Governments’ Social Media Use for External Collaboration: Juggling Time, Task, Team, and Transition, with Technology

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ABSTRACT

Purpose
As social media technologies permeate public life, the current forms of collaboration between government and non-government stakeholders are changing. The purpose of this paper is to investigate how social media use reconfigures the organizing practices around such collaboration. A case study of a collaborative e-government project showcases how emergent organizing practices through external social media differ from existing ones along the dimensions of time, task, team, and transition.

Design/methodology/approach
This paper presents a case study of a collaborative e-government project on open data, organized by Shanghai Municipality, local businesses, universities, and NGOs, using an external social media platform, WeChat. Adopting the theoretical lens of temporary organization, the paper identifies the key aspects of change emerged in the organizing practices of this collaboration.

Findings
The findings outline how the use of external social media reconfigures the collaboration between government and non-government stakeholders along the four dimensions of time, task, team, and transition. The new form of collaboration is reconfigured along the lines of: (1) an ad-hoc and non-linear management of time; (2) Discursive task creation, assignment and engagement among stakeholders; (3) a serendipitous engagement of team members based on expertise; and (4) shifting formal and informal organizing practices.
Originality/value

This paper provides insights on the use of external social media for collaboration in e-government research, and develops the concept of temporary organization in a sociomaterial setting. It also provides practical suggestions on how to manage new forms of public projects leveraging on the capacity of external social media.

Keywords

Social Media; E-government; Inter-organizational Collaboration; Temporary Organization

1. INTRODUCTION

Governments around the world increasingly seek to find innovative ways to deliver public services. Leveraging on the recent development of social media, new collaborative initiatives appear that aim at combining government and non-government stakeholders (e.g., citizens, businesses and non-profit organizations) into a coherent service delivery system (Bertot et al., 2016; Scupola and Zanfei, 2016).

Such development is often referred to as collaborative e-government (Chun et al., 2012). In particular, external social media (e.g., Facebook, Twitter, WeChat) that allow not only government employees, but also individuals from other communities, “to create, circulate, share, and exchange information in a variety of formats (Leonardi and Vaast, 2017, p. 150)”, are used to enhance such collaboration efforts (Schlagwein and Hu, 2016).

The use of social media to deliver public services has reportedly brought benefits to various aspects of public governance (Aral et al., 2013; Baskerville, 2011; Baumer et al., 2013; Downey, 2012). However, it has also introduced concerns with respect to the potential damage it can cause to the collaboration process between governments and their external stakeholders (Landsbergen, 2010; Zavattaro and Bryer, 2016), which often features clearly defined goals (e.g., major product or service provides), organizational structure (e.g., particular modes of operation), and organizational boundaries (e.g.,
identification of key stakeholders) (Beynon-Davies, 2007). Nonetheless, recent studies on social media suggest that the use of external social media has brought fundamental changes to the organizing arrangement of collaboration. This includes identification of stakeholders from private networks (Hwang et al., 2015; Ollier-Malaterre et al., 2013; van Zoonen et al., 2016), evolving definition of project goals, and alternative use of time (Subramaniam et al., 2013). Consequently, the organizing practices emerged through social media are often a result of ‘making it work’, and produce specific organizing arrangements of governments’ collaboration with external stakeholders, which invites us to reframe our ways of looking at these collaboration.

Such development resonates with the rising discussion on ICT-enabled collaboration in e-government research (Bertot et al., 2012; Chun et al., 2012). However, these studies mostly rest on the assumption that changes take place along the line of established processes, and often only focus on government-to-business (Liu et al., 2012), or government-to-citizen collaboration (Bertot et al., 2012). The actual organizing activities in collaborative projects that involve stakeholders with more heterogeneous backgrounds remain largely undiscussed. Therefore, it is still unclear how social media may reconfigure the organizing arrangements of collaboration between government and non-government stakeholders, particularly in an environment that features heterogeneous types of stakeholders. To understand this, it is therefore important to scrutinize the actual organizing practices appeared through social media in e-government projects, and ask:

*What are the characteristics of inter-organizational collaboration between government and non-government organizations enabled by social media?*

To address this question, we build on a case study of a collaborative project on open data in Shanghai, China, where local municipality, businesses and universities and NGOs collaborate using an external social media platform, WeChat. Seeing collaboration as discursive activities of innovating around
emergent situations, we adopt an action-oriented conceptualization of collaboration – “temporary organization” proposed by Lundin and Söderholm (1995), to analyze our collected data.

Along these lines, this study unfolds the characteractics of the emergent organizing configurations in external social media-facilitated collaboration between government and non-government stakeholders. By doing so, we contribute to the understanding of the use of external social media for collaboration in e-government projects, and set out the first attempt to develop the theory of temporary organization in a sociomaterial setting. Such insights also provide public project managers with suggestions on how to manage new forms of public projects leveraging on the capacity of external social media.

This paper is structured as follows. The next section discusses existing studies on the impact of social media use on inter-organizational collaboration in e-government projects. Section 3 presents the theoretical lens of temporary organization to understand the key dimensions of inter-organizational collaboration. Section 4 presents the research setting along with the procedures of data collection and analysis. Section 5 presents our findings along the four dimensions of temporary organizations: time, task, team, and transition. In section 6, we discuss the findings in light of their implications to research and practice, as well as the avenues for future research. We conclude by summarizing the main findings and its implications.

