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# AN ANALYSIS OF MULTIPLE SOCIAL MEDIA CONSULTATIONS IN THE EUROPEAN PARLIAMENT FROM A PUBLIC POLICY PERSPECTIVE

*Complete Research*

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## Abstract

*Government institutions of various levels have started experimenting with the use of social media for increasing citizens' involvement in their public policy making processes. It is necessary to evaluate systematically these initiatives from various perspectives, in order to develop new knowledge in this recently emerged area, concerning methods of social media exploitation in government, the value they can generate, and also the challenges they pose and their limitations. This paper contributes in this direction, by analysing three centrally managed multiple social media consultations conducted by Members of the European Parliament, from a public policy perspective, based on the wicked problems theory. It has been concluded that the above method of social media exploitation has a good potential for disseminating highly informative multimedia content on a policy under formulation to a much wider audience than the usual participants in the 'traditional' European Parliament consultations, and also involving and stimulating them to think about the policy, leading to the collection of useful relevant ideas, knowledge and opinions, in a cost efficient manner. However, in order to go into more discussion depth it will be necessary to conduct further consultations, more focused on particular sub-topics and participants. Furthermore, their outcomes should be combined and integrated with the ones of the 'traditional' consultations and experts' studies. Finally, a critical success factor is to build wide, knowledgeable, diverse and pluralistic communities for these social media consultations, including various social actors with strong interest and good knowledge of the particular problem, and extending beyond the networks of the initiator.*

*Keywords: Social Media, Government, European Parliament, Public Policy, Wicked Problems.*

## 1 Introduction

Government institutions of various levels (e.g. of local, regional and central government, and also international ones) have started experimenting with the use of social media for increasing citizens' involvement in their public policy making processes, taking advantage of the large numbers of users the social media attract, and the unprecedented capabilities they provide to simple non-professional users for developing, distributing, accessing and rating/commenting various types of digital content, and also for the creation of on-line communities (Bertot et al. 2012; Bonsón et al. 2012; Chun et al. 2012; Chun et al. 2010; Margo 2012; Chun and Luna Reyes 2012; Criado et al. 2013). Therefore it is necessary to evaluate systematically these initiatives from various perspectives, in order to develop new knowledge in this recently emerged area, concerning methods of social media exploitation in

government, their impact and value, and also the challenges they pose and their limitations, which will enable a mature and effective utilization of social media by government agencies (Chun and Luna Reyes 2012; Criado et al. 2013).

This paper contributes in this direction, by analysing from a public policy perspective three multiple social media consultations, which have been conducted by Members of the European Parliament, using the method and the technological infrastructure proposed by Charalabidis and Loukis (2012). In particular, this method aims to enable a wide involvement of many and diverse social actors in a policy consultation, through the combined exploitation of multiple social media, with each of them attracting different groups of citizens. In order to make this more efficient, it uses the application programming interfaces (APIs) of the targeted social media, initially for the automated posting of relevant content to all of them simultaneously, in order to initiate and stimulate discussion on the particular policy, and then for the automated retrieval from them of data on citizens' interactions with this posted content (e.g. views, likes, comments). These tasks are performed by a central ICT platform, which also makes advanced processing of the collected interaction data, such as calculations of various analytics, and opinion mining for extracting the main topics mentioned by citizens and the corresponding sentiments (positive or negative), aiming to support drawing conclusions from them, which are useful for public policy formulation. The context in which the above method is applied is quite interesting, due to the long and extensive debate about the European Union (EU) 'democratic deficit' (see for instance Chrysoschoou (2007)), one of its main dimensions being the limited accessibility of its main institutions to the ordinary citizens; therefore it is interesting to examine to what extent the combined exploitation of multiple social media can contribute to reducing this deficit.

Since the social problems that the public policies of various levels' government agencies (including the European Parliament) aim to address are usually 'wicked', our analysis of these multiple social media consultations from a public policy perspective is based on wicked problems theory (described in section 2.2): it assesses to what extent are these consultations useful for identifying the main elements of the social problem that the particular public policy aims to address (issues, solutions, advantages, disadvantages), which are perceived by various stakeholders' groups, for revealing similarities and differences among them, and for facilitating synthesis and convergence. This important perspective of social media use by government agencies has not been investigated by previous literature.

The research presented in this paper has been conducted as part of project PADGETS ('PolicyGadgets Mashing Underlying Group Knowledgein Web 2.0 Media' – <http://www.padgets.eu>), which has been partially funded by the 'ICT for Governance and Policy Modelling' research initiative of the EU.

The paper is structured in seven sections. In the following section 2 the background of our research is presented. The organization of our three policy consultations are described in section 3, followed by methodology we followed for their analysis in section 4, and the results of it in section 5. Finally, in section 6 the conclusions are summarized and future research directions are proposed.

## **2 Background**

### **2.1 Social Media in Government**

Previous literature has extensively analysed the great potential of social media for supporting, enhancing and transforming critical government functions, and offering to government agencies big opportunities to: i) increase citizens' participation and engagement, providing to more groups of modern societies a voice in debates on public policies development and implementation; ii) promote transparency and accountability, and reduce corruption, enabling governments to open up large quantities of activity and spending related data, and at the same time enabling citizens to collectively take part in monitoring the activities of their governments; iii) proceed to public services co-

production with citizens, enabling government agencies and the public to develop and design jointly government services; iv) exploit citizens' knowledge and talent in order to develop innovative solutions to the increasingly serious and complex societal problems (Bertot, Jaeger and Hansen 2012; Bertot, Jaeger and Grimes 2012; Bonsón et al. 2012; Linders 2012; Margo 2012).

