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‘Gentlemen, all aboard!’ ICT and Party Politics: Reflections from a Mass-eParticipation Experience

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Abstract

Information and Communication Technology (ICT) use is becoming an ever-more popular way to involve citizens in political decision making. And yet, despite their recently increasing number, few eParticipation initiatives have achieved their intended aims. If nothing else, this shows that the internal processes, challenges and opportunities of using ICT to engage citizens in politics deserve further examination. The present paper attempts to undertake such an investigation by analysing Italy’s Five Star Movement, a mass-eParticipation-based political organisation recently founded by private citizens. Using an interpretive case-study approach, this paper assesses the goals, participation, technology use, internal governance, external consequences, and challenges endemic to employing ICT in citizen engagement, to answer the following question: *what consequences, challenges and opportunities does mass-eParticipation present to organisational stakeholders?* Results of the study bring to light several additional research questions whose answers will surely advance the current discourse on eParticipation, and they also provide practical guidance and direction for those launching eParticipation initiatives.

Keywords

eParticipation, eDemocracy, Five Star Movement, Citizen Involvement in Politics, , ICT, Social Media

1 Introduction

In the past two decades, information and communication technologies (ICTs) have figured increasingly in attempts to involve citizens in political decision making (Medaglia, 2012), with the intent of recapturing otherwise declining interest (Sæbø, Rose & Skiftenes Flak, 2008). The term *eParticipation* has been coined to indicate the processes and structures through which ICT supports relationships amongst citizens, governments and public organisations (Rahman & Ahsan Rajoin, 2012; Veit & Huntgerburth, 2014). Such implementations of ICT might change the political landscape (Criado, Sandoval-Almazan & Gil-Garcia, 2013) and present new opportunities for communication, consultation and dialogue between public organisations and citizens (Medaglia, 2012).

Exploring how ICT usage functions in eParticipation initiatives, as well as how related consequences, challenges and opportunities for those being involved is a matter of serious interest to researchers (Borins, 2005). A vast majority of eParticipation studies thus far have focused on how traditional government stakeholders, such as political parties, citizens and public administrations, use ICT-based services in conjunction with traditional communication channels (Criado et al., 2013; Kavanaugh et al., 2012). In general, such initiatives neither attract large groups of citizens nor significantly change the way politicians work (Chadwick, 2008). In fact, only a few eParticipation initiatives have achieved their intended aims (Sæbø, Flak & Sein, 2011), and many of these initiatives remain local or small-scale (Medaglia, 2012). Less attention has been paid, thus far, to successful national and international, citizen-initiated eParticipation initiatives, which though few, are fascinating subjects for further study (Medaglia, 2012; Sussha & Grönlund, 2012).

In this context, the Italian Five Star Movement's (*Movimento Cinque Stelle*;

henceforth, M5S) use of ICT to encourage direct citizen participation in politics represents an exceptional example from which to glean information on eParticipation for many reasons. First, the M5S is new to Italy's political landscape and has, in only a few years, become influential at both the local and national levels, being the second-most voted-for party in the country's 2013 parliamentary elections; indeed the M5S has probably garnered more influence in less time than most (if not all) other eParticipation political initiatives. Second, unlike many eParticipation political initiatives—which are overwhelmingly founded on existing political systems and focused on the interests of traditional stakeholders—people who were not part of the established political elite created the M5S. Third, the organisation has, since its inception, coordinated all its activities using ICT tools, and this has allowed each of its supporters to participate in political debates and decision making.

In short, the M5S represents the successful use of a mass-mobilization eParticipation initiative originated by citizens who unexpectedly entered the political processes, and it now has representatives elected to positions in not only Italy's national and local institutions but also European parliament. Through the M5S's online channels citizens receive information and post comments on a daily basis. As such, the organisation has introduced several innovations to the political landscape, challenging the political status quo and how Italian politics operate. Due to its novelty and pioneering efforts in promoting political engagement through mass-eParticipation, the M5S can be seen as a large-scale experiment, and it is consequently the subject of great interest for many international observers (Bartlett, 2014; Scherer, 2012). Still, current literature on the M5S focuses solely on the role it plays within Italy's political landscape (Bordignon & Ceccarini, 2013), on how the source of its strength lies in the positions it has taken on local issues (Mosca, 2014) and on the democratic processes intrinsic to the organisation itself (Miconi, 2014). Hence, more research should be conducted into how the organisation orchestrates participation and activities and how these

efforts are perceived amongst its followers.

This paper contributes to the existing literature on eParticipation by investigating the dynamics of mass-eParticipation initiatives organised mainly by their followers. In particular, the present research aims to answer the following question: *what consequences, challenges and opportunities does mass-eParticipation present to organisational stakeholders?* To answer this question we conducted an empirical case study analysing interviews and archival data; in so doing, we bring to light several additional questions whose answers will undoubtedly advance the current discourse on eParticipation and provide practical guidance and direction to those launching eParticipation initiatives.

2 About the Five Star Movement

The M5S is a political organisation founded in 2009 by prominent former comedian Beppe Grillo and entrepreneur Gianroberto Casaleggio. Grillo was quite popular in Italy in the 1980s for his TV shows, which were characterized by strong and staunchly critical stances against the country's business, financial and political establishment. Banned from TV in 1986 for his politically incorrect rhetoric, Grillo continued to perform in theatres and other venues across Italy. In 2005 he started a blog with the support of Casaleggio Associati Ltd., a company founded by Gianroberto Casaleggio.

Grillo's popularity and reputation continued to grow as a result of his blog posts, and in 2009, he was ranked the world's seventh-most influential Web personality by *Forbes Magazine* (Ewalt, 2009). Over the years Grillo's fans across Italy began organising groups that were active in local politics. Using Grillo's blog as its main meeting place, a group called 'Amici di Beppe Grillo' ('Friends of Beppe Grillo'), formed in 2005 to coordinate these local groups' activities. The smaller groups started using the social-networking platform

Meetup.com¹, as per one of Grillo's suggestions, and the word *meetup* soon became synonymous with local group. These groups, moreover, organised nation- and region-wide events at which members met face-to-face and at which Grillo himself was often in attendance.

In 2008, several of these groups began creating candidate lists naming citizens unaffiliated with specific political parties. Furthermore, as stated above, the M5S was officially founded in 2009 to expand and build upon the Friends of Beppe Grillo and to provide a common political agenda for all the listed candidates. Grillo trademarked 'Movimento 5 Stelle', reserving all rights to the organisation's brand to him, and since, he has granted its usage to groups that adhere to a specific set of rules available online.

Since 2009 the number of active M5S groups on Meetup.com has grown from an initial 40 to 1,482 across 1,191 cities in 21 countries. In Italy the M5S has rapidly become a national political party and is currently second-most voted-for party both in the 2013 national elections and 2014 EU elections.

The M5S sharply distinguishes itself from Italy's traditional political parties by claiming to be more open, transparent and representative. Notably, too, the M5S does not define itself as a party but as a platform for consultation and confrontation that originated on Grillo's blog. To distinguish itself even more thoroughly from traditional political parties, the M5S refers to itself as a 'non-association' regulated by a 'Non-Statute' (M5S, 2009).