2. LITERATURE REVIEW

A continuously growing body of e-government studies has investigated and discussed the implications of government innovation by the use of social media (Criado et al., 2013; Medaglia and Zheng, 2017). Social media is strategically used in various initiatives by governments around the world to co-produce public services with external stakeholders (i.e., citizens, non-profit, and private organizations) (e.g., Criado and Rojas-Martín, 2013; Mainka et al., 2014; Zheng and Zheng, 2014). A common denominator of this research is that social media, particularly external social media, is increasingly used as an
organizing unit for collaboration among government and non-government stakeholders. Here, external social media refers to a particular type of social media that runs by providers outside of the organization (e.g., such as Facebook, Twitter, or WeChat) (Schlagwein and Hu, 2016). Different from internal social media that only allow certain organizational members to access (e.g., Yammer or corporate wikis), external social media are accessible for individuals from other organizations and communities to create, circulate, share, and exchange information.

The combination of the use of external social media and governmental reforms potentially brings about a new range of opportunities for governments, touching several aspects of public governance (Downey, 2012). These opportunities include increased transparency and accountability by use of ICT, cost savings through citizen crowdsourcing (Brabham, 2008; Doan et al., 2011), increasing smartness of public action (Gil-Garcia et al., 2016), real time interaction (Mergel, 2013a), as well as citizen participation and empowerment (Bonsón et al., 2015; Porwol et al., 2016). However, governments’ use of external social media has also caused concerns in regards to security (Bertot et al., 2012), privacy (Bryer and Zavattaro, 2011), and productivity (Picazo-Vela et al., 2012).

Such concerns mainly occur against the backdrop of the conventional ways of collaboration in e-government project (e.g., public-private partnership project on IT infrastructure), where government and non-government organizations (often business organizations) are typically involved in a supply chain relationship – the government organization obtains goods and public services from non-government organizations. Collaborations as such are often assumed to take an organizing form of clearly defined goals (e.g., major product or service provides), organizational structure (e.g., particular modes of operation), and organizational boundaries (e.g., identification of key stakeholders) (Beynon-Davies, 2007). For example, the key stakeholders of a conventional collaboration are often identified through official collaborative arrangements (e.g., outsourcing contract or official agreement) (Dawes and Pardo, 2003; Lee and Kwak, 2012). The stakeholders’ tasks and responsibilities are tied to their position in the
affiliated organizations (Jaeger and Bertot, 2010; Mergel, 2013b). The involvement of government may also imply that the project management is prescribed by governments’ institutional arrangements and features bureaucratic procedures of collaboration (Gil-Garcia, 2012; O’Leary and Vij, 2012). Hence, the assumption here is that external social media, ambidextrously used for both private and professional purposes by individual stakeholders, can pose threats to the coherence of the existing organizing arrangements around collaboration, and jeopardize the outcome of collaboration (Picazo-Vela et al., 2012).

Nevertheless, recent studies on social media suggest that the use of external social media has more ‘subversive’ impacts on organizational practices (Leonardi and Vaast, 2017). Rather than supporting existing organizing arrangements, the use of external social media can, in fact, generate organizing practices that evolve goals, unsettle existing organizational structure, and blur existing boundaries, challenging the conventional assumptions about how collaboration should be organized. As the use of external social media in organizations diffuses largely from private to professional settings, it becomes increasingly difficult to define where one’s network begins and ends, and to what extent the connections formed feed into the development of professional needs (Henderson and Bowley, 2010; Ollier-Malaterre et al., 2013; van Zoonen et al., 2016). In addition, as knowledge is increasingly shared within and among organizations, employees are found to associate with each other more based on shared expertise, rather than other organizational categories (i.e., affiliation or hierarchy) (Hwang et al., 2015). This transforms the way key stakeholders are identified, and affects the goal of collaboration. As the stakeholders often have disparate goals, new involvement of stakeholders can lead to changes in setting the common goal.

Moreover, the constant availability of external social media makes it possible for people to copresent in a virtual setting, and organize across time and space (Subramaniam et al., 2013). Together with the affordance of social media for instantaneous and persistent communication (Treem and Leonardi, 2013), the use of external social media can generate organizing practices that are “simultaneously transient and
enduring and simultaneously virtual and material” (Leonardi and Vaast, 2017, p. 180). Such change in terms of how organizing practices are organized across time and space, has particular implications for inter-organizational collaboration, especially those among organizations with heterogeneous backgrounds. This is mainly due to organizations often taking a different amount of time to respond (Janssen and van der Voort, 2016). By providing an alternative use of time, external social media can potentially change the way in which the collaboration is coordinated. These practices defy the typical understanding of collaboration as a clearly defined process. Rather, individuals using external social media have to constantly deal with emergent situations due to the fast-changing dynamics on external social media, and invent solutions around these situations by capitalizing their resources through their networks. This shift from goal-oriented processes to emergent actions invites new ways to look at inter-organizational collaboration in an e-government context.