Social media can drive important innovations in both internal operations of government agencies and the ways they interact with the public outside their boundaries, and transform government's behavior and practices in information sharing and service provision, change the decision making patterns in all levels of government, and facilitate policy changes based on vast input from the citizens (Criado et al. 2013). They can lead to the creation of new models and paradigms in the public sector: i) social media-based citizen engegement models, ii) social media-based data generation and sharing models, and iii) social-media based collaborative government models (Chun and Luna Reyes 2012). Previous research in the domain of private sector innovation has revealed that the exchange of knowledge and opinions among individuals with different education, expertise and experience promotes innovation, and that ICT (and especially Internet-based ones) can greatly facilitate and support this exchange (Nerkar and Paruchuri 2005; Cassiman and Veugelers 2006; Thomke 2006; Meyer 2010). Also, previous research on creativity has emphasized the importance of diverse social networks, since generating creative ideas is often the result of novel combinations of different perspectives that individuals are exposed to via social interaction (Garfield et al. 2001; Perry-Smith and Shalley 2003; Wu and Chang 2013). Therefore, taking into account that the development of public policy for addressing a social problem usually includes the creative design of innovative actions for managing various dimensions of it, we expect that the exploitation of social media by government agencies for conducting consultations with citizens can contribute to the formulation of highly innovative policies.

In this direction there is previous literature arguing that the capabilities offered by social media for a wide and low cost application by government agencies of the 'crowdsourcing' ideas' (Brabham 2008 and 2012; Howe 2008) can be highly useful for public policy making. These Web 2.0 platforms enable government agencies to mine useful fresh ideas from large numbers of citizens concerning possible solutions to social needs and problems, new public services or improvements of existing ones, or other types of innovations (Bovaird 2007; Lukensmeyer and Torres 2008; Nam 2012; Linders 2012). This can facilitate the adoption of open innovation ideas (Laursen and Salter 2006; Chesbrough 2003; Chesbrough and Crowther 2006; Chesbrough and Appleyard 2007; Enkel et al. 2009) in the public sector, which can lead to more innovative and socially-rooted public policies (Hilgers & Ihl 2010).

Another parallel research stream is dealing the impact of social media on political communication in general, focusing mainly on election campaigns (Schweitzer 2008; Wattal et al. 2010; Larsson and Moe 2011 and 2013; Larsson 2013; Vergeer and Hermans 2013). The main question it investigates is whether e-campaigning transforms and substitutes the patterns of offline electioneering (innovation hypothesis) or replicates them (normalization hypothesis). According to the 'innovation hypothesis' the media-specific features of ICT (hypertextuality, interactivity, multimedia and information capacity) lead to fundamental changes in the practices and patterns of electioneering and in the political communication in general, offering opportunities to revitalize the ideals of democratic discourse. On the contrary according to the 'normalization hypothesis' the way ICT are used are shaped by the existing campaign tactics, established power and resource relations, or traditional cultural values; therefore online campaigning leads not to a revolution but rather to a reinforcement of typical offline practices and patterns of political communication. Schweitzer (2008) has elaborated the innovation hypotheses by defining six dimensions of ICT-driven innovation in political communication (that can be viewed as sub-hypotheses of the innovation hypothesis); three of them are at the 'structural level': more efficient, rapid and extensive dissemination of information from politicians to citizens, more dialogue and interaction among them, and more customization of political messages; the other three are at the political communication 'content level': more substantial policy discussions, more decentralized and less candidate-focused approach in political communication, and more 'positive style' with fewer political attacks. It should be mentioned that most of the empirical

studies that have been conducted concerning the above questions support mainly the normalization hypotheses (though in most of them it is mentioned that this might be because we are still in the initial stages of the utilization of various kind of ICT (e.g. websites, social media) in election campaigns and political communication in general, so we are far from exploiting their full potential); however, some studies have found some first evidence supporting the innovation hypothesis (e.g. the abovementioned study of Wattal et al. (2010) based on data from the USA 2008 presidential campaign has found evidence that the Internet has reduced the (financial) ‘barriers to entry’ in politics, serves to ‘level the playing field’, so it may foster a new generation of politicians who ignore traditional “big money” tactics in favor of grassroots campaigns).

Therefore extensive research needs to be conducted concerning the exploitation of the above potential of social media by government agencies and politicians, and the benefits/value from them; this research should aim at the development of effective methods and practices for this purpose, and at understanding better their impact and value, to what extent they lead to innovation or normalization, and also the challenges they pose and their limitations (Chun and Luna Reyes 2012; Criado et al. 2013). Our study makes a contribution in this direction, as it examines the benefits/value generated by a novel method of social media exploitation in government (automated use of multiple social media from a central ICT platform through their APIs see Charalabidis and Loukis (2012)) from a public policy perspective.

## **2.2 Wicked Problems Theory**

Public policies designed and implemented by government agencies of all levels (e.g. of local, regional and central government, and also international ones) aim to address various types of social problems. Previous literature has analysed the inherent high complexities of social problems. In a highly influential paper Rittel and Weber (1973) theorize that social problems are usually ‘wicked’, because they lack clear and widely agreed definition and objectives. Our societies have become more heterogeneous and pluralistic in terms of culture, values, concerns and lifestyles, and this has serious effects on their perceptions of social problems and on the methodology of addressing them: social problems have many stakeholders with different and heterogeneous problem views, concerns and expectations, so they lack clear and widely agreed definition and objectives that can be adopted as criteria for identifying and evaluating possible solutions. For these reasons these wicked social problems cannot be solved by using the previously established ‘first generation’ methods, which are based on mathematical optimization algorithms, because the latter do need clear and widely agreed definition and objectives. So Rittel and Webber (1973) suggest that these wicked social problems require ‘second generation’ methods, which include:

- a first stage of consultation among problem stakeholders, aiming to formulate a shared definition of the problem and the relevant objectives to be achieved,
- and then a second stage of mathematical analysis of the well-defined at this stage problem, using various optimization algorithms.