The M5S challenges Italy's established political-representation processes by aiming to turn elected representatives into spokespersons. To do so, a set of ICT tools is used to help *followers* share information, hold discussions, make decisions and set agendas. Elected

¹ Meetup.com is a commercial online social-networking platform (<http://www.meetup.com>) owned by Meetup Inc. It facilitates offline group meetings in various localities worldwide and helps individuals find and join groups of people with similar interests, i.e., hobbies, careers or politics.

representatives are expected to assert M5S *subscribers*' collective will, as it is developed and expressed online. At the same time, representatives are required to inform citizens via ICT channels about on-going activities within the political institution to which they have been elected.

The M5S uses several ICT tools, some of which are accessible to all M5S *followers*, including online content and comment posting. A restricted set of tools with enhanced participation features, such as voting, polling and decision making, are accessible only to *subscribers*. To become a *subscriber* a citizen must register on the M5S national website and submit a scanned copy of her ID card. Unlike other parties, M5S subscribers are not required to pay a registration fee. The status of a certified subscriber is granted exclusively to those whose requests have been fully processed, in order to satisfy the individual-identification requirement for becoming a M5S subscriber. Verification is performed by the M5S's small staff.

The M5S has gained a large number of subscribers in just a few years and currently boasts a membership roll of approximately 800,000 persons. Only about 100,000 of these are *certified subscribers*, while the rest continue to await the processing of their applications. Still, these figures exceed the registration numbers of Italy's other political parties, which have suffered membership declines in recent years. For instance, the most voted-for party has experienced a membership decline from about 800,000 members in 2009 (Labate, 2013) to 240,000 in 2014 (Lo Sardo, 2014).

3 Research Design and Context

The M5S uniqueness as a successful mass-eParticipation political organisation has been taken into account in designing the present study. We suggest that the views of those involved in the M5S and the context in which the organisation operates are the most

important pieces of evidence, and thence the research shall start from that. Also, as Cavaye asserts (1996), a hypothesis-testing research approach is inappropriate in such circumstances. With such an approach, in fact, hypotheses would have to have been based on previous literature or on the prior eParticipation experiences of the present study's authors. Hence, such an *a priori* research strategy would have prevented this study from discussing aspects of eParticipation unaddressed by existing literature. Consequently, this study adopts an interpretive, *a posteriori* research approach that investigates the M5S in its natural context using qualitative-data collection. As per Eisenhardt's recommendation (1989, p. 541), then, this study uses theory as an iteratively contrasting medium to data collected and analysed. The study's aim is to determine why the M5S is unique amongst eParticipation-based organisations, a point not yet discussed in the current literature, and to reveal, as a result, information that might be useful to other organisations.

3.1 Research context

The research project described in this paper took place over 13 months, from July 2013 through July 2014. It began with an exploratory study (Sæbø, Braccini, & Federici, 2015) that allowed this paper's authors to form an initial understanding of the M5S. This understanding was formed through observation of the organisation's events and activities and by collecting data from documentary sources, including books, newspapers, websites and social networks. This first part of the study allowed us to identify the M5S's various stakeholders and to glean general insights into how the organisation orchestrates its activities. Having identified key interview subjects and questions based on these observations, the research team was then able to plan its approach to empirical-data collection. The research team subsequently designed the semi-structured interview plan included in this paper's appendix.

3.2 Data collection and analysis

The present study's empirical-data sources, summarised in Table 1, included the

following: semi-structured interviews, archival data (from Web pages and other online documents), observations of available software features (both public and internal) and documents presented by interviewees.

Table 1
Data sources.

Interviews
Parliamentarians (REP1 and REP3)
Regional Councillor (REP2)
Subscribers (SUB1, SUB2, SUB3, SUB4, SUB5)
Voters (VOT1, VOT2, VOT3)
Archival data
www.beppegrillo.it
www.beppegrillo.it/listeciviche/liste/xxx (local electoral lists' websites, namely /roma2013, /viterbo, /trani, /palermo, /nepi, /cagliari, /calabria)
www.xxx5stelle.it (regional groups' websites, namely lazio5stelle, sicilia5stelle, toscana5stelle, lombardia5stelle)
www.xxx5stelle.it (local groups' websites, namely viterbo5stelle, parma5stelle, modena5stelle, catania5stelle, genova5stelle)
www.meetup.com/xxx (local groups' websites, namely /Meetup-ReteSalentina5stelle, /M5SRoma7, /MoVimento5Stelle-Viareggio, /Sipontinia5Stelle)
Non-Statute (M5S NS)
Internal M5S documents on eParticipation platforms
Observations
M5S Operating System – Lex
Videos posted on YouTube

With regard to archival data, the aforementioned research team analysed the documents available, including the M5S's requirements for use of its ICT channels and the presentation (if any) of the organisational staff, to observe the type of information provided, the level of transparency and the organisation's structures.

As for interviews, they were conducted with members of the movement's major stakeholder groups:

- Three parliamentary or local-council *representatives* (referred to as *REP* in Table 1). The representatives are citizens the M5S has helped elect to office, and they participate in their institution's activities, i.e., submitting and discussing proposals and voting. They have full access to M5S's eParticipation interface and to all M5S ICT tools

- Five *certified subscribers* (referred to as *SUB* in Table 1) who have completed the subscription process. Certified subscribers can access every M5S eParticipation tool and take part in internal decision-making processes, i.e., they can vote and post proposals and comments and can apply to stand for election
- Three *voters* (referred to as *VOT* in Table 1) who voted for the M5S in the last election. Voters have limited access to M5S ICT decision-making tools, e.g., they cannot vote online but can only get information, post comments and use social media to interact with other M5S followers.

As the M5S's verification process is lengthy, this study also introduces the term *uncertified subscribers*, which refers to those awaiting subscription approval from the M5S. Throughout the remaining text the term *follower* will be indiscriminately used to signify all of the various stakeholders in this vein.

All of the semi-structured interviews, which lasted an average of one hour, were recorded, transcribed and analysed individually by this study's research team. In accordance with this study's research objectives, analysis focused on the identification of topics emerging from the M5S case, which were relevant to understand eParticipation better. This study's three research-team members iteratively discussed the results of their individual data analyses to compose a mutually agreed-upon interpretation. Archival data and observations were used as Eisenhardt suggests (1989, p. 538) in a triangulated approach to strengthen the relevance of the knowledge gleaned from interviewing the selected M5S stakeholders. In particular, observations of M5S software platforms were utilised in identifying the software's features and uses. Indeed, this study's authors were interested in seeing if and how different M5S ICT tools were used by the organisation's followers. ICT tools available to the public were accessed directly, while interviewees demonstrated and explained the systems from restricted

areas, such as the M5S's system for proposing new laws (Lex).

Following this interpretative approach, the research team let concepts and relationships emerge from its data analysis without adhering to any *a priori* constructs. The resulting ideas were later analysed in light of current eParticipation literature to identify how the study added to existing research, allowing the research team to examine this study's implications for mass-eParticipation researchers and practitioners. Considering the richness of the information contained in this study's empirical materials, results of the aforementioned iterative data analyses were classified into subtopics, which were further grouped into six topics (Table 2). These classifications are consistent with the direction Criado et al. (2013) insist eParticipation research should take and are used to organise the presentation of the present paper's empirical-data section.