The current scholarship on collaborative e-government is amongst the early moving ones in understanding this shift (Chun et al., 2012). Collaborative e-government mainly refers to the ICT-facilitated collaboration environment between government and non-government organizations, where the use of ICT transforms the ways these stakeholders interact among each other (Chun et al., 2012). Seeing external social media as part of the environment, existing studies have looked into the motivation (Chun et al., 2012), outcome (Bertot et al., 2012), success/failure factors (Janssen and Klievink, 2012; Williams and Fedorowicz, 2012) of such transformations. Studies have also embarked on the changing organizing processes of collaborative e-government project (Liu et al., 2012). However, most of these studies take the assumption of collaboration as goal-oriented processes, and often focus on government to business, or government to citizen collaboration. We are still at lost to understand how the use of external social media reconfigures organizing arrangements, particularly in the collaboration between government and stakeholders with heterogeneous backgrounds (i.e., government, businesses
and non-profit organizations). In the next section, we illustrate on the concept “temporary organization” to provide a theoretical lens to shed light on this inquiry.

3. THEORETICAL LENS: TEMPORARY ORGANIZATIONS

As we indicated in the literature review, governments’ innovation through external social media results in a number of collaborative projects between government and external stakeholders that are open and dynamic. The organizing arrangements that occur through external social media can be largely different from the conventional organizing arrangements of such collaboration (Beynon-Davies, 2007), in regards to aspects, such as increasing involvement of stakeholders from private networks, changing definition of project goals, and alternative use of time.

In order to account for these attributes of change, we looked into the literature on different organizing forms of inter-organizational collaboration, where one form of inter-organizational collaboration, *temporary organization*, particularly speaks to these emergent attributes (Bakker et al., 2016; Burke and Morley, 2016; Jones and Lichtenstein, 2008; Lundin and Söderholm, 1995). The concept of temporary organization emerges out of an ongoing trend in inter-organizational projects across business and industry settings, such as filming (Stjerne and Svejenova, 2016), architecture (Jones and Lichtenstein, 2008), public infrastructure construction (van Marrewijk et al., 2016), and public administration (Swärd, 2016). In particular, it refers to a form of inter-organizational collaboration, in which “multiple organizations work jointly on a shared activity for a limited period of time…to coordinate complex products/services in uncertain and competitive environments (Jones and Lichtenstein, 2008, p. 1).” A key distinction between temporary organization and other more commonly studied forms of joint collaboration (e.g., joint venture and alliances) is the dimension of time. The limited project duration has a significant influence over the kind of organizing practices (i.e., coordination techniques) that are used to pace the collaborative activities between multiple organizations. Along this line, scholars have looked
into the framework for understanding the various types of temporary organization, and how these different types of temporary organization facilitate the collaboration in different contexts (Bakker et al., 2016; Burke and Morley, 2016). While each framework features a specific angle that is related to a specific context, the forms of temporary organization in general vary along four basic dimensions: time, team, task and transition (Lundin and Söderholm, 1995). The first dimension is time. As indicated above, projects are created for a specific goal within a predefined deadline; thus the project duration is limited. Under such pressure, the coordination activities of projects revolve around the key management of time. The project organizers often use different pacing techniques, that is time-oriented markers (e.g., key milestones; timelines) to organize their activities and reduce the time to complete tasks (Jones and Lichtenstein, 2008). The second dimension is task. A project is dependent on one or a limited number of tasks, and all of its resources are retrieved, planned, and managed accordingly. This results in a discursive distribution of responsibilities among the team members that link individual responsibility directly to their capacity in accomplishing project goal-related tasks in daily operations. The third dimension is team. Closely linked to the traits of time and task, the existence and development of teams is centered on the tasks that must be accomplished within a limited time. Team members are often brought together for their common interest in (a task of) the project (by force or by coincidence). While the team members commit to the tasks around the project, they also need to legitimize their engagement to their parent organization. The fourth dimension is transition. As temporary organizations are created to achieve a specific project goal, there is a transition between the states of “before” and “after” the achievement of the goal. Transition can also concern changing behaviours about how certain work is done, as team members come from a different organization with their own distinctive way. A summary of the dimensions of temporary organization is provided in table 1.

[Table 1. Dimensions of Temporary Organization]
These four dimensions are developed by a series of empirical studies that often focus on one or some of these four dimensions (Bakker, 2010). Along the dimension of time, empirical studies have addressed the effect of time pressure on process, functioning, behaviour, and performance in temporary organizations – e.g., how variance of project duration affects the kind of coordination techniques that are used to manage uncertainty (e.g., Jones and Lichtenstein, 2008). Along the dimension of task, empirical studies have looked into the types of tasks temporary organizations perform (e.g., Bechky, 2006) and the effective execution of tasks (e.g., Saunders and Ahuja, 2006). Along the dimension of team, empirical studies have focused on how a team is formed (e.g., Ebers and Maurer, 2016; Perretti and Negro, 2006), as well as how team members resolve issues of vulnerability, uncertainty, and risk (e.g., Xu et al., 2007).

Studies that focus on the dimension of transition discuss how temporary organizations can be sustained within the environment of the firm; for example, how a temporary organization is sustained in an enduring form (e.g., Cacciatori, 2008). In the broader context of society, empirical studies look at how different social, structural, and institutional forces influence the coordination of temporary organization and its transition (Sorenson and Waguespack, 2006; Stjerne and Svejenova, 2016; Swärd, 2016).