In the first stage it is necessary to conduct extensive discourse and negotiation among the stakeholders of the social problem, in which each of them expresses their views, opinions, concerns and expectations with respect to the problem, and similarities and differences are identified and discussed further, performing several cycles of this process if required, in order to achieve finally a synthesis and convergence, and formulate a shared definition of the problem and the particular objectives to be achieved.

Subsequent research on this ‘second generation’ approach to the wicked social problems has revealed that its critical first stage can be greatly supported by the use of appropriate information systems, which are referred to as ‘issue-based information systems’ (IBIS) (Kunz and Rittel 1979; Conklin and Begeman 1989; Conclin 2003). These systems allow stakeholders to enter the following four types of

elements, which are regarded as the basic ‘ontology’ of a consultation (i.e. the main types of entities that a consultation includes): ‘topics’ (defined as broad discussion areas), ‘questions/issues’ (defined as particular problems to be addressed within a discussion topic), ‘ideas’ (defined as possible alternative solutions for addressing the above questions/issues), and also positive and negative ‘arguments’ (defined as positive and negative evidence or viewpoints that respectively support or object to ideas).

Therefore it is important to assess to what extent ICT-based policy consultations (using different ICT tools) conducted by government agencies of various levels are useful for addressing the abovementioned inherent complexity of the corresponding wicked social problems: for identifying the above four types of elements of them, which are perceived by various stakeholders’ groups, for revealing similarities and differences among them, and for facilitating synthesis and convergence.

### 3 Policy Consultations Organization

Three pilot multiple social media policy consultations were organised in cooperation with three Greek Members of the European Parliament (MEPs), using the method and the technological infrastructure proposed by Charalabidis and Loukis (2012). They all concerned the use of multiple social media for consultations about the policies that should be adopted by the European Parliament for addressing specific problems; the first two of them for managing two negative situations:

- a milder one, the underrepresentation of women executives in the higher management of enterprises,
- and a severe one, the socio-economic crisis that the societies of the Southern European countries are facing,

while the third one for the exploitation of an important positive opportunity for the society:

- the exploitation of renewable energy sources, and especially wind power, for improving capacity in energy production.

The above three MEPs undertook the role of initiators of the consultations, and their existing personal accounts in three different social media platforms (Facebook, Twitter, Blogger) were used to activate and involve various interested social actors. The following process was followed for the organization of the consultations:

a) The first step was the presentation of this concept of multiple social media consultation to several Greek MEPs.

b) For the three MEPs who were eventually interested and willing to participate, we proceeded to a more detailed presentation of the concept and the supporting central ICT platform to their Assistants. Then the main topics of the consultations were selected in cooperation with them, so that on one hand they reflect current debates and priorities of the European Parliament, and on the other hand satisfy our objectives (as we wanted to have policy consultations both on the management of negative situations of various levels of severity, and also on the exploitation of positive opportunities).

c) For each consultation the targeted community was initially built, by enhancing the already established social networks of the MEPs in the employed social media platforms (Facebook, Twitter, Blogger), and by identifying and inviting additional groups interested in the particular topic. These groups were contacted (by e-mail, phone, or social media) and asked to be involved, both by propagating the initial messages and content of the consultation to other groups and individuals who might be interested, and also by contributing messages and content. The communities of the first and third pilot were built in Greece, but for second pilot, due to its nature, we decided to build a cross-

national community. The rationale behind this was that since the problem to be addressed in this pilot (the socio-economic crisis in the European South) affects several countries, a consultation on it should involve a wider community representing all the affected countries. For this purpose cooperation was established between the Greek initiator MEP, two other MEPs from Italy and Spain, and also the Portuguese Socialist party and a civil society initiative currently established in Portugal. Each of them, under the coordination of the Greek side, used their own social media accounts to post simultaneously the same initial messages and content on the problem (translated in their own language), in order to initiate and stimulate discussion on it. Additionally, a blog was created in English in order to host international discussion on this problem.

d) The next step was the preparation of various forms of messages and multimedia content concerning the particular problem, such as short messages, larger texts, small surveys, photos, videos, charts with statistical figures; they aimed to introduce to the community the different aspects of the problem, and provide a basis and stimulation for its online discussion. Also, the employed social media accounts were defined and set-up in the central ICT platform.

e) Subsequently, the consultation was launched: the responsible team (consisting of Assistants of the MEP, and members of the authors' research group) started publishing the prepared messages and content on the aforementioned social media using the central ICT platform.

f) The operation of the consultations lasted fifteen days on average, and included close monitoring of users' activity daily, especially their textual inputs.

g) Finally, each consultation was concluded with analysis of participants' activity and a discussion with involved MEP's team, and their results are presented in section 5.

Moreover, all the above stages were supported by a set of dissemination activities (press releases, news articles, newsletters, banners) and physical events for boosting the social media discussion.