Table 2.
List of topics and subtopics

Topic	Goals	Participation	Technology use
Subtopics	Citizen empowerment Information Transparency	Level of engagement Motivation On- and offline participation Trust	Core technology Extended technology Technology as an enabler Technological limitations
Topic	Internal governance	External Consequences	Challenges
Subtopics	Internal rules Internal roles Staff Decision-making process Organisational issues	Citizens Other parties Political system	Too many participants/too little structure Too much openness Information overload

4 Related Research

This section surveys previously published literature on eParticipation, which literature will later be compared to and contrasted with the present study's findings on the M5S to reveal new insights.

Whereas previous research has insisted on the importance of using ICT (Medaglia, 2012) to address decreased citizen 'participation in traditional party politics' (Sæbø et al., 2008), little research addresses the organisational settings and democratic methods needed to

tackle such issues (Criado et al., 2013). As a result, there have been no advances in the practical understanding of how best to implement ICT and integrate it into existing institutional processes (Ferro, Loukis, Charalabidis & Osella, 2013). ICT might provide citizens the opportunity to initiate policy changes from the bottom up (Abdelsalam, Reddick, Gamal, & Al-shaar, 2013) and act as a transformative agent in generating citizen engagement (Chun & Luna Reyes, 2012). By utilizing ICT, a large number of citizens might be able to participate in shaping politics (Bekkers, Edwards & de Kool, 2013) achieving such an aim through the efficient facilitation of collective actions (Coleman & Blumler, 2009) in posing questions, receive information, engaging in conversation, and otherwise setting the rules for open dialogue (Mossberger, Wu & Crawford, 2013).

Individuals' extensive participation in online political discourse is hard to achieve (Coleman & Shane, 2012). There is an ongoing debate regarding online participants' characteristics and contributions. While some scholars argue that online discourse is dominated by members of elitist groups that are already active in and dominate politics—groups which 'most people have no will [*to join*] nor interest [*in joining*]' (Margolis, Resnick & Tu, 1996)—others argue that ICT could transform citizens engagement (Chun & Luna Reyes, 2012). More research is needed to fully investigate the deliberative qualities of online political activities and explore the scale of information sharing, the heterogeneity of messages posted and the number of collective actions (Coleman & Shane, 2012), before the kind of enlightened understanding described by Dahl (1989) can be achieved.

More pessimistic commentators have argued that the low frequency and quality of online political discussions means that they will not lead to insightful discourse (Hagemann, 2002); hence, such observers argue, 'Democratic procedures must not demand a level and quality of participation that exceeds people's capabilities and willingness to participate. Reformers who desire to "improve" these procedures must take into account social science-

research results about citizens' knowledge, attitudes and behaviour regarding public affairs' (Margolis & Gerson, 2013). More research into the citizen side of eParticipation is needed (Criado et al., 2013) to investigate users' knowledge and motivations; doing so should allow researchers to describe users' needs better and introduce new avenues for collective actions (Coleman & Blumler, 2009) and content production (Abdelsalam et al., 2013).

Additionally, the role technology plays in political activities must be examined to understand how ICT influences online deliberation (Criado et al., 2013) and explore how and by whom technology use is initiated (Abdelsalam et al., 2013). ICT usage entails providing content-sharing capabilities (O'Reilly, 2007) and the speedy exchange of information amongst users (Mossberger et al., 2013) via social media, which is a user-participation driver. There is very little empirical research into ICT management and use with regard to eParticipation, nor is there much information available on how to manage the use of multiple technologies and platforms to 'communicate with a wider range of heterogeneous citizens' groups, having different cultures, values, concerns' (Ferro et al., 2013). The use of social media might support a flat-network approach that features little or no hierarchical organisation in facilitating activities (Chatfield, Scholl & Brajawidagda, 2013). Such an approach might conflict with the need to coordinate and direct political discussions.

A primary issue with previous research regarding eParticipation is that it fails to explain on- and offline-activity integration and the development of discussion protocols that allow participants to move from opinion expression and discussion to identifying possible distortions in opinion-formulation dynamics (Ferro et al., 2013). Although discussions have already been formulated with regard to online communities' organisational structures (Faraj, Jarvenpaa & Majchrzak, 2011), research into the consequences of designing dynamic self-organising features for such communities is needed. Various groups of users and stakeholders have various needs, and the possible uses for technology change dynamically. Hence,

governance structures must address the various possible roles and likely consequences of ICT implementation. Research into online communities raises awareness of platform ownership when collective action involves exchanging information (Murray & O'Mahony, 2007). Similarly, attention should be paid to the consequences, in terms of accessibility and availability of using ICT tools to execute democratic processes, especially if these processes are escalated to the institutional level. ICT use is seen as an opportunity to redesign the roles and responsibilities of citizens and thus address the major challenges currently facing Western democracies: decreased voters participation and increased distance between the political system and citizenry, resulting in increased mistrust of political systems (Susha & Grönlund, 2014).

5 Findings

To ensure readability, the findings below are grouped into the six topics identified during the analysis: goals, participation, technology use, internal governance, external consequences and challenges. For each subsection, a table summarizes the most relevant information from the interviews conducted and documents analysed during the present study.

5.1 Goals

One of the M5S main objectives is to amplify the role citizens play at every stage of the political processes. The organisation's purpose in directly involving citizens is to achieve 'a more effective democratic debate' and a 'new kind of democracy' that overcomes the barriers of party boards and committees, as they exist in traditional political systems. As exemplified by the excerpts in Table 3, M5S followers applaud the organisation's endeavours to help members play a more important role in their governments' decision making, allowing them to contribute and be heard throughout the whole political process.

Another main M5S goal is for citizens to freely share non-biased information. In

Grillo's political statements (published on his blog), he calls access to free information the core of all modern democracies. Thus, the M5S seeks to bypass traditional, supposedly biased media by freely sharing information online. Our interviewees shared their concerns with the quality of information traditional media sources provide and find the M5S approach very helpful, stating that it provides a huge quantity of freely accessible information about national and international events and politics, the state of the environment and the state of the economy.

Related to the concept of freely accessible information is the idea of operational transparency, which is a purported cornerstone of the M5S philosophy. For instance, the M5S website allows visitors to view all the pay slips and expense receipts of M5S members of parliament, thus allowing everyone to explore how tax money is used. The representatives also report their activities daily. Most interviewees view this immense quantity of information as a strength that allows M5S followers to control their representatives directly. Table 3 contains quotations from official statements and interview responses that explain the M5S's goals.

Table 3
Quotations concerning the M5S's goals

Subtopic	Source	Quotation
	M5S NS	The 5 Star Movement is not a political party. ... It aims to testify to the possibility of achieving an efficient and effective exchange of thought and democratic debate outside associative and party ties, without the mediation of boards of leaders or representatives, giving every Web user a role in governing and agenda setting, which roles are normally reserved for the few. (Art. 4)
Citizen empowerment	Rep2	We are connected every day, at every moment, to the people, thanks to the network. We are using many tools just to create a direct democracy—a real direct democracy. ... It is a first step towards a change in the relationship between electors and the elected.
	Sub1	If I want to get in contact with XXX [<i>a parliamentarian</i>], there is the possibility. ... Roughly, if he has his own Facebook profile, I can write, and he will respond. ... At first, it was shocking. We are not used to receiving feedback [<i>by politicians</i>].
Information	BLOG	Information is held by economic and political groups. ... Information is biased. Without free access to information, there is no democracy. If information becomes a means for [<i>furthering</i>] the interests of private parties, there is no democracy.