Among these studies, there are some resemblances between the identified forms of temporary organization and the emergent attributes of the organizing arrangements in a collaborative e-government project, particularly on how some of the boundaries around time, task, team and transition are introduced and shape the project (e.g., Jones and Lichtenstein, 2008; Stjerne and Svejenova, 2016). Nevertheless, as Information System scholars, such as Orlikowski (2007), have argued, sociomateriality constitutes the shaping of everyday organizing. Therefore, in following this line of enquiry, we should not lose sight of how the use of objects, in particular ICT, is shaping these organizing arrangements and are used to manage the collaborative activities between multiple organizations. Recently, studies such as Sergi (2013)’s work start to emerge, showing how objects (i.e., documents) contribute to the actuality of inter-organizational collaboration projects. Nonetheless, very few studies have taken such inquiry empirically.
to examine the role of ICT, such as externals social media, in shaping the forms of temporary organization and the organizing practices associated with them. Thus, in this study, while drawing on the theoretical lens of temporary organization to shed light on the emergent organizing form of interorganizational collaboration in a new context of collaborative e-government, we also aim to develop the concept through our empirical study by elaborating on the role of external social media in shaping the organizing arrangements that give rise to the temporary organization form.

4. RESEARCH METHOD

In this section, we outline the research design, and share the methods for data collection and analysis for investigating the emergent characteristics (i.e., time, task, team, and transition) of the organizing practices that emerged through the use of external social media in the collaboration between government and non-government organizations. We start out by describing the research setting of our study.

4.1 Research Setting

To address the research question, we chose a collaborative project on open data in China – the Shanghai Open Data Apps (SODA) contest as our case. SODA is a municipal level contest organized in Shanghai to invite citizens, businesses, and communities to participate in the co-production of public services using government data. The contest was officially launched in August 2015, and has achieved a result of ten compelling new public service prototypes and several hundreds of elaborated ideas to improve the local public services in Shanghai. The result of the contest was particularly well received among the local governments and businesses. It is now developed into a brand project of the municipality, which takes place annually.

Comparing to the scale of the turnout, the organizing team behind the project appears to be much ‘smaller’ in terms of headcounts. The project was originally initiated by nine active open government data promoters in Shanghai, following the central government’ advocates for open data in 2015 (Gao,
2015). These nine organizers are of very different organizational backgrounds, including the municipal government (i.e., SMCEI\(^1\)), universities (i.e., OMNI Lab\(^2\) and DMG\(^3\)), a state-owned enterprise (i.e., CIDI Shanghai\(^4\)), a small IT company (i.e., Enerlong), an IT start-up (i.e., Kesci), and an NGO (i.e., Open Data China). They are also associated with different positions in their own organizations, with CEOs, Chief of Offices, Head of Labs, but also secretary and students.

These nine organizers take charge of all the project management tasks during project planning, execution, control and follow-up. These range from repetitive tasks, such as correcting press release manuscripts, to more unique tasks, such as envisioning the future state of the project. The preparation lasted for three months, during which the nine organizers had two face-to-face meetings for general discussion and updates. Most of the other coordination activities took place and were acted upon in an exclusive chat group on an external social media platform, WeChat.

We deem the collaborative project SODA as an excellent setting to study the use of external social media in collaborative government projects. Firstly, the interest in local collaborative e-government projects is growing. There is an active search for innovative solutions to public issues from local governments, citizens, NGOs, and businesses. Secondly, the prevalence of WeChat use in both private and professional settings. By May 2017, there were 768 million daily active users (private and professional) on WeChat (China Internet Network Information Center, 2016). This prevalence of WeChat represents a digital ecosystem in swift expansion that public actors need to respond to when envisioning new modes of collaboration with external stakeholders (Chen et al., 2016). Thirdly, the boundaries between the public and the private sector in China are in a state of rapid change and continuous negotiation. China is a case of hybrid transition between a command economy and a

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1 SMCEI stands for Shanghai Municipal Commission for Economy and Informatization.
2 OMNILab stands for the Open Meta Nexus Innovation Lab (OMNILab) at Shanghai Jiaotong University.
3 DMG stands for the Lab for Digital and Mobile Governance (DMG) at Fudan University.
4 CIDI Shanghai stands for the China Industrial Design Institute Shanghai.
relatively newly established market economy. While bureaucratic modes of governance persist, new governance practices are also devised to respond to the challenges posed by the environment (Gao et al., 2013; Zhang et al., 2016).

4.2 Data Collection

Considering that this study focuses on capturing the actual organizing practices emerged in the daily work scenarios, it requires us to provide a detailed account of the real-life contexts where practices take place. We therefore chose to base our data collection on a single case study (Walsham, 2006) of the SODA project, as it provides more in-depth account of the emergent dynamics in inter-organizational collaboration within its real-life context. The data analyzed belongs to a study of SODA, where we follow the informants from April 2015 to September 2015. We collected our data using a combination of qualitative methods (i.e., participant observation, semi-structured interviews, and document analysis).

The data sources for this paper consist of fourteen semi-structured interviews with the nine stakeholders, participant observation of meetings and daily organizing practices through WeChat, as well as documents that are linked to SODA’s official promotion. These sources are listed in Table 2.

