, Brussels Economic Forum 2017, EU Enlargement Day, etc.). In this vein, the most popular re-tweets were largely centred on the Smart Regions conference, followed by the annual conference of the ESF Transnational Platform in Brussels, both of which took place from June 1-2, 2017.

The peak for the European Commission's twitter handle @EU_Commission on June 17 is not clearly linked to an event, but makes use of the hashtag #FutureofEurope as well as #EUdialogues. The latter refers to a series of events connecting citizens with European Commissioners across the European Union, and is reflected in re-tweets such as "RT @EU_Commission: Our #FutureofEurope debate has had 1,750+ #EUdialogues events so far. Wish to participate too? Tell us here [...]". These are in line with first results of the campaign being published on July 17, 2017 in the European Commission press release database.

@EU_CoR's popularity increase on July 13 (with a total amount of re-tweets of 152) is due to the Presidency of the European Committee to the Regions handed over from Markku Markkkula to Karl-Heinz Lambertz and the meeting of the #CoRplenary. Re-tweets comprise "RT @ EU_CoR: We have a new President at the CoR. Watch his first speech in his newly elected role now at #CoRplenary: [...]" or "RT @ EU_CoR: #CoRplenaryelects new President, signs up for clean transport, H2020 @ sustainability-swipe left for the highlights [...]".

As regards the twitter handle of @RegioInterreg, no particular peak was evident for the period in question. Rather, the pattern seems to mirror @EU_Regional's popularity timeline, albeit to a less pronounced extent.

Figure 13 – Active re-tweeting per day



In the same manner as for the popularity by absolute amount of re-tweets (Figure 12 above), the twitter handles @INTERREGTweets, @EU_Regional, @EJAAriza93, @cohesify, and @CaleEuropaEdic were chosen on the grounds of the absolute daily amount of re-tweets (i.e. of actively re-tweeting) being above zero, and both the average and the absolute daily amount of re-tweets being higher than those of their counterparts. Rather than measuring how often these accounts were re-tweeted, this figure indicates the act of re-tweeting others.

Interestingly, when compared to prior Figure, the act of re-tweeting follows a more cyclic pattern. This is due to the sample largely consisting of institutional accounts following a weekly work schedule. In this sense, an increase of re-tweeting (especially visible in the case of @INTERREGTweets) starts at the beginning of the work week, with less activity (often with zero re-tweets on Sundays) visible on the weekends.