Subtopic	Source	Quotation
	Vot1	You have an instrument on which no one can dictate information, and on which you are free to choose the information you believe is most relevant. This alone is an important statement.
	Sub5	The core of the movement is information gathering—by people who crave information, who don't trust mediated communication and choose their own messages, values and important topics.
	Vot1	The strength of the M5S is that its transparency is manifested through these informative means. ... I receive daily information of every kind. ... Whatever the M5S do I know. Whatever happens in the [<i>parliament</i>] I know.
Transparency	Sub1	Everything is documented in real time. We are at the point where, if there is a discussion at the Lazio Region Council meeting, in few minutes you receive all the information [<i>on it</i>]. ... You are not physically there, but you can be there virtually if you like.

5.2 Participation

A large number of M5S subscribers frequently comment and cast votes in online public forums on proposed laws and candidate selection. Typically, 30,000-40,000 of the organisation's 100,000 certified subscribers participate in making major decisions online. Some interviewees have raised concerns regarding information overload due to this huge amount of online activity.

The level of unregistered follower participation varies. Some unregistered followers continually interact with the organisation over social-networking platforms, while others only receive information from the M5S. Subscribers, who feel more committed to participating, contribute to online debates, take part in internal polling and take responsibility for managing group communication channels. Based on the present study's interviews, it is evident that only a small number of subscribers take part in offline activities and debates.

Motivations for participation vary. The desire for detailed, reliable information represents one important impetus, as does the desire to share ideas for parliamentary and local-council proposals with other citizens directly. The political process as practiced by the M5S is perceived as simple and linear and as having fewer hindrances and biases than other parties' decision-making processes. The close connection between submitted proposals and real action is crucial for promoting participation, as well as the perception that the M5S

represents a substantive protest against the established political elite.

Followers participate offline by attending face-to-face meetings and events. Despite the importance of ICT in M5S operations, face-to-face meetings play an important role in community building and communication. Local decision-making processes are mainly managed at in-person meetings. Such groups typically consist of a few dozen active participants who live near each other. Hence, face-to-face activities are easy to coordinate.

Online activities, spread across different online channels, are the only way to suggest, discuss and make decisions on national issues. The level of trust is generally high, with voters and subscribers expressing a great deal of confidence in the information received from and actions undertaken by the M5S. Table 4 shows quotations concerning participation from this study's various data sources.

Table 4
Quotations concerning participation

Subtopic	Source	Quotation
Level of engagement	Sub1	Being a M5S subscriber is not just a matter of holding a M5S card. In the moment, when you decide to take part in the movement, you must also decide to be active and an activist.
	Sub2	Among the 700 subscribers [<i>in our group</i>], 40 are the most active.
	Vot3	Deliberately, I never wanted to subscribe or access other forms of participation.
	Rep3	We made 30-40 online polls on Grillo's blog. ... Some 40,000-50,000 people always participate.
Motivation	Sub2	It was a different way of viewing politics with respect to what I knew. It wasn't politics; it was a way to solve a problem.
	Sub4	I think the keystone, the keyword—which might seem trivial but lets you actively participate—is <i>coherence</i> : coherence between what is said and what is done.
	Vot3	I believe that M5S receives a huge number of protest votes.
On- and offline participation	Rep1	Participating in local groups is the primary means of sharing information, of allowing people to find themselves and share information directly, face-to-face. ... I usually participate in 8-10 meetings in a month.
	Sub4	I prefer, as a general rule, having a physical presence because in person you can explore the subtleties of a discussion, and you cannot do it on the web. In a physical encounter body language is important.
Trust	Vot1	No one has contradicted or disproved what I've learned. No one has succeeded in demonstrating that the information I received from the M5S was inaccurate.
	Sub1	I participated in online polls on the M5S platform, and ... I did not find them piloted. They always reflected, more or less, what I wanted to express.

5.3 Technology use

The M5S has incorporated many different technologies into its practices, including tools like blogs, discussion boards, video streaming and online polling, and it is connected to popular social-networking platforms like Facebook, YouTube and Twitter. Participation platforms, such as the ‘M5S Operating System’, were developed internally and include features that support interaction amongst citizens and the organisation’s subscribers. A central component of the Operating System platform is a piece of software called Lex, which the M5S uses to let citizens participate to the formulation and proposal of laws to be discussed in the legislature.

However, while some M5S tools are intended for specific uses, e.g., the official website, others have partially overlapping purposes, e.g., the local sections of the official website and the corresponding regional websites host similar content. As a result, the M5S provides multiple access points for some services and single access point for others. Layouts and graphics vary, and similarities between any two sites can be limited to the M5S logo and a few links. Table 5, whose content is affirmed by two IT-competent representatives, provides an overview of how the M5S uses ICT-based tools.

Table 5
List of ICT tools

Technology	Examples and usage
Blogs	Grillo’s official blog; disseminate official statements from the founder
	Official M5S website; headquarters of the organisation
	Official regional websites, e.g., Lazio 5 Stelle, Sicilia 5 Stelle, etc.; present regional agendas, disseminate information and press releases of local interest, participate in thematic committees, stream regional council debates, contact spokespersons, inform followers of representatives’ salaries and expenses
Social media	Facebook: official M5S page; individual Facebook pages for M5S candidates and representatives
	Twitter: official M5S account; official local-group accounts; individual accounts for M5S candidates and representatives
	Official platforms (based on Meetup.com) for organising local groups, coordinating activities and connecting followers
Video-streaming	Official parliamentarian – and regional – representatives’ YouTube channel; update followers on representatives’ activities; interviews are released by parliamentarians

platform	Beppe Grillo's official YouTube channel; disseminate Grillo's speeches
	The M5S's official Web-based TV channel, La Cosa; Web TV channel with a weekly programming lineup that treats topics related to the M5S agenda; shows interviews with parliamentarians
Participation platform	M5S Operating System: official platform for fundraising, elections, decision making, interaction and law proposals (The tool for the latter function, 'Lex', is the only one released at the time the present study was conducted.)
	Online parliament; online platform that allows followers to vote on proposed laws

ICT uses differ between the national and local levels and from representative to representative. Tools related to the national level, including the websites beppegrillo.it and movimento5stelle.it, the M5S streaming channel, LaCosa, and the M5S operating system, are all owned by a single company, Casaleggio Associati Ltd., and controlled by one of M5S's two founders, Casaleggio. These are the official platforms for political statements, and they host decision-making processes at the national level. They are managed by M5S staff members and are designed to support extensive deliberation, including polls for voting on decisions and for choosing candidates for elections, as well as an interface for creating and proposing laws in cooperation with other citizens that uses a structured, step-by-step process.

At the local level, groups and representatives freely adopt tools without any clear guidance from the M5S on what to adopt. Every group may choose and change its online services dynamically and make its own rules on these tools' use. These services are mainly used for communicating and for coordinating local activities.

The Lex software facilitates decision making by allowing issues to be debated and voted on iteratively before a final proposal is drawn up. More than 8,000 contributions were made when the M5S used Lex for the first time on the proposal of a new electoral law, and the interviewed representatives and subscribers consider their experiences with this technology extremely positive.