## 4 Consultations Analysis Methodology

As mentioned in 2.2, most public policies today aim to address 'wicked' social problems (Rittel and Weber 1973), which lack clear and widely agreed definition and objectives, and have many stakeholders with different and heterogeneous problem views, values, concerns and expectations. For this reason the analysis of these multiple social media policy consultations should focus on assessing to what extent they are useful for addressing this inherent complexity of public policy making, and the most appropriate lens for this is the 'Wicked Problems Theory' outlined in 2.2. Therefore our consultations' analysis methodology (shown in Table 1) assesses to what extent they are useful for reaching and involving wider audiences in a short time and at low costs; also, to what extent they are useful for identifying the main issues concerning the social problem to be targeted by the particular policy under formulation, possible solutions for addressing them, and relevant advantages - positive arguments and disadvantages - negative arguments; to what extent they reveal similarities and differences among stakeholders on the definition of the problem, the main issues, the required solutions/activities, and also their advantages and disadvantages; and finally to what extent they facilitate synthesis and convergence (at least to some extent) between the stakeholders on the above aspects.

To what extent these multiple social media policy consultations are useful/beneficial in terms of ...

- reaching and involving wider audiences
- time saving
- cost saving
- identifying the main issues concerning the targeted social problem

- |   |
|---|
| <ul style="list-style-type: none"><li>• identifying possible solutions or activities for addressing these issues</li><li>• identifying relevant advantages (positive arguments) and disadvantages (negative arguments) of them</li><li>• revealing similarities and differences among stakeholder groups on the definition of the problem, the main issues, the required solutions/activities, and also their advantages and disadvantages</li><li>• facilitating synthesis and convergence (at least to some extent) among stakeholders on these aspects</li></ul> |
|---|

Table 1. Consultations Analysis Methodology

In order to assess the above analysis dimensions, at the end of each consultation data were collected from three different sources:

a) Social Media Metrics: They were collected from the official social media accounts of the initiators MEPs and the Google analytics engine, and used in order to calculate the level of reach and engagement achieved in the consultations. The Google analytics were used to provide statistical information on the traffic in the consultation blogs; we focused on the total number of unique visitors and the countries they were coming from, the total visits and page views, and the traffic sources. With respect to the reach, it was not possible to calculate accurately the number of unique users who saw the initial messages and content of each consultation, due to the viral effects caused by the retransmissions of them in the Facebook and the Twitter. For this reason we calculated a conservative estimate of the audience reached and also a more optimistic one. The conservative estimate was calculated as the sum of the unique visitors in the consultation blogs and Facebook accounts. The more optimistic one was calculated as the sum of the unique visitors in the consultation blogs plus the numbers of followers in the Facebook and Twitter accounts. The actual audience engagement achieved was calculated as the sum of users' active reactions to the messages and content of each consultation in its social media accounts, taking into account for each social media platform the particular kind of reactions it allows. In particular, in Facebook the number of 'likes', 'shares' and 'comments' on the created posts were taken into account, in Twitter the 're-tweets', 'replies' and 'favorites' on the campaign 'tweets', and finally in Blogger the number of 'comments' submitted on the blog posts. Also, we have distinguished between two forms of reactions: 'direct' ones, concerning the initial posts, and 'indirect' ones, concerning their first level retransmissions (through sharing in Facebook and through re-tweeting in Twitter).

b) Textual inputs analysis: The textual inputs of the participants in each consultation (i.e. various types of comments) were retrieved and analysed in a twofold manner. First, using the opinion mining capabilities of the central ICT platform (see Charalabidis and Loukis (2012)) the main topics mentioned and the corresponding sentiments were extracted. Second, all textual inputs were examined in more detail, in order to understand better their nature, and then classified according to the typology of the wicked problems theory (section 2.2), as issues/concerns, solutions, advantages or disadvantages/barriers. Also, they were grouped according to the subject (i.e. textual inputs concerning the same subject were grouped together), and for the most frequently mentioned subjects representative textual inputs have been identified, and are mentioned in section 5.2.

c) Focus group discussions: Three separate semi-structured focus group discussions were organised with the three MEPs' teams involved in these consultations. In each of them initially were presented the results of the analyses of the above data (a) and (b) for their consultation. Then the participants were encouraged to unfold their views on the whole multiple social media consultation concept, and assess all the dimensions of our consultations analysis methodology outlined in Table 1. Each discussion lasted about one hour, was recorded with the consent of the participants, and then transcribed and coded manually using an open coding approach (Maylor and Blackmon 2005).



## 5 Results

### 5.1 Social Media Metrics

The reach estimations we calculated as described in the previous section 4 lead to the conclusion that the messages and content published by the three MEPs in these consultations reached large numbers of citizens. In particular, the conservative estimation of their reach (= sum of the unique visitors in the consultations' blogs and Facebook accounts) is at the level of about 10,000 citizens, while the more optimistic estimation (= sum of the unique visitors in the consultation blogs plus the numbers of followers in the Facebook and Twitter accounts) is at the level of 35,000 citizens. With respect to the actual engagement of people, our estimations according to the previous section 4 indicate that the consultation posts have generated 5,869 direct and indirect reactions. The above results provide a first positive evidence that the multiple social media policy consultations enables us to communicate messages and multimedia content concerning the problem we want to create public policy for, to large numbers of citizens, and also to obtain their reactions, which can be quite useful for the initial formulation of the policy.