[Table 2. Overview of the Data Sources]

These three methods complement each other by providing different types of data. Participant observation (Locke, 2011) provides us with an opportunity to uncover the organizing practices that are contextualized in different work scenarios. In this regard, we conducted both online observations on WeChat and offline observations of the meet-ups between the stakeholders. Online observations included unobtrusive observation of several chat groups on WeChat used by the organizing team for coordination. This gives a sense of the actual working dynamics on WeChat between the stakeholders in the SODA project. Offline observations included participation in the wrap-up meeting, where all the stakeholders presented and reviewed the organizing processes; the internal meetings that took place
among the university stakeholders; and the final event of SODA, where the author engaged in informal conversations with different stakeholders (see Table 1). The observations of the organizing practices in SODA were documented in the form of field notes. In addition, we also used document analysis to verify some of the statements that are posed by the informants and to shed light on the (in)coherence between the public address and the private reflections, which provided us with cues for our interview questions at a later stage of data collection.

We also conducted semi-structured interviews with the nine organizers of SODA to probe into the informants’ motivations and reflections on their experiences. They were chosen as the key informants, because they recognized themselves as the core organizing team of SODA, and because their engagement with the project and with each other started from the beginning of the project. The interviews followed two primary inquires: 1) how do the stakeholders organize around the collaboration using WeChat, and 2) what are the differences between their organizing practices in SODA and their previous collaboration experiences with government. The specific interview questions are tailored to each informant’s background and experiences. All interviews were carried out in Chinese. The duration of the interviews varies from 40 minutes to 3 hours, due to the circumstances of the interview. They were documented and transcribed with the informants’ consent and then translated into English. The protocols used for the interviews are available from the authors upon request. An interview guide sample is included in the appendix (See Appendix A).

4.3 Data Analysis

The data analysis is conducted in three broad steps with distinct objectives. In the first step, we applied “within-case analysis” (Eisenhardt, 1989) to our data. Here we used an open coding procedure to familiarize with the data, and capture the differences between emergent organizing practices through WeChat and the perceived ways of collaboration with government. Coding categories included generic codes related to project management, such as parallel work, meeting, private/professional networking,
dispersive assignment of tasks, recruitment of new members, conflicts. The outcome of the first coding step was a mapping of emergent organizing practices in the SODA project, as well as a mapping of perceived ideas of conventional collaboration with government. In the second step, we looked for more structured patterns of these two mappings. This step started out as an iterative process, where we first used the codes generated from the first step of the analysis as clues to identify a pool of relevant theories and concepts. We then turned to the literature in order to provide dimensions around which we could cluster codes from our first phase of analysis. Eventually we chose the concept of temporary organization (Lundin and Söderholm, 1995) as our sensitizing device (Klein and Myers 1999) to systematically categorize the two mappings that were identified in the first step, by relating them to the sub-dimensions of temporary organization. For example, the first-level code “parallel work” was coded as “project pacing”, “private/professional networking” as “individual to team”, “dispersive assignment of tasks” as “stakeholder responsibilities”, and “conflicts” as “shifting ways of organizing”. In the third step, we compared the conventional ideas of collaboration with government and the emergent organizing practices through external social media, to understand how the use of external social media reconfigures the inter-organizational collaboration between government and non-government organizations.

5. FINDINGS

During the interviews, our informants exhibited an overwhelmingly positive attitude towards their collaboration experience during the first year of SODA. They expressed that the coordination on WeChat was “smooth”, “convenient” and very different from their previous collaboration experiences with government agencies. It has become clear that time pressure is a central issue in the organizing experiences for the stakeholders, and has various implications along the inter-connected dimensions of task creation, assignment and engagement, team formation, and transition of the project. In the following, we detail on the organizing practices that emerged through WeChat and showcase how the use of
WeChat reconfigured the conventional ways of collaboration between government and non-government organizations.

5.1 Time: Alternative Mode of Temporality

The interviews with the stakeholders of SODA show that time appears to be one of their primary concerns in the coordination efforts, and there seems to be two contrasting views. On the one hand, all the stakeholders from government, university, and industry expressed a sense of “lacking time” during the coordination. Expressions such as “hectic” or “short of time” frequently came across in the interviews. The experience of “lacking time” was mainly linked to the pressing deadline of the project, which was set by the stakeholders to limit the preparation time within three months. On the other hand, the stakeholders also express that time is flexible here in comparison to the ‘traditional’ collaboration project with government. The Information Chief of SHCEI [G01] provides an example in her account of time in organizing SODA:

We are all very busy, and we have to attend to other work, or go on business trips. With WeChat, we no longer need to have meetings all the time. So WeChat is good in the sense that if we were not present when things were discussed, we can always come back and comment on what other people said. It happened a lot… We don’t have to pick and decide on a time any more. Time is really flexible on WeChat. [G01]

Similarly, the co-founder of KESCI [NG02] has expressed his surprise on how agile some of the government stakeholders have become during the preparation of SODA:

I am really surprised by our working style at SODA, especially how some of the main government stakeholders worked together with us. I mean, it has become more entrepreneur-like. We constantly discussed and worked on WeChat, whenever people have time. We almost just kept it going 24/7. This is different from the “from nine in the morning to five in the afternoon”
government working time where they are not reachable out of these time slots. Or when you have to wait for the call to go meet them in the government.