Technology enables follower involvement and is seen as having been necessary to the birth and rise of the M5S. However, some interviewees commented that they experienced difficulties when using M5S ICT tools. Tools designed by the M5S itself are seen as difficult

to use and incompatible with users' needs and habits; thus, further improvements are considered necessary. Another concern relates to security threats and confidentiality risks, and the lack of proper codes of conduct is a matter of concern with regard to the effectiveness and impact of such tools. Table 6 lists quotations on M5S's use of technology from various data sources.

Table 6
Quotations concerning the M5S's use of technology

Subtopic	Source	Quotation
Core technology	Sub3	Everything has to be done online on the national blog. Decisions made in blogs and platforms outside of the national blog are not recognized [<i>by the movement</i>] as official decisions.
	Rep2	We are trying to move the people and ourselves to new kind of tools, like eDemocracy platforms. ... We introduced a system called the <i>M5S Operating System</i> . It is not an eDemocracy platform, but it is a step in this direction.
	Rep1	It is important that we have these tools ... which allow us to share all our work on laws directly with the people. ... We have about 8,000 suggestions, comments and suggested changes. ... The tool is our own. It is self-made.
Extended technology	Sub2	Facebook is the most important dissemination tool we have. ... Twitter is still a niche.
	Rep2	Why many tools? Because it's free. The best tools will survive. ... We really leave it to the subscribers to develop the best tool. It is open-source. It is a philosophy.
Technology as an enabler	Sub2	Technology was a strong driver in my approaching the movement.
	Vot2	I am absolutely engaged in the topics, but I think if they had not used these technologies, and the Internet overall, I would not have approached the movement.
	Rep3	The M5S might not have existed 10 years ago. ... All the social networks came later and allowed [<i>people</i>] to disregard the information disseminated by newspapers. ... Technology allowed [<i>for this</i>] progress, which will continue.
Technological limitations	Sub2	Twitter is still a niche ... simply because it is restricted to those 140 characters and many people like to talk. ...
	Rep2	This tool [[' <i>Lex</i> '] is not yet what we are looking for. ... We are not able to handle and modify suggestions as in a forum or blog. We need a real eDemocracy tool with a clear participation process to gather amendments and aggregate them into proposals.
	Rep3	The first time, we voted on Doodle or Google, but security was poor, and internal discussions were disclosed.
	Sub5	A meeting streamed live ... turns out to be really boring, preternaturally boring. It is a channel [<i>that's</i>] really difficult to follow.

5.4 Internal governance

The M5S adopts rules at the central and local levels in various ways, and there is a

great deal of variety in how they are written and presented. The movement does not have common rules for every possible aspect of political life. Instead, central regulations are very brief, consisting of the ‘Non-Statute’ comprising seven articles—each of which consists of three to 10 lines of text. Two of these relate to the processes for subscribing and standing for election. The Internet is specified as the core channel for all decision making. Except for these seven articles, there are a few succinct regulations concerning privacy and the use of Meetup.com at the central level.

At the local level, regulations vary from one group to the next. Whereas one local group might have detailed regulations concerning how to participate in the online forum, others might offer only brief statements regarding the same issues. Regulations are fully accessible through the Internet, except for some local group-management regulations, which might only be available on paper hand-outs presented to participants attending face-to-face activities. Local groups have their own internal regulations; hence, rules concerning the process of becoming an active participant in local activities and how to manage meetings can vary. This study’s interviewees had highly favourable views of this flexibility in adapting rules and regulations to serve local needs. Despite the fact that regulations are accessible online, however, several interviewees were unaware of their content. For example, several interviewees reported being unfamiliar with the rules on how national-level consultations (i.e. for the banishment of a national representative) should be conducted.

That said, there are some general rules common to all levels of the M5S. For instance, all M5S representatives are seen as spokespersons for the organisation. Through the Internet representatives disseminate detailed information about their activities within the institutions to which they are elected, and they are expected to resign if a majority of subscribers want them to. Banned representatives are no longer considered M5S representatives, but they can continue sitting in parliament or council; they are merely ejected from the M5S.

The subscriber certification process occurs at a slow pace. According to one interviewed representative the process is slow not only because of the immense number of applications but also because the organisation prefers to test potential subscribers' commitment to its ideals. A similar process occurs at the local level, where people's commitment must be acknowledged in order to obtain full access to local content and meetings. The M5S has no official top leaders. Grillo is and Casaleggio are prominent members of M5S, but none of the interviewees were able to clearly define their roles, nor is this clearly stated in the seven articles mentioned above. What information is available confirms that Grillo owns the M5S trademark and that Casaleggio Associati Ltd. owns the platforms the organisation uses at the central level.

The lack of explicitly defined structures at the central level makes it difficult to identify the number and positions of M5S staff members, and information about them is not available online. What is known is that the organisation's structure features a small central unit, supposedly composed of three or four persons, who are responsible for processing subscriber certifications. Parliamentary groups, meanwhile, are supported by a small secretariat. An external, private company monitors and validates internal voting processes. The *modus operandi* at the local level is more explicitly defined, as roles are assigned to some subscribers on the basis of personal interest and competencies, and these staffers are personally identified on each local group's website and labelled members of the group's 'Leadership Team'.

Major decisions are discussed online before certified subscribers vote on them using the organisation's online-voting system. Prior to holding a vote, the organisation publically announces it will do so and specifies the terms of the online voting process on the central blog; information included in these posts can include, for example, the questions to be voted on, the process's duration and the cut-off date in the past by which subscribers must have

received certification to be eligible to vote. The voting procedure usually lasts for a very short time. In a trade-off between openness and security, the exact timeslot for when voting will take place might be communicated on short notice. According to some interviewees, this is done to avoid lobbying, reduce the possibility of net *trolling*² (by not giving *trolls* the opportunity to plan their attacks) and get votes mostly from the truly active subscribers. Election candidates are selected using internal voting procedures. Any certified subscriber may seek a M5S nomination by simply presenting her credentials and, often, submitting a short video introducing herself. Other certified subscribers are then able to read about the various candidates, who might number in the hundreds, and vote for their selections online.

A different decision-making process takes place at the local level, where ideas are introduced and discussed using ICT tools but locally accredited members always make the final decisions at face-to-face meetings.

Those interviewed for the present study see the M5S's methods of organising political debates and decision-making processes as novel. Since the M5S is still in its infancy, difficulties are considered natural and necessary to improving the organisation's operations. One main challenge reported concerns the overwhelming number of comments and proposals posted, and some interviewees said that including so many participants in decision-making processes makes it difficult for such a small staff—all of whom are volunteers—to complete the resulting work. Table 7 shows quotations concerning the M5S's internal governance from various data sources.

² In Internet slang, a *troll* is someone who shows discord online and purposely starts arguments or otherwise upsets others by posting inflammatory, extraneous or off-topic messages to a website with the deliberate intent of eliciting an emotional response from or disrupting the normal discussion among the site's regular users (Wikipedia).