### 5.2 Textual Inputs Analysis

Next, for each consultation we analysed the textual inputs of the participants as described in section 4. In the first consultation the main question under discussion was how we can improve the gender balance among non-executive directors of companies, and what activities and measures should be undertaken in order to achieve the target of 40% women presence in management boards by 2020 set by relevant EU draft directives. Most textual inputs entered by citizens concern the advantages of the EU policy under formulation for increasing women representation in top management positions (which can be viewed as a high level 'solution' direction according to the wicked problems theory terminology). A number of specific advantages of this policy have also been mentioned, which are summarized by the following contribution: *"women bring another dimension to corporate governance and decision-making in general, because of their special qualifications, such as multitasking, and the world with more women in leadership positions would be safer and more effective and lead to social, economic, and cultural progress"*. Also, many textual inputs - mainly by women - stressed the barriers to their participation in management boards (which can be characterised as 'issues' according to the wicked problems theory terminology, directly associated with the above 'solution'), such as the negative prejudice towards women's skills, differences among the relevant legal frameworks in different EU countries, and factors that influence negatively women's professional evolution and prospects, such as family responsibilities, and the time required to best serve their different roles, leading finally to less women pursuing higher positions than men.

However, there was only a small number of textual inputs proposing solutions to the above issues (barriers), with most of them being concerning either cultural or legislative changes. The former propose changes in peoples' behaviors and mentalities, and overcoming relevant stereotypes. As it was characteristically said *"It is time to overcome the discrimination against women"*, *"Not to force equal behavior and imitation, but equal treatment and equal opportunities"*, but *"equality is matter of culture and education, so strategies should be start from there"*. The latter propose modifications in the relevant legislation, e.g. to include the 40% women representation target of relevant EU draft directives not only non-executive positions, but also executive ones in management boards; also, this to apply to SMEs as well, or even to all companies of the private and public sector. Summarizing, in this first pilot we received useful textual contributions, concerning mainly advantages of the initial solution direction, and also issues - barriers with respect to its realisation. On the contrary, there were much fewer proposals of solutions, mainly general ones, while there was a lack of more specific solutions' proposals, and also advantages and disadvantages of them.

The second consultation concerned the current severe socio-economic crisis in the European South. Most textual inputs collected referred to issues raised by participants, concerning either the insufficiency of current austerity measures forced by the European institutions for overcoming the crisis, or perceived causes of the crisis. For instance, with respect to the former a posting mentioned that *“austerity measures, do not contribute to economic improvement”*. Regarding the latter there was a convergence on the main causes of the problem: *“the division between North and South”*, *“left and progressive is absent from European politics”* and *“the barbarism of the Northern countries”*. Some other textual inputs proposed general solution directions. The majority of them referred to required transformations in government institutions, including the *“establishment a healthy state machine”*, *“elimination of corruption”*, *“consolidation of the public sector”*, *“Less favouritism and customer relationships from politics”*. Some others mentioned the need for cultural change in public sector agencies, and in the society in general, as an important prerequisite. Summarizing, in this second pilot most textual contributions are perceived critical issues concerning the main problem, with only few of them mentioning of pointing towards specific solution directions. Also, it should be noted that both the above issues and proposed solution directions were not ‘politically balanced’, but rather biased towards a social-democrat direction (as in this pilot the initiator MEP was from the Socialist-Democrat group of the European Parliament).

Finally, the third consultation concerned the exploitation of wind energy as an alternative renewable energy source. In this debate two distinct clusters of participants were clearly identified. The first cluster includes participants who are against the massive exploitation of wind power for energy generation (which can be viewed as a high level ‘solution’ direction according to the wicked problems theory terminology); nearly all their textual inputs highlight disadvantages, such as the negative environmental consequences from the installation of wind parks (*“wind turbines threaten environment, animals, birds, etc.”*), their high cost (*“the installation and maintenance cost are prohibitive”*), the lack of efficient technologies for storing wind energy (*“neither wind nor electricity produced can be stored, so wind power is fundamentally incompatible with energy networks”*), while concerns about the financial feasibility and profitability of wind energy have also been expressed. We also had a few textual inputs from this cluster proposing alternative solutions, such as better management and more efficient use of energy resources, for instance *“using energy efficient appliances and machines both for consumers and for the industry”*. The second cluster includes participants who recognize the benefits from the exploitation of the renewable wind energy sources, but are to some extent concerned about its risks and disadvantages. Many of their textual inputs mention benefits and advantages of the installation of wind parks, as a sustainable way to cover part of the energy needs, however at the same time they accept some of the risks and disadvantages mentioned by the first cluster. Some other textual inputs from this cluster propose ideas for addressing the disadvantages/issues, for instance *“feasibility studies can be conducted by independent bodies”*, or for the efficient exploitation of wind energy, such as *“combination of wind energy with other renewable energy sources (e.g. geothermal, solar, hydroelectric)”*, *“construction of third generation systems”*, *“installation of wind turbines for urban environment”*. It should be noted that some degree of convergence between these two clusters has been developed, despite their differences, concerning the problems and disadvantages of wind energy.

Summarizing, this third consultation differs from the first two, in that it has revealed two clusters having different positions on wind energy exploitation, with the first of them being negative and posting mainly disadvantages, and the second being positive and posting both advantages and proposals for addressing the inherent disadvantages and improving exploitation efficiency, leading finally to some degree of convergence. In this consultation we had more proposals for solutions and actions that should be taken, and also more specific ones, than in the first two consultations. Furthermore, though the majority of the proposals referred to actions to be taken by government institutions, we also had interesting proposals for cooperations and synergies between different social actors, including government agencies of various layers, civil society, educational organizations and industry. Therefore we can conclude that this third consultation has provided more basis and support

for the formulation of European Parliament policies on wind energy exploitation, and also for the mobilisation of other social actors as well, in order to increase overall effectiveness. The main reason suggested for this in the corresponding focus group discussion was that in this consultation there was a strong emphasis on building a wide and diverse community to participate in the consultation, beyond the followers-friends of the social media accounts of the initiator MEP (e.g. many diverse civil society organizations with strong interest and extensive knowledge on wind energy, and renewable energy sources in general, were invited, covering a wide range of different views and perspectives). This indicates that the quality and diversity of the communities of these policy consultations is quite important for their success.