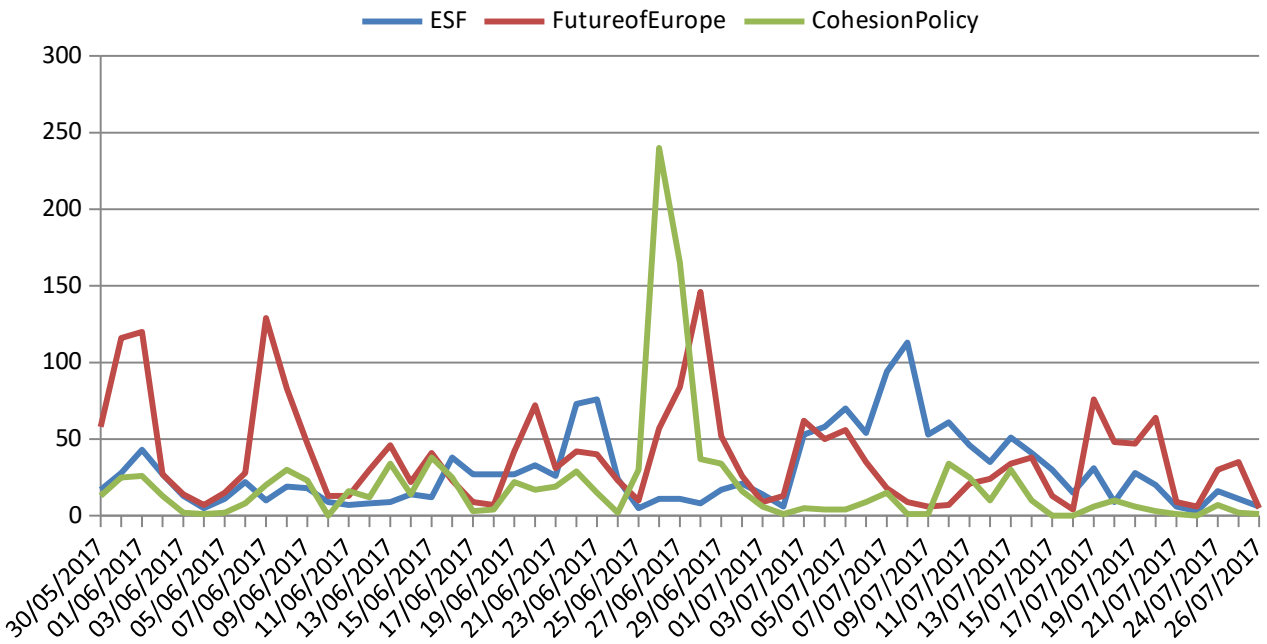
As regards @INTERREGTweets, two high-points are evident, one of which took place around June 26 (71 re-tweets), while the other happened around July 13 (48 re-tweets). The dates, again, coincide with Cohesion Policy-related events: the 7th EU Cohesion Forum, and the taking up of the Presidency of the European Committee of the Regions. Re-tweets made are largely related to these and include (for June 26): "RT @EU_Cor: 7th Cohesion Forum will take off this afternoon! [...]" or "RT @ CorinaCretuEU: @EU7CF: #Cohesionpolicy strengthens #cities & #regions' #resilience via projects [...]", but also references to the EU in my region blog contest ("RT @EU_Regional: #EUinmyRegion blog contest: "when saving ecological diversity meets business" by @Cvi-Dichevska [...]"). For July 13, re-tweets include "RT @EU-COR: #Have you missed Politico's Spotlight on #Cohesion2020 with @GOettingerEU & KH Lamberts? [...]" or "RT @PierluigiBoda: Smarter implementation of Growth&stability pact key for #CohesionPolicy after 2020 to succeed, says @EU_CoR pres. Lambert [...]".

As regards @EU_Regional, two peaks are apparent: while June 26 again reflects the 7th EU Cohesion Forum with clearly related tweets, another earlier peak is evident on 6 June. The latter mostly reflects re-tweets of their own twitter handle with examples such as "RT @EU_Regional: Why do regions have to be Smart, Specialised, Strategic? #SmartRegions make the most of innovation investment! [...]" or "RT @EU_Regional: #SmartRegions 2.0 summing up: smart specialisation strategies are attracting increased investment in crossborder research [...]", referring to the Smart Regions 2.0 Conference. Further references are made to #smartspecialisation, a research and innovation strategy of ERDF funding and one of the key topics at the conference.

The twitter handle @EJAAriza93 distinguishes itself from the rest of the sample in the sense that it does not denote an institutional account, but belongs to an individual user. With the re-tweets made comprising highly relevant content (essentially mirroring the peaks of the other accounts in the sample), this shows that discourse on social media is not exclusively produced and re-produced by large, institutional players, but by the general citizen too. In this sense, social media opens up new arenas of communicating, enabling dialogue between the EU and its citizens.

@cohesify, a EU research project, and @CaleEuropaEdic, the official desk of the European Commission in Calabria, Italy, both reflect the mentioned high-points with the respective peaks around June 26 and the Cohesion Forum. Tweets include, inter alia: "RT @EPP_CoR: Looking forward to #EU7CF starting today with important input from @EU_CoR rapporteur & our President @MSchneiderEPP [...]" or "RT @EU_Regional: Commissioner @KarmenuVella to introduce 3rd parallel workshop on governance and cooperation: follow it live #EU7CF".

Figure 14 – Top 3 most popular hashtags per day (used in tweets)



Prior descriptions have indicated a prevalence of event-related discourse, while the top 3 most popular hashtags suggest a more general usage of hashtags. In this sense, the most popular hashtag

(by terms of usage in tweets) was #CohesionPolicy, with the peak on June 26 again corresponding with the 7th EU Cohesion Forum (240 occurrences). In fact, one tweet summarises its popularity by saying "#cohesionpolicy is now trending in Belgium [...]".