Table 7
Quotations concerning internal governance

Subtopic	Source	Quotation
Internal rules	M5S NS	A subscription to the movement does not entail anything more than registering on a common website. ... Subscription requests are to be submitted over the Internet; the applicant swears to uphold the requirements [<i>the M5S demands for subscription</i>].
	Sub2	Our rules are specific to us, but if you go to another group you'll find different rules. Our rules for becoming a credited [<i>member</i>] are: attend at least 4 out of 6 meetings and man in at least one kiosk at one of our public events.
	Sub4	Who takes care of opening and closing the online polls; who sets the rules? ... I don't know.
Internal roles	Sub1	The assumption is that they [<i>the representatives</i>] are my employees. For them it is a duty to stop and talk to you.
	Sub2	When you demonstrate a willingness to be active in a local group, you can enter this area and read all its stuff.
Staff	Rep1	I get around 200 e-mails per day. There are only three or four e-mails per day from the Chamber [<i>one of the houses of the Italian parliament</i>] I really need to read. My staff helps me do this.
	Sub1	Furthermore, a third-party company certifies that the voting is reliable, that it was not tampered with.
	Sub2	I am a sort of secretary to the Councillor [<i>of the municipality</i>]. We're organised into subgroups, and I'm in charge of everything related to the municipality.
Decision-making process	Sub3	You can participate in the writing of a law on the national blog. You might be of real help with topics on which you are an expert.
	Rep1	We are asking, every day, that the people comment and make suggestions on laws discussed at the national level. ... For us it is very binding, compulsory, that the network and the citizens decide. ...
	Rep2	Someone elected to the regional council [<i>in the M5S</i>] is called a 'spokesperson' because he reports directly to the people who voted for him and proposes all that have been decided by the local group.
Organisation-al issues	Rep1	We have some problems because we need to coordinate with different groups that are really heterogeneous.
	Rep3	You need more money and a stronger organisational environment to manage such a large platform.
	Rep2	I've collected 1,000 suggestions, but which are really important, which are suggestions supported by the people? ... We are trying to maintain a horizontal organisation. It is not that easy.

5.5 External consequences

Those interviewed agreed that the M5S's organising methods strongly influence citizens' expectations concerning participation in the overall political process. Hence, in the long run, the M5S might influence other parties and traditional ways of organising political

systems. Representatives argue that other parties might be forced to integrate similar services. A group of subscribers is currently developing a new integrated eParticipation platform that will allow every citizen to take part in parliamentary activities directly. By using this platform, citizens will be able to submit an issue for discussion and propose a solution. Through a guided discussion, the system will aid in the process of involving all interested persons in identifying alternative solutions, formulating suggestions for discussion and, finally, writing the final text of a law proposal. The process depends on the number of people participating, and their involvement is facilitated through the integration of social networks. Such a platform is meant to be shared with all other interested parties. Hence, there is a belief that political process introduced by M5S might change the entire way politics are practiced, not only in Italy but around the world. Table 8 includes quotations on external consequences of M5S practices from various data sources.

Table 8
Quotations on the external consequences of the M5S

Subtopic	Source	Quotations
Citizens	Sub4	Thanks to these technological tools we are able to create traversal links among all social classes and physical phases ... The ramifications are beyond our current imagination.
	Rep2	We will give this platform to every institution, every political party without our logo. We want to influence all parties. ... They will be obliged to ask the people what they want. So they will have to use eParticipation tools in the future.
Other parties	Rep3	I think we also influence the citizens voting for other parties. I knew people were wondering why, if we are doing it like this, their parties are not doing the same thing.
	Rep1	We are creating a means of changing the way to do politics here in Italy. Maybe we will be an example for other countries.
Political system	Rep2	We have many problems with this kind of approach because it is really having an impact; it is really creating fights and battles with the traditional system whose rules are not built to bring the people directly to the institutions.

5.6 Challenges

Challenges faced by the M5S include organisational issues resulting from the movement's fast growth in terms of subscribers, local groups and online activities. Combined

with the limited amount of administrative support available, due to the organisation's small staff, this has made representatives' jobs difficult, slowing them down and diminishing what they can accomplish. There is also an ongoing debate over how to balance the benefits of inviting everyone into the political process with the risk of some making malicious comments; this issue requires finding ways to prevent trolling and poor-quality contributions from dominating the online discourse.

A final issue is *information overload*. Representatives have to make sense of a large number of comments and suggestions collected through the online process, and subscribers find it difficult to evaluate extensive amounts of online content to make their decisions; at the same time, voters also face difficulties in reviewing discussions on the M5S blog, a single page of which can hold thousands of posts. Because of this, initiatives are underway that will provide tools capable of meaningfully aggregating messages from large volumes of online content, in order to profit from the 'collective intelligence of the masses of participants' (Rep2). Table 9 shows quotations concerning challenges.

Table 9
Quotations concerning challenges to the M5S system

Subtopic	Source	Quotation
Too many participants/ too little structure	Rep2	We were not expecting to grow this fast in Italy, and we are not yet organised enough to handle it. ... We want horizontal a organisation, but we are facing problems over how we are managing certifications and discussions.
	Sub2	I strongly believe that, even in a 'not-structured' organisation like the M5S that has neither formal jobs nor roles, someone must say, 'OK, now we've started the real work, but it must also have an end.
	Rep1	The amount of work is the big problem.
Too much openness	Vot1	As [<i>access to the platform</i>] is totally free ... it so happens and was demonstrated that some member of parties against the M5S entered Grillo's blogs and posted accusations that our non-free media [<i>TV, newspapers</i>] later repeated.
	Sub1	With the development of technology there is also the development of fraud; they go together. It is a risk that it is worth taking because the benefit you will get is greater than the risk you take.
	Vot3	Other citizens are reporting that someone is spamming; we have many trolls from other parties entering our discussion.
Information overload	Rep1	We have about 8,000 suggestions, comments or suggested changes. So, it is a lot of work to read all these comments.

Sub2	The time constraint restricts my work. I had the ability to vote, but out of 800 candidates, I read about 400 CVs. I couldn't actually read them all.
Rep2	We also need a smart platform just to check all the suggestions. I cannot read 1,000 suggestions every day and understand which is best.

6 Discussion and implications

In this section, findings from the present case study are discussed in light of related research. Then the implications of these findings are presented so that practitioners and researchers can discuss how the M5S can serve as an example for furthering discourses on eParticipation.

6.1 Discussion of findings

The M5S's main objective is to achieve direct citizen involvement in politics throughout the decision-making process, from agenda setting to policy evaluation. Although facilitating individuals' extensive participation in online political discourse is difficult to achieve (Coleman & Shane, 2012), the example of the M5S demonstrates that numerous people are willing to play an active role in politics if they are allowed to do so through purposefully designed services, as long as their ideas are carefully considered by their representatives. Not only is the number of M5S subscribers rather substantial, but these subscribers also actively participate, with 30,000-40,000 subscribers usually participating in important online discussions. Participation takes place both online and offline but follows different steps at the national and local levels. The present study's interviewees exhibit a strong desire to participate that is motivated by how the M5S opens participation in political processes to average citizens. Based on the example of the M5S, then, it is certainly possible to create ICT platforms over which everyone can participate in politics using social media as an important tool to handle the plethora of participants and contributions efficiently.

M5S subscribers do, however, report difficulties in actually participating because of their lack of technical expertise in the issues being discussed. Moreover, the huge volume of

online postings, which have no hierarchical structure, makes it difficult for participants to follow discussions and identify those contributions that provide valuable insights. Whereas social media might facilitate a paradigm shift that will make organising collective action more efficient (Bekkers et al., 2013) the example of the M5S illustrates the need for a citizen-engagement strategy aimed at deriving more value from net-savvy citizens through social media (Chatfield et al., 2013). Such a strategy could be consistent with Dahl's (1989) concept of 'enlightened understanding', allowing learning and reflection on alternative policies and possible outcomes.