### 5.3 Focus Group Discussions

In all three focus group discussions there was a wide agreement that these multiple social media consultations constitute a time and cost efficient method to communicate a social problem to a wide audience *“that an MEP will be unable to reach under other conditions”* and achieve high levels of reach, in order to stimulate and motivate them to think about possible policies for addressing the problem, and to express their relevant ideas, knowledge and opinions. They enable much wider reach and participation of more citizens (individuals or representatives of affected citizens’ groups) in comparison with the traditional methods already used by the European Parliament for conducting consultations on various problems and policies (such as physical events and meetings with representatives of the most important stakeholders), with lower effort and cost. This app enables ‘widening’ policy consultation in the European Parliament, and involving a wider circle of stakeholders’ representatives, and also the general public. It can be especially useful for involving younger target groups in such debates, which seems difficult to be achieved currently with the traditional consultation methods. According to one of the involved MEP Assistants, it can be a valuable complementary activity that increases awareness and participation by *“transferring the consultation outside the events we usually organise”*.

Furthermore, the participants in the focus group discussions believe that these consultations provided a useful ‘high level’ picture about advantages and disadvantages of existing general policy directions on the topics under discussion (e.g. for increasing women representation in top management positions, overcoming the socio-economic crisis in the European South, exploiting wind energy), and also important issues and barriers, as perceived by various social actors. This information is quite useful for the detailed design of policies and specific actions, aiming to exploit the above advantages, and manage disadvantages, issues and barriers, and also for the design of appropriate communication actions if necessary. Overall, the participants in the focus group discussions characterised the approach as a valuable tool for gathering the main issues on which public policies on a particular social problems should focus on, as perceived by social actors, and for collecting some interesting relevant ideas, knowledge and opinions, since it allows *“hearing citizens’ voices as an initial formulation of ideas”*. As underlined by one of the MEP Assistants *“the outcome of the campaign provided an identification of the issues that should be taken in consideration in the formation of solutions, as input coming from society”*.

However, it was mentioned that they would expect these multiple social media consultations to provide them not only a ‘high level’ picture, but also to go into more detail and depth concerning issues, solutions, advantages and disadvantages. Therefore it was suggested that in order to achieve this the information collected from such a consultation should be processed, and then used for subsequent more focused consultations on specific sub-topics and social actors with strong interest and extensive knowledge and experts. Furthermore, it was mentioned that the topic of the second pilot (socio-economic crisis in the European South) was quite complex, so proposing specific solutions and activities for addressing it requires extensive study by experts (which is to some extent in progress by various European institutions and research centres). Therefore a realistic expectation from such a

social media consultation is the collection of the main issues and solution directions perceived by social actors. One of the involved MEP Assistants said: “*We did not manage to find out the solution on the European South Crisis, but we didn’t target on this: we wanted to listen to citizens’ opinions on the issues that we should be concerned with*”. So it was widely agreed that the outcomes of these multiple social media consultations should be combined and integrated with the outcomes of other consultations usually conducted by the European Parliament with the traditional methods and of experts’ studies.

Another weakness mentioned was that in the first two consultations we did not have ‘balanced debates’, with different and diverse views and perspectives being expressed; so we did not have the opportunity to identify groups with different opinions, and have confrontations and convergences, which are, as mentioned in section 2.1, quite important for the creative development of innovative policies and actions for addressing social problems. On the contrary, this weakness did not appear in the third consultation (on the exploitation of wind power), in which we had a more balanced and pluralistic debate, in which two different opinion clusters were identified, and a higher diversity of views and opinions were expressed, providing finally more assistance and support for the formulation of public policy. This is attributed by the participants in the corresponding focus group discussion to the fact that in this consultation there was particularly strong emphasis and great effort for built a wide and diverse community, by inviting a big number of civil society organizations with strong interest and extensive knowledge on wind energy, and renewable energy sources in general, and also diverse perspectives and orientations; this happened in the other two consultations as well, but to a much smaller extent. Furthermore, it was mentioned that while in the usual traditional consultations conducted by the European Parliament there is participation of a variety of diverse stakeholders, having different opinions and perspectives, this multiple social media consultation approach poses the risk of discussions among like-minded individuals belonging to the networks of the initiator MEP, leading to reduced diversity of opinions and perspectives; this reduces the richness of the consultation (and of the identified issues, solutions, advantages, disadvantages) and its creativity, and does not assist much in identifying stakeholder groups with different opinions and perspectives, understanding the similarities and differences among them, and facilitating synthesis and convergence. Hence, it was recommended that it is critical that such consultations should not be based only on social media accounts and networks of one MEP; they should exploit social media accounts and networks of several MEPs of different political groups and orientations, and also of other social actors, which enable access to a wide range of diverse communities with interest in and knowledge on the topic under discussion.

## 6 Conclusions

In the previous sections we have analysed from a public policy perspective three multiple social media consultations conducted by MEPs. For this purpose we developed an analysis methodology based on sound theoretical foundations from the political sciences: the wicked problems theory.