The use of WeChat seems to release some of the time pressure from stakeholders by providing a different way of project pacing from the government. Instead of using regular meetings as the marker for project progression, external social media enables virtual co-presence of team members to be constantly online across time and space, which are described by some informants as [G01], “just chat on the Internet”. Being able to organize the discussion in a virtual space also means that the stakeholders can respond to the discussions more instantaneously and persistently, therefore becomes more efficient in terms of their use of time.

Seen from the quotes, WeChat appears to enable an alternative mode of temporality in organizing collaboration compared to the perceived mode of collaboration in government, which is characterized by cyclical meetings, standard procedures, and overall an implicit expectation of time as ‘eternal’ (Lundin and Söderholm, 1995, p. 439). Under the pressure of project deadlines, the stakeholders experience time as a scarce resource. However, the stakeholders are able to leverage on external social media as a project pacing technology to relieve their organizing practices from the spatial and temporal constraints. Rather than working with serial timelines and formal milestones, the stakeholders use external social media to organize working time based on ad-hoc, task-related emerging schedules. With the external social media platform of WeChat, the organizers have the possibility of constantly being present at a virtual space and engaging in a continuous stream of discussion and action. In a project setting where time is limited, the use of WeChat enables a new set of organizing practices that are free from temporal and spatial constraints, and to some extent, free the stakeholders from the pressure of project deadlines.
5.2 Task: Informal Task Distribution

As indicated in the research setting, the overall goal of SODA was agreed by the stakeholders following the central government’s advocate for open data in China in 2015. Though without an official agreement, this still resembles how a project goal is set in conventional collaborative e-government in China. In countries such as China, the municipal e-government design has to follow a centralized e-government strategy, which means the organizational and procedural standards are reinforced in a top-down manner in government-issued regulations, or by government-endorsed advocates (Chen et al., 2009). This also indicates that in inter-organizational projects, the roles and responsibilities of each stakeholder need to be spelled out in policies.

Nonetheless, during the observation, it seems that WeChat has triggered a set of changing organizing practices around the assignment of responsibilities among stakeholders. Enabled by the persistent communication on WeChat, new tasks emerge in the on-going conversation between stakeholders, and are adopted contingently based on people’s availability, expertise, even willingness, rather than fixed assignment. The Vice CEO of CIDI [NG01] has illustrated in details how tasks emerge through WeChat:

If people have questions or ideas, they can just throw them in the group. And then the others will come, discuss how to approach this, and claim the tasks themselves once the tasks are clear.

People who claimed the tasks will complete the tasks offline, and then throw the end product back into the group. If others are OK with the end product, then it is done. Otherwise, we will just fix it altogether. [NG01]

What we see here is that tasks emerged through the on-going communication on WeChat and their assignment are highly discursive. While WeChat allows for on-going negotiation of task responsibilities through joint decision-making, taking such responsibility also depends on individual engagement in the group. During our observation, we have noticed that emergent task making relies on a shared belief
among the stakeholders. In the interviews, one of the recurring expressions the informants used to describe the bonds between the stakeholders is *qinghuai*, which can be translated as ‘felt interest’. Many of the organizers remarked that the assignment of tasks could, at times, be quite imbalanced and intense. What motivates them to complete these tasks is the *qinghuai* – their felt and shared interest in open data.

The co-founder of Kesci [NG02] has particularly appraised that tasks are adopted in the WeChat group despite of individual’s position in the organizational hierarchy;

> Well, we are all positioned quite differently in relation to each other. Some are from higher positions in the government and companies, or professors, and some are still students, or somewhere lower in their own organization. But when it comes to taking tasks, we are just all in this together. People are really dedicated to this project.

The way [NG02] described how tasks are adopted in the WeChat group is very different from how tasks are assigned in the government, where individuals’ tasks and responsibilities are typically fixed to their organizational position (Jaeger and Bertot, 2010; Mergel, 2013b). The use of WeChat, in combination with a dedicated team who shared a common interest, has enabled changes in how tasks emerge, adopted and engaged in such collaborative project. However, it does not mean that stakeholders would organize in an identical fashion. In fact, stakeholders also use external social media to avoid unwanted engagement with the collaboration.

For example, the secretary of CIDI Shanghai [NG04] mentioned in the interview that even though she was also included in the WeChat group, she did not participate in the conversation as much as the other members of the group who were all in leadership positions. She only responded when directly mentioned with an “@” sign in the group, which meant that she had been assigned to a very specific task. Otherwise, she felt she only needed to be informed about the progress of the project preparation, and that she would not necessarily share as much *qinghuai* as the others. This example shows that while the
use of WeChat enables new task creation, assignment and execution practices to emerge, it can still accommodate less engaged ways, or more conventional ways of task assignment and execution. WeChat makes it possible for stakeholders to juggle between the emergent organizing practices and the conventional processes around collaboration.

5.3 Team: Allowing New Stakeholders to Participate

The conventional collaborative e-government project in China often rests on government-business partnership. The municipal governments would engage local private-sector partners based on their specialized technological resources. They would also engage local research institutes and universities based on their shared interests in solving public needs and building possibilities for innovation. These potential partners are also often well-known organizations (Chen et al., 2009).