Still, the M5S has not only succeeded in getting citizens to post messages in response to the movement's initiatives; its Lex system has introduced a new tool for harnessing citizen engagement that plays an active role in the coproduction of content, such that M5S members can now propose the texts for new laws following a specifically designed process. The Lex system example further illustrates how difficult it is to incorporate direct citizen input into political processes, as average citizens often lack contextual and procedural knowledge; this, then, indicates there is a need for technical and organisational solutions that empower citizens with regard to these aspects.

The M5S seeks to provide information directly through the organisation's blog, so as to avoid mediated sources of mainstream publication, which it considers biased. The present study's findings indicate that a lack of trust in the political and mass-media status quo is an important motivation for M5S followers, an insight that argues a transparent, unmediated flow of information between political movements and participants. Indeed, the exploitation of Internet technologies, as undertaken by the M5S to avoid traditional intermediaries, offers political parties and movements the ability to communicate more directly with citizens.

This case study also provides empirical insights into citizen-initiated eParticipation projects achieved through the efficient facilitation of collective action. Moreover, the studied

organisation consists of a large number of participants, and it enables these citizens to shape politics. Thus, the M5S represents a networking strategy (Mergel, 2013) that relies on extensive citizen discussions in which party members participate as one set of actors, who introduce topics for discussion and otherwise set rules for open dialogue (Mossberger et al., 2013).

As indicated in the above survey of related literature, current research rarely focuses on the use and organisation of ICT within the eParticipation arena. The movement's flat structure, with its very limited rules and regulations, allows members to organise their own groups and behaviours, but also challenges the coordination and integration of different views into a coherent opinion. Consequently, the present findings identify a double-loop design to the M5S's use of technology—a design consisting of a more structured core and a more flexible periphery. At the local level, M5S participation allows participants a great deal of latitude in their use of its ICT systems; a larger variety and less comprehensive number of tools are used. At the central level, in contrast, a limited, less varied collection of official tools are used to encourage participation, and access to these core ICTs is regulated and certified by M5S staff. Individual groups regulate access to local tools themselves, and this falls under staff supervision in a more limited way. Meanwhile, the M5S is continuing its standardization of core technologies by moving to process-based tools through the implementation of its Five Star Movement Operating System.

The M5S explicitly states its desire to influence other political parties and movements. Through its use of technology in engaging citizens in political processes, the M5S seeks to transform the role of elected representatives. First and foremost, such representatives are *primus inter pares*, or spokespersons on behalf of equally important participants. Second, the representatives are seen as ombudsmen, responsible for representing participants' needs and for raising concerns that reflect everyone's needs. Finally, the influence of representatives is

reduced, due to the fact that they are committed to following the opinion of the majority of subscribers when a decision must be made.

This transformed role of representatives directly addresses the main reason the M5S was founded: a lack of trust in the politicians. Indeed, politicians are generally perceived as being more interested in their own wellbeing than in helping their constituents. The M5S's new definition of roles resonates with the ideals of direct democracy and focuses on transferring power from traditional institutions to network-based groups of individuals. This study's findings also indicate that there is a strong belief amongst M5S followers that the organisation is not only transferring power within the M5S but will do so in other political parties in Italy and the European Union. One of the organisation's primary objectives is therefore to develop eParticipation tools even more supportive of direct democracy and offer them to other parties to help change the entire political system. Despite the resistance expected from traditional parties, those interviewed for this study strongly believe that such change is unavoidable and that it will make political processes worldwide more democratic.

6.2 Practical implications

One lesson learnt from studying the example of the M5S concerns the importance of understanding current democratic practices and challenges in order to design citizen-oriented alternatives that create more participatory, open and transparent political organisations through the use of ICT. Online communication services are platforms for a huge number of potential contributors. Hence, eParticipation initiatives should be designed to handle a large number of participants. At the same time, though, eParticipation initiatives need to find ways of properly recognizing valuable contributions within a *mare magnum* of online contributions.

Based on the present analysis, one might argue that mass-eParticipation initiatives must harness technological plurality to address the demands of heterogeneous multitudes of participants. Managers of such initiatives must be ready to deal with large portfolios of

different ICT solutions, mixing specifically designed systems like the M5S's Lex system with more general-purpose systems like Twitter and Facebook. In designing specific, process-based eParticipation solutions, a tension between the need for openness and the strictures that ICT will necessarily impose on participation will naturally arise and should be carefully managed.

Practical advice for eParticipation-project managers includes the caveat that they must keep the administrative burden of their respective systems as small as possible so local groups and users have the freedom to self-organise and the power to modify their decision-making processes. Also, the use of free, open, online channels leaves room for opportunistic trolling behaviour, and this should be managed through appropriate technological and organisational measures. This study's main practical implications are summarized in Table 10.

Table 10
Practical implications

Goals	Market the services as an innovative alternative to existing practices through coherent use of ICT, to allow for openness and transparency.
Participation	Plan and design for a huge number of participants; ensure scalability. Develop processes and features for identifying meaningful content from amongst a vast number of online postings.
Use of technology	Ensure technological plurality, requiring participants to use a variety of technologies needed to achieve their various aims. Carefully manage and balance the need for openness with the strictures that technology necessarily imposes on processes.
Internal governance	Carefully balance centralised control with self-managed groups. Manage, rather than cause, dynamic changes by assigning roles and responsibilities.
External governance	Manage relationships with existing movements and political parties.
Challenges	Manage trolling and opportunistic behaviour.

6.3 Research implications

Reflecting on the example of the M5S, we argue for the need for more research into how the practices identified herein can be utilised within existing political frameworks. In the M5S, representatives act as spokespersons and negotiate two different worlds: the political institutions to which they have been elected and the eParticipation process. Further research on the relevance, challenges and consequences of such boundary-spanning roles is advisable. Additionally, with regard to using the Internet as a direct, intermediary-free channel for

political engagement, the example of the M5S shows there is a need for more innovative solutions that encourage direct relationships between elected representatives and citizens. Other intermediaries, different from the newspapers and journalists M5S followers try to avoid, say Internet service providers or social-networking platforms owners, might influence information dissemination (Federici & Braccini, 2012). Attention should also be paid to the influence these other intermediaries exert and the potential consequences of this for eParticipation and institutional political processes.

Furthermore, a greater understanding of how eParticipation services can be designed to allow for greater flexibility and scaling is needed. This is a potentially fruitful avenue for future research, as it combines online-community studies with the development of features for identifying meaningful content. Researchers might, for instance, investigate how crowd-sourcing techniques can be leveraged to achieve these ends, thus allowing groups of individuals both to produce content and easily identify the most relevant content.

Meanwhile, other research could address the M5S's structure. While the M5S's central-level approach agrees with Ferro et al.'s (2013) argument for a centralized, cross-platform approach, so as to 'communicate with a wider range of heterogeneous citizens' groups, [*each*] having different cultures, values [*and*] concerns', what seems the M5S's intentionally bidirectional design for addressing local and central groups is, to our knowledge, not currently discussed within the existing literature on eParticipation. While the M5S exemplifies the advanced practices of ICT integration within the entire policy decision-making cycle, future research is needed to fully understand how to integrate on- and offline activities and to develop discussion protocols so that participants might be able not only to express and debate opinions, but also to identify possible distortions in the debate dynamics (Ferro et al., 2013).