While the usage of #CohesionPolicy clearly reaches its high-point during the Cohesion forum, #FutureofEurope is used in a broader context and experiences multiple peaks. The maximum peak occurs on June 28 (146 occurrences), followed by June 7 (129 occurences). In the case of June 28, multiple references are made towards the EU budget and a published reflection paper on the future of EU finances linked to the #FutureofEurope. Tweets include "MEP reactions to #FutureofEurope Finances paper? Follow EP rapporteurs for post-2020 MFF and EU Own Resources reform [...]" or "Brexit hole in #eubudget wil be made up for with new money and more European added value, says @GOettingerEU #FutureofEurope". In the case of June 7, references are made to the joint EU defense pact, with tweets such as "@JunckerEU @FedericaMog @jyrkikatainen Just published – Reflection paper on the Future of European Defence [...]" or the European Economic and Social Committee (EESC) organizing a debate in Dublin ("Today we are in Dublin to debate about the #FutureofEurope! https://t.co/ZuUXhlLqEd @eurireland @ATDIreland [...]").

As has been mentioned, the hashtag #ESF is used in a more general sense by default. While the acronym is certainly linked to the European Social Fund, it is also used for non-related topics such as describing the fan base of a singer (#EwalSuperfriends shortened to #ESF). The high-point on July 8 (with 113 occurrences) refers to the latter case, comprising mainly non-Cohesion Policy-related topics.

4 Discussion

4.1 General description of LMAs' Facebook homepages

Local Managing Authorities in our sample seem to consider Facebook as a useful channel to discuss and communicate Cohesion Policy. Indeed, with the only exception of the UK case, Facebook is used by LMAs as a mean to tell stories related to ESF and ERDF, as well as a way to get in touch with digital natives. Yet, "coming out of the ivory tower" deals not only with "moving onto social media"; but with "how" LMAs use this idiosyncratic channel. And from this point of view, experiences differ a lot.

Facebook pages of Emilia-Romagna and Junta de Extremadura are characterised by high numbers of comments and/or posts. They seem to function as places where discussions are launched and several comments are collected. Unfortunately, from our point of view, as these Facebook profiles are not only devoted to the communication of Cohesion Policies, news referring to this topic tends to be obscured by other themes.

The three profiles that seem to perform less well are the ones of Burgenland, Dolnośląskie, and Agentia pentru Dezvoltare Regionala Sud-Est. Citizens in Burgenland do not engage with a page that is more devoted to the management of the LMA than with the management of European funds. Dolnośląskie's page focuses mostly on Cohesion Policy, but fails at creating a fan base: it is one of the cases where posts receive less likes. Agentia pentru Dezvoltare Regionala Sud-Est, finally, uses Facebook as press office, publishing press releases. They are informative, but do not ask for engagement: indeed, this page is the one receiving fewer comments per post.

Ministerul Fondurilor Europene and Tillväxtverket share the fact that, in both cases, comments are mostly complaints, which tend to focus on what is not working. Their similarities end here: Ministerul Fondurilor Europene receives negative comments because of the problems with the process of managing funds. In fact, there is even a specific topic, which mostly constitutes these comments in the Romanian case. Tillväxtverket, on the contrary, generates negative comments because of one specific case referring to the supposed misuse of taxpayers' money. Other themes do not launch discussions.

The case of Warmińsko-Mazurskie is very interesting: it is the page that receives more comments per post. The page itself has a large fan base, defined by the page likes. Yet, several posts are touristic postcards, which Polish people comment out of pride. It seems that this traffic, generated by the page, does not really convert into interest in Cohesion Policy. Ministerul Dezvoltarii Regionale, Administratiei Publice si Fondurilor Europene on the other hand receives mostly comments focused on Cohesion Policy-related issues. This page publishes a high number of posts, and receives an average number of likes and comments. Probably it is legitimised as a page where it is possible to discuss Cohesion Policy.