In our case, while the nine stakeholders may have identified each other based on their matching needs and resources, we also start to see a new way of engaging partners/stakeholders that is enabled by external social media. During our observation, the ad-hoc tasks created on WeChat result in stakeholders capitalizing the available resources in their private networks in order to complete these tasks. The boundary of project team in this sense becomes very malleable. With the prevalence of other external social media platforms, such as Weibo (an approximate equivalent platform of Twitter), we have seen possibilities to involve experts who were not part of any individual’s private or professional network into the team.

For example, the director of Opendatachina.com [NG03], who is now regarded as one of the experts in open data in Shanghai, told us how he ‘stumbled upon’ the opportunity to become a team member of SODA. After obtaining his PhD in the U.K. in 2014, he developed an interest in open data in China and started out by following several open data-related hashtags on Weibo, where he found some posts on open data by the Head of the Lab for Digital and Mobile Governance at Fudan University [NG08]. After
contacting [NG08], he was invited to different e-government collaboration groups on WeChat and gradually built a reputation of his expertise amongst the future team members of SODA.

What is interesting here is that, as the founder of an online community, [NG03] did not have an affiliation with any known organization. The informal recruitment of [NG03] into the project team that happened through Weibo and WeChat contrasts to the conventional recruitment procedure in collaborative e-government project in China, where team members are often recruited through identified stakeholders in an existing contract or agreement. Moreover, other stakeholders (i.e., [G01], [NG01], and [NG08]) emphasized that they value more [NG03]’s expertise on open data than where he is affiliated with. [NG03]’s shared interests on open data that are made visible on Weibo and WeChat are the main reasons why they have involved him into the project team. Such a dynamic shows that, as stakeholders learn about other individuals’ expertise through external social media, they tend to base the partnership on people’s similarity of expertise rather than on well-known organization affiliations.

In addition, external social media also seemed to produce a reference for the team to legitimize their existence. In our case, legitimacy of the team has become an interesting issue among the stakeholders. Even though the engaged stakeholders are mostly from higher management of municipal government and state-owned business, SODA is different from a conventional public-private partnership project by nature, as it did not start with an official partnership agreement. It is therefore difficult for the stakeholders to legitimize their project and the work they do for the project. In this sense, the chat group is sometimes used as a reference for the stakeholders to provide evidence for the existence of the project.

5.4 Transition: Shifting Between Formal and Informal

While the stakeholders have praised WeChat for enabling agility in juggling tasks, time, and team development, there are also growing tensions that concern the informality in the emerged organizing practices. These tensions become especially explicit when the project is coming to an end.
During a follow-up meeting, we have observed offline after the contest finished, one of the heated discussion was about how to raise sponsorship for next years’ SODA. While most of the stakeholders celebrated the idea of ‘crowdsourcing’ through WeChat, namely to capitalize on their personal networks to scout for potential fundraisers, some other stakeholders (i.e., [NG08]) raised the concern that crowdsourcing can be “too much of a commercial behaviour” for people who are affiliated with a university or government. This especially has to do with the fact that WeChat is often used for both private and professional purposes; hence becoming a grey zone where the boundary between private and professional activities becomes unclear. The dispute has led to further discussion on whether or not SODA should transition from a ‘temporary’ organization that was, at the time of research, still a collaborative project between nine organizations, to a permanent organization that run on its own. Some suggest a ‘milder’ approach to increase the formality of fundraising online by announcing the fundraising call on the official website or on an official social media account. These discussions often ended with a temporary solution with some stakeholders making a compromise with the others. However, the tensions persist and re-emerge when they are triggered by certain situations.

These examples showed that while external social media provides opportunities for stakeholders to juggle between new organizing practices and established processes around collaboration, it also reinforces the tensions between them, particularly around the boundary between formal and informal practices. Once the tensions are triggered, they can lead to the collapse of the whole project, but they also bear the opportunity to transform the project into a new different form of organization.

Table 3 summarizes the key findings on the characteristics of inter-organizational collaboration enabled by the use of external social media.
[Table 3. Summary of Findings]

6. DISCUSSION

6.1 A Research Agenda

In this study, we have analyzed the inter-organizational collaboration between government and non-government organizations facilitated by external social media. Based on our findings of how external social media enable change in collaborative projects along the dimensions of time, task, team, and transition, we propose a five-point research agenda on how governments’ use of external social media can benefit from re-addressing these fundamental dimensions of collaboration.