And yet, although the M5S does represent a novel approach to involving everyday

citizens in political discourse, it is worth mentioning that a majority of the organisation's registered followers are not yet fully permitted to participate in all decision-making processes. eParticipation projects should be designed to use varied objectives and levels of participation in addressing the needs of various stakeholders. There is also an obvious need to consider holistic approaches that consist of both on- and offline activities, and researchers should investigate ways of better designing coherent eParticipation systems that empower participants in complex decision-making processes. Levels of engagement and commitment will naturally vary amongst participants, and the deliberative qualities of the online activities should be explored to understand the levels of knowledge sharing and heterogeneity in that result from participants' posting messages. But an even more engaging question is this: what level of collective action must occur to achieve *enlightened understanding* (Dahl, 1989)?

Scholars should be mindful of existing social-media platforms' limitations within eParticipation initiatives to focus on specifically designed solutions and their potential consequences. To aid in replicating and improving upon the M5S's outcomes, researchers could discuss the underlying mechanisms of the double-loop technology design the organisation currently uses, thereby improving management structures and results for eParticipation initiatives in general. This, along with a better understanding of ICTs' information-processing capabilities, is a necessary starting point for examining methods of helping representatives make sense of the vast quantity of content produced online in mass-eParticipation initiatives.

Of course, various user and stakeholder groups have differing needs, as well as handicaps, in terms of using dynamically changing technologies. Hence, any workable governance structure should focus more on accommodating the dynamic changes initiated by stakeholders than on initiating such changes itself. The governance structure should therefore make allowances for various roles and outcomes. And the issue of balancing freedom of

participation with abuse and malicious-activity prevention should be explored.

Ownership of the M5S's key assets, such as its trademark and core platform, provides avenues for further investigation. Previous research into online communities has already raised awareness of platform ownership in cases wherein collective action involves the creation of knowledge (Murray & O'Mahony, 2007). Commensurate attention should be devoted to the consequences, in terms of accessibility and availability, of using ICT tools to engage in democratic processes, especially if these processes are escalated to the institutional level. Open issues calling for further research are summarized in Table 11.

Table 11
Open issues calling for further research

Goals	What are the effects of mass-eParticipation initiatives on the roles and relationships between political institutions and parties (or movements)?
Participation	How to design flexible and scalable eParticipation solutions? How to use crowd-sourcing techniques to identify meaningful content?
Use of technology	How to design technology that involves a double-loop system with a stable core and a dynamic periphery? How to leverage technology's sense-making potential in mass-eParticipation initiatives?
Internal governance	How to integrate on- and offline activities and discussion protocols? What are the effects of allowing self-organising groups to engage in conflict management?
External governance	How to manage a dual role as both representative and spokesperson? How to manage ownership of enabling platforms?
Challenges	How to balance a lean organisational structure against managing a large number of participants? How to allow for freedom of participation yet prevent trolling?

7 Concluding remarks

This paper contributes to the current understanding of eParticipation initiatives by examining the example of Italy's M5S, which has garnered major influence in Italian and European politics in a very short time. The qualitative empirical analyses presented in this study were thoroughly discussed and reflected upon in light of the current knowledge on eParticipation, in order to determine the implications of the study's findings in the following areas: goals, participation activities, technology use, internal governance, external governance and challenges.

Some of the implications mentioned herein were immediately confirmed by events

that took place within the M5S after data collection and analysis for this study was complete. Although not part of the present study's formal data-gathering process, reflections on these events shed light on the use and usefulness of the study itself. These reflections relate to events that up to the time of this paper's composition (January 2015).

First, after data had been gathered for this study, technological plurality inside the M5S increased with the development of a new law-proposal platform currently in testing. When completed, this platform will overlap with the Lex system, which is considered as the M5S official law-proposal platform. However, the official status of the new platform is being questioned within the organisation. Moreover, several followers have grown increasingly concerned with the need for transparent internal regulations in using an official software platform. This debate over the official status of the organisation's tools reinforces this study's argument that further investigation into the consequences of owning software platforms in eParticipation initiatives is warranted.

A second occurrence, meanwhile, provides insight into the organisation's effectiveness. There is growing concern that the M5S is not influencing Italy's political landscape as expected. Though a plethora of online activities—especially those of representatives—are facilitated by the organisation's eParticipation tools, questions have been raised concerning the organisation's potential failure in communicating with a wider audience of citizens. Internal efforts are purportedly being made to help citizens participate, successfully interact and put pressure on other political forces in institutional processes. As a result, debate has surfaced within the M5S over the organisation's goals in using only Internet-based channels to communicate with citizens. This debate stresses the importance of better managing the relationships with external parties and investigating the consequences of eParticipation initiatives on established democratic political processes.

A final aspect worth mentioning concerns the increasing complexity of the

participation activities practiced within the M5S. The number of members and contributions continues to grow, and online activities are consequently becoming more complex. After some followers demanded improved transparency concerning internal rules and roles in the M5S, including Grillo's and Casaleggio's roles, the movement responded with the appointment of a board of five representatives with the power to make decisions for the whole movement. The number of regulations also increased slightly. Such aspects are currently being discussed; whereas some find it necessary to constantly improve organisational structures, others think doing so is a potential violation of the organisation's core philosophy that all M5S subscribers are peers and representatives should only deliver the decisions of citizens directly to the institutions to which they are elected. While this seems to suggest a need for better management, rather than a dynamic change that would redefine the roles and responsibilities in such organisations, one might also argue that it highlights the need for an in-depth investigation into specific aspects of the M5S, such as the consequences of self-organisation versus conflict management, and how the M5S might balance freedom of participation with control of online activities. The problems endemic to designing platforms that prevent information overload and differentiate meaningful content from unhelpful posts are issues that remain unsolved.

As exemplified by recent events, the M5S represents a type of dynamic political structure that changes continuously, adapting to emerging situations. The present paper contributes to previous literature on eParticipation by pointing out aspects that deserve further investigation (see Table 11) in order to promote mass-eParticipation initiatives. The results of the analysis presented in this paper could also be relevant to smaller eParticipation initiatives. Because scalability is a major hurdle, according to previous research into eParticipation, the information provided here might help current eParticipation projects scale up and attract new followers. Future studies should investigate whether the features of the M5S are universal to

better explain how eParticipation initiatives grow.

This study also contributes to previous research by identifying issues related to ICT use in eParticipation initiatives and their consequences on institutional processes, and this will surely aid further research in this area. This study is relevant as well to managers of political movements and parties, as the implications of the findings examined herein provide several caveats and indicate opportunities for mass ICT adoption among eParticipation initiatives.

Though the M5S is a relevant case representing a mass-eParticipation initiative, it is thus far also unique. It is therefore worth mentioning that a potential limitation of the current study is it focuses on a single case of successful eParticipation. Fruitful avenues for further research include comparative studies that discuss and compare similar eParticipation initiatives in light of our findings. Given the M5S's dynamic nature, meanwhile, further research into the organisation should be conducted in the near future, as it would contribute to a greater understanding of how mass-eParticipation initiatives evolve.

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