Finally, a very interesting case and possibly a best practice to be shared is the case of Calabria. Here, a new Facebook profile was created recently, which is used to specifically inform on projects related to Cohesion Policy. The page is not meant to be a unidirectional channel of communication, where the LMA informs citizens. Quite the contrary, is it considered as a short channel of communication, with dedicated employees, allowing to overcome more time-consuming administrative communications. The page is parsimonious in publishing posts, but discussions that arise are effectively focused on calls and managing issues.

4.2 Sentiment analysis of Facebook topics

Through the analysis illustrated in section 3.4, we wanted to understand which sentiments are associated with the most used topics by the LMAs and their respective audiences. We now draw a short comparative discussion based on the analysis' main findings..

First, the most used topics by external audiences (i.e. Facebook commentators on the posts of LMAs homepages) generally showed a higher absolute match with the four different lexicons of sentiment-loaded words we have selected when compared to topics being mostly used by the LMAs (i.e. Facebook posts). This is also true for the three countries (Romania, Sweden, and Spain) in which the number of posts exceeds the number of comments on the LMA's Facebook pages. While not entirely surprising, this result indicates a relevant fact for policy communicators. That is: there seems to be a misalignment between the 'tone' that LMAs and their audiences use on social media (Facebook in this particular case), being that the tone of external audiences tends to be more "emotional" or "sentiment-loaded" than the tone of the LMAs.

Second, and referring more specifically to negative sentiments, our results suggest that comments are more likely the place for the associated vocabulary to occur. In four of the national case studies (Italy, Romania, Sweden, and Spain) this result emerged rather clearly (i.e. see the negative/positive vocabulary ratios in the table of each case). In other words, it is suggested that LMAs' external

audiences are more likely to use vocabulary that potentially expresses negative opinions about topics concerning them.

A limitation to be associated with this result comes with the fact that the selected topics did not always seem to perfectly centre on EU Cohesion Policy. Still, as results are derived by discussions taking place on the LMAs' Facebook pages, their general relevance to our argument remains.

As for neutral sentiments, our results show less clear distributions of matches between topics and sentiment lexicons. A result that seems nevertheless worth mentioning is that in Sweden and Spain, two countries where the selected topics indicated a number of complaints and issues with policy management, the detected neutral vocabulary exceeded the amount of positive vocabulary. This result can be interpreted as possibly indicating an attempt of LMAs to neutralize or mitigate bad publicity or criticism.

4.3 Analysis of the discourse on EU Cohesion Policy on Twitter

As regards the analysis of EU Cohesion Policy discourse unfolding on Twitter, many of our results indicate that dialogue potentially remains rather 'closed' and 'self-referential'. On the one hand, simple descriptive statistics on account activity levels indicate a highly skewed distribution of tweeting and re-tweeting behaviours. On the other hand, the re-tweet social network, at least when considering the reduced version with the top 30 influential (most re-tweeted) actors, is constituted by almost exclusively institutional actors (i.e. central EU institutions and financed international programmes). In a similar vein, also when looking at the top 15 most popular tweets, we observed that nine of them were re-tweets of contents originally produced by the European Commission.

However, there seems to be potential to expand the number of actors more actively involved in discourse about EU Cohesion Policy. This claim is based on the existence of a very large base of 'occasional' contributors. In fact, simple descriptive statistics indicate that the majority (60%) of Twitter users only tweeted once during our observation period and that this proportion rises to about 90% when counting those who tweeted less than 10 times.

Therefore, a policy indication would be to increase the activities of community-building rather than the flux of top-down communication departing from institutional accounts. Also, more attention should be given to private citizens with an interest in EU Cohesion Policy. In fact, we have observed that some very active citizens (i.e. potential influencers) were never re-tweeted by institutional accounts. We believe that changing the boundaries of this role system in which institutional actors do not engage with private individuals is another important step for the EU to "get out of the ivory tower". However, we also see that institutional actors might have to be more cautious in this setting in the sense that re-tweeting other institutional actors might very often grant 'political correctness' not implied in the ret-tweeting of private accounts. Still, viable ways of engaging can be thought of – i.e. asking and answering questions instead of the more passive re-tweeting.