The evidence collected from the above consultations indicates a good potential of this multiple social media consultation approach to disseminate to a wide audience, with low cost and effort, multimedia content about a social problem, and to stimulate and motivate them to think about possible policies and actions for addressing it, and to express their relevant ideas, knowledge and opinions. It enables ‘widening’ policy consultation in the European Parliament, and involving a wider circle of stakeholders’ representatives, and also the general public. This can be very useful, taking into account the long and extensive debate about the EU ‘democratic deficit’ (Chryssochoou 2007), since one of its main dimensions is the limited accessibility of EU institutions to the ordinary citizens. These consultations generated useful information concerning advantages and disadvantages of existing general policy directions on the corresponding problems, important issues and application barriers, as

perceived by social actors, and also some ‘high-level’ solution directions. This information constitutes a useful basis and support for the more detailed design of public policies and their elaboration into specific actions. However, in order to go into more discussion depth it will be necessary to conduct a series of such social media consultations, probably with different thematic focus and participants each. Also the outcomes of such multiple social media consultations should be combined with the outcomes of other ‘traditional’ consultations, and also of experts’ studies.

It has been concluded that a critical precondition for the success of this approach is to build wide, diverse and pluralistic communities for these social media consultations, including social actors with strong interest and good knowledge of the particular problem, and also different orientations and perspectives, extending beyond the networks of the initiator. This results in more balanced, pluralistic and productive debates, and enables identifying stakeholders’ clusters with different opinions, understanding similarities and differences among them, and facilitates confrontations and convergences. These are highly important for modern public policy making, due to the ‘wicked’ nature of most social problems that public policies aim to address (section 2.2). Also, they lead to more creative and innovative identification of policies and actions for addressing various dimensions of complex social problems. However, if this critical precondition is not fulfilled, this approach can lead to consultations among ‘like-minded’ individuals/social actors belonging to the networks of the initiator MEP, resulting in reduced diversity of opinions and perspectives, and finally providing limited support for public policy formulation and addressing its inherent difficulties. These findings are in line with previous private sector innovation research, which concludes that the exchange of knowledge and opinions among diverse individuals with different experiences and knowledge promotes innovation, and that ICT can be very useful for this (Nerkar and Paruchuri 2005; Cassiman and Veugelers 2006; Thomke 2006; Meyer 2010). Also, they are in line with previous research on creativity, which emphasizes the positive impact of diverse social networks on creative performance (Garfield et al. 2001; Perry-Smith and Shalley 2003; Wu and Chang 2013).

The findings of our study provide some evidence in favour of the ‘innovation hypothesis’ (Schweitzer 2008; Larsson 2013) outlined in section 2.2, indicating that this multiple social media consultation approach can lead to innovations in political communication along four out of the six innovation dimensions proposed by Schweitzer (2008): more efficient and extensive dissemination of information from politicians to citizens, more dialogue and interaction among them (at the structural level), and also more substantial policy discussions, and more ‘positive style’ with fewer political attacks (at the content level).

This study has interesting implications for research and practice. With respect to research, it opens up a new direction of research on the use of social media by government from a public policy perspective, and also proposes a framework for this research, which is based on sound theoretical foundations from political sciences research. With respect to practice, our findings provide useful guidance to both government agencies management and elected representatives for the effective exploitation of these recently emerged and highly popular social media platforms in policy making processes. However, further research is required in the above directions, for investigating the use of social media for supporting various stages of the policy making cycle, by government institutions of different types and levels, and for different kinds of policies and social problems. Also, it is necessary to examine the combination of these multiple social media consultations, with consultations based on other more structured ICT tools, such as structured forums (Loukis and Wimmer 2012), for supporting public policy making.

## References

- Bertot, J. C., Jaeger, P. T. and Grimes J. M. (2012). Promoting transparency and accountability through ICTs, social media, and collaborative e-government. *Transforming Government: People, Process and Policy*, 6 (1), 78 – 91.
- Bertot, J. C., Jaeger, P. T. and Hansen, D. (2012). The impact of policies on government social media usage: Issues, challenges and recommendations. *Government Information Quarterly*, 29, 30-40.
- Bonsón, E., Torres, L., Royo, S. and Flores, F. (2012) Local e-government 2.0: Social media and corporate transparency in municipalities, *Government Information Quarterly*, 29, 123–132.
- Bovaird, T. (2007). Beyond engagement and participation: User and community coproduction of public services. *Public Administration Review*, 67 (5), 846–860.
- Brabham, D. C. (2008). Crowdsourcing as a Model for Problem Solving: An Introduction and Cases. *Convergence: The International Journal of Research into New Media Technologies*, 14 (1), 75-90.
- Brabham, D. C. (2012). Crowdsourcing: A Model for Leveraging Online Communities. In: A. Delwiche and J. Henderson (Eds.) *The Routledge Handbook of Participative Cultures*, Routledge.
- Cassiman, B. and Veugelers, R. (2006). In Search of Complementarity in Innovation Strategy: Internal R&D and External Knowledge Acquisition. *Management Science*, 52 (1), 68-82.
- Charalabidis, Y. and Loukis, E. (2012). Participative Public Policy Making Through Multiple Social Media Platforms Utilization. *International Journal of Electronic Government Research*, 8 (3), 78-97.
- Chesbrough, H. W. (2003). *Open Innovation: The New Imperative for Creating and Profiting from Technology*, Harvard Business School Press, Boston, Massachusetts.
- Chesbrough, H. W. and Crowther, A. K. (2006). Beyond high-tech: early adopters of Open Innovation in other industries. *R&D Management*, 36 (3), 229–236.
- Chesbrough, H. W. and Appleyard, M. M. (2007). *California Management Review*, 50 (1), 57-76.
- Chrysochoou, D. (2007). Democracy and the European polity. In *European Union Politics - 2nd edition* (Cini M. Ed.), Oxford University Press, Oxford, UK.
- Chun, S. A. and Luna Reyes, L. F. (2012). Editorial - Social media in government. *Government Information Quarterly*, 29, 441–445.
- Chun, S. A., Shulman, S., Sandoval, R. and Hovy, E. (2010) Government 2.0: Making connections between citizens, data and government, *Information Polity*, 15 (1/2), 1-9.
- Conklin, J. (2003). Dialog Mapping: Reflections on an Industrial Strength Case Study. In *Visualizing Argumentation: Software Tools for Collaborative and Educational Sense-Making* (Kirschner, P., Buckingham Shum, P. and Carr C. Eds.), Springer Verlag, London, UK.
- Conklin, J. and Begeman, M. (1989). gIBIS: A tool for all reasons. *Journal of the American Society for Information Science*, 40 (3), 200–213.
- Criado, J. I., Sandoval-Almazan, R., Gil-Garcia, J. R. (2013). Government innovation through social media. *Government Information Quarterly*, 30 (4), 222-230.
- Dodgson, M., Gann, D. and Salter, A. (2006). The Role of Technology in the Shift Towards Open Innovation: The Case of Procter & Gamble. *R&D Management*, 36 (3), 333-346.
- Enkel, E., Gassmann, O. and Chesbrough, H. (2009). Open R&D and Open Innovation: Exploring the Phenomenon. *R&D Management Journal*, 39 (4), 311-316.
- Garfield, M. J., Taylor, N. J., Dennis, A. R., and Satzinger, J. W. (2001). Research Report: Modifying Paradigms - Individual Differences, Creativity Techniques, and Exposure to Ideas in Group Idea Generation. *Information Systems Research*, 12 (3), 322-333.
- Hilgers, D. and Ihl, C. (2010). Citizensourcing: Applying the concept of open innovation to the public sector. *The International Journal of Public Participation*, 4(1), 67–88.
- Howe, J. (2008). *Crowdsourcing, why the power of the crowd is driving the future of business*. Crown Business, New York.
- Kunz, W. and Rittel, H. (1979). Issues as Elements of Information Systems. Working Paper No. 131, University of California, Berkley.

- Larsson, A. O. and Moe, H. (2011). Who Tweets? Tracking microblog use in the 2010 Swedish election campaign. In Proceedings of the 19<sup>th</sup> European Conference on Information Systems (ECIS), Helsinki, Finland.
- Larsson, A. O. and Moe, H. (2013). Studying political microblogging: Twitter users in the 2010 Swedish election campaign. *New Media & Society*, 14 (5), 729 – 747.
- Larsson, A. O. (2013). “Rejected Bits of Program Code”: Why Notions of “Politics 2.0” Remain Mostly Unfulfilled. *Journal of Information Technology and Politics*, 10 (1), 72-85.
- Laursen, K. and Salter, A. (2006). Open for innovation: the role of openness in explaining innovation performance among U.K. manufacturing firms. *Strategic Management Journal*, 27, 131-150.
- Linders, D. (2012). From e-government to we-government: Defining a typology for citizen coproduction in the age of social media. *Government Information Quarterly*, 29, 446–454.
- Loukis, E., Wimmer, M. (2012). A Multi-Method Evaluation of Different Models of Structured Electronic Consultation on Government Policies’, *Information Systems Management*, 29, 284–294.
- Lukensmeyer, C. J. and Torres, L. H. (2008). Citizensourcing: Citizen participation in a networked nation. In K. Yang, & E. Bergrud (Eds.), *Civic engagement in a network society* (207–233). Charlotte, NC: Information Age Publishing.
- Nam, T. (2012). Suggesting frameworks of citizen-sourcing via Government 2.0. *Government Information Quarterly*, 29, 12–20.
- Margo, M. J. (2012) A Review of Social Media Use in E-Government. *Administrative Sciences*, 2 (2), 148-161
- Maylor, H. and Blackmon, K. (2005). *Researching Business and Management*. Palgrave-Macmillan, New York, USA.
- Meyer, J. (2010). Does Social Software Support Service Innovation? *International Journal of the Economics of Business*, 17 (3), 289-311.
- Nerkar, A. and Paruchuri, S. (2005). Evolution of R&D Capabilities: The Role of Knowledge Networks Within a Firm. *Management Science*, 51 (5), 771-785.
- Perry-Smith, J. E., and Shalley, C. E. (2003). The Social Side of Creativity: A Static and Dynamic Social Network Perspective. *Academy of Management Review*, 28 (1), 89-106.
- Rittel, H. W. J. and Weber, M. M. (1973). Dilemmas in a General Theory of Planning. *Policy Sciences*, 4, 155-169.
- Schweitzer, E. J. (2008). Innovation or Normalization in E-Campaigning? A Longitudinal Content and Structural Analysis of German Party Websites in the 2002 and 2005 National Elections. *Innovation or Normalization in E-Campaigning? European Journal of Communication*, 23, 449 – 470.
- Thomke, S.H. (2006). Capturing the real value of innovation tools. *MIT Sloan Management Review*, 47 (2), 24-32.
- Vergeer, M. and Hermans, L. (2013). Campaigning on Twitter: Microblogging and Online Social Networking as Campaign Tools in the 2010 General Elections in the Netherlands. *Journal of Computer-Mediated Communication*, 18, 399–419.
- Wattal, S., Schuff, D., Mandviwalla, M. and Williams, C. B. (2010). Web 2.0 and Politics: The 2008 U.S. Presidential Election and an e-Politics Research Agenda. *MIS Quarterly*, 34 (4), 669-688.
- Wu, Y. and Chang, K. (2013). Network Diversity and Social Cohesion in Creative Performance: A View of Communication Media Mix. In Proceedings of the Thirty Fourth International Conference on Information Systems (ICIS), Milan, Italy.