As regards time dynamics we have observed that there tend to be peaks of activity (i.e. content production and reproduction) whenever EU Cohesion Policy-relevant events occur. During our two-month period of observation these comprised (inter alia): the 7th EU Cohesion Forum, the Smart Regions 2.0 Conference, or the Brussels Economic Forum 2017. While often including diverse stakeholders, a large number of events were generally not freely available to the public. With a view

to the largely institutional networks and re-tweets comprising institutional actors referencing each other, a recommendation in this case would be to open up the discussion and increase (re-)tweeting activities around more citizen-centred events.

Our time-based analysis however also shows that there certainly is potential – and it is made use of: during the 7th EU Cohesion Forum – in which regional and local representatives, economic and social partners, as well as NGOS were present – institutional discourse trickled down to the general citizen, resulting in #CohesionPolicy trending in Belgium; and building the bridge between the EU and its citizens.

5 References

Bryer, T. A. (2013). Designing social media strategies for effective citizen engagement: A case example and model. *National Civic Review, 102*(1), 43-50.

Cambria, E., Poria, S., Bajpai, R., & Schuller, B. W. (2016). SenticNet 4: A semantic resource for sentiment analysis based on conceptual primitives. *COLING,* 2666-2677.

Ceccobelli, D., & Siewert, M. B. (2016). Campaigning on Facebook: How do candidates running for the presidency of the European Commission behave? *Conference Paper.*

Delancray, C., & Lorthiois, L. (2014). *From social media to social activation in the EU.* Available at https://www2.deloitte.com/content/dam/Deloitte/lu/Documents/public-sector/lu-social-media-social-activation-eu-31102014.pdf.

Futurelab Europe. (2014). *The role of new social and digital media in the European public sphere.* Available at http://www.frittord.no/images/uploads/files/Position_Paper_-_The_Role_of_New_Social_and_Digital_Media_in_the_Europea....pdf.

Gausis, E. (2017). European institutions on social media: Shaping the notion of European citizenship. *Economics and Business, 30,* 27-39.

Hofmann, S., Beverungen, D., Räckers, M., & Becker, J. (2013). What makes local governments' online communication successful? Insights from a multi-method analysis of Facebook. *Government Information Quarterly, 30*, 387-396.

Hu, M., & Liu, B. (2004). Mining and summarizing customer reviews. *Proceedings of the tenth ACM SIGKDD international conference on Knowledge discovery and data mining*, 168-177.

Hutto, C.J., & Gilbert, E.E. (2014). VADER: A parsimonious rule-based model for sentiment analysis of social media text. *Eighth International Conference on Weblogs and Social Media (ICWSM-14). Ann Arbor, MI, June 2014.*

Jones, M.D. (2014). Communicating climate change: Are stories better than "just the facts"? *Policy Studies Journal, 42*(4), 644-673.

Nulty, P, Theocharis, Y., Popa, S.A., Parnet, O., & Benoit, K. (2016). Social media and political communication in the 2014 elections to the European Parliament. *Electoral Studies, 44*, 429-444.

Shanahan, E. A., McBeth, M. K., & Hathaway, P. L. (2011). Narrative policy framework: The influence of media policy narratives on public opinion. *Politics & Policy, 39*(3), 373-400.

Shanahan, E., Jones, M. D., McBeth, M. K., & Lane, R. R. (2013). An angel on the wind: How heroic policy narratives shape policy realities. *Policy Studies Journal, 41*(3), 453-483.

Usherwood, S., & Wright, K. A. M. (2017). Sticks and stones: Comparing Twitter campaigning strategies in the EU referendum. *The British Journal of Politics and International Relations, 19*(2), 371-388.

Wasserman, S., & Faust, K. (1994). *Social network analysis: Methods and applications.* Cambridge, ENG and NY: Cambridge University Press.

Wilson, T., Wiebe, J., & Hoffmann, P. (2005). Recognizing contextual polarity in phrase-level sentiment analysis. *Proceedings of the conference on human language technology and empirical methods in natural language processing*, 347-354.