First, our findings show that in the context of inter-organizational collaboration, external social media platforms can enable a sense of ‘flexible time’ in the presence of pressing project deadlines. What we have observed is that people’s perception of time is largely connected to the change brought by external social media to the standardized organizing arrangement of collaboration in their ‘home’ organization – the government. Previous studies have pointed out that increased efficiency is an outcome brought by external social media to inter-organizational collaboration between government and non-government organizations (Aral et al., 2013; Baskerville, 2011; Baumer et al., 2013). However, few studies have reflected on what exact changes have been brought to the organizing arrangements that lead to this increased efficiency. Our studies show that, compared to the conventional way of collaboration in the government, external social media enables more efficient collaboration by providing a virtual space for stakeholders to communicate across physical distances, and allowing for these communications to persist over time. In the context of inter-organizational collaboration, future studies should unfold the nuances in stakeholders’ perception and management of time, and explore the changes enabled by external social media to the organizing processes of collaboration in governments.
Second, in existing e-government studies, stakeholders’ tasks and responsibilities in inter-organizational collaboration are often taken for granted and tied to the individual’s position in the organizational structure of government, such as Government Social Media Manager or Chief Information Officer (Jaeger and Bertot, 2010; Mergel, 2013b), or official partnership agreements (Chen et al., 2009). Consequently, the distribution and execution of tasks are looked at in terms of organizational structure rather than actual interactions between individuals. However, our findings show that task creation, assignment, and engagement in inter-organizational collaboration are a negotiation between the function and power of one’s organizational position and the individual commitment and expertise. With the needed expertise, stakeholders can move across hierarchy and organizational boundaries and take responsibilities that do not necessarily correspond to one’s position in their ‘home’ organization. Our findings show that individual’s responsibilities should be understood based on stakeholders’ actual actions rather than on their organizational affiliations, or the nature of their affiliated organizations. The latter especially has important implications for governance, as for example: governments and businesses may not take on their traditional divide of labour in delivering public services in such collaboration. Future studies should look into how the boundary between sectors can be changed through the use of external social media in collaborative e-government project.

Third, the on-going negotiation of tasks and responsibilities opens up opportunities for a team formation that is constantly developing based on needed expertise, rather than on the pre-defined organizational arrangements. Our findings show that in inter-organizational collaboration, external social media can enable bottom-up team formation. The inclusion/exclusion criteria for team formation do not only rely on organizational affiliation or formal agreement between organizations (Henderson and Bowley, 2010), but increasingly on similarity of expertise and shared interest between individuals. This is markedly different from the recruitment tradition in governments, which often requires standardized recruitment procedures or identification through official organizational arrangements (e.g., a special task force) if in
the context of inter-organizational collaboration (Dawes and Pardo, 2003). These stakeholders are found through organizations that are involved in existing collaborative arrangements (Dawes and Pardo, 2003; Lee and Kwak, 2012). For example, in a public-private partnership project, the organizing team would typically only consist of stakeholders from industry and government. In a digitally enabled inter-organizational collaboration project, future studies should question the existing understanding of what it means to be a team. Attention is especially needed to the emerging group of project stakeholders on external social media, namely the citizens and non-government organizations.

Fourth, as the stakeholders originally come from different organizational backgrounds, there are inherent tensions on goals and managerial norms in an inter-organizational collaboration. Our findings show that the open and fluid nature of external social media enables transitions by sparking these tensions. Once the tensions are triggered, they can lead the project to collapse, or they can become institutionalized into a ‘permanent’ organization by an agreement among stakeholders. It is therefore sensible to infer that the institutionalization of an inter-organizational project can potentially lead to institutional changes in the ‘home’ organizations of some stakeholders. This is particularly relevant for government, which often features strict bureaucratic procedures of collaboration. Previous studies have looked into institutions as an external factor that facilitates or constraints the outcome of inter-organizational collaboration (Gil-Garcia, 2012; O’Leary and Vij, 2012). However, there is a need to further understand how the institutional arrangements of government can be changed using external social media in inter-organizational collaboration.

Fifth, by using the theoretical lens of temporary organizations (Lundin and Söderholm, 1995), we showcase how e-government research can benefit from focusing on specific characteristics of inter-organizational collaboration. Our findings also reveal that external social media can potentially defy some of the conventional assumptions in temporary organization, such as how time can be managed. Based on this, this study also proposes that another “T” (Technology) should be added to the four
dimensions of temporary organization. Future studies can feed into the refinement of this theoretical framework by focusing on how external social media can enable different forms of temporary organization along the four dimensions in different contexts. It could also be interesting to compare the organizing practices of collaboration enabled by external social media at different phases of the project.

The research agenda for future studies can found in Table 4.

[Table 4. Research Agenda for Future Studies]

6.2 Implications for Theory and Research

Based on our discussion in our contribution for research, the findings of this study have significant implications for research in the following two areas. First, this study supplements existing research by unfolding the black box of the organizing practices around collaborative e-government project. In particular, this study showcases the emerging organizing form of collaboration that is enabled by social media along four fundamental dimensions. The identified organizing form of the collaboration can be used as a descriptive tool to organize and analyze the coordination activities involved in e-government projects.

Second, this study also has implications for the development of the theoretical lens of temporary organization, by shedding light on the role of ICT in enabling different forms of temporary organization. Through this case study, we have showed that a sociomaterial understanding of ICT use in organization can defy the previous assumptions in the temporary organization, where boundary-opening activities are seen detrimental to the actuality of a collaborative project. Instead, our study shows that boundary-opening activities can also be beneficial for the actuality of the project, particularly in regards to the management of time and tasks during project work. In addition, by adding the fifth dimension of technology, the lens of temporary organization can be used as a more effective conceptual tool to account for sociomaterial phenomena.
6.3 Implications for Practice

This study also has significant implications for public managers. Our findings provide input for handling managerial challenges of social media use in government. Given the bottom-up, non-linear, and non-hierarchical nature of the use of external social media, we recommend government project managers to re-think their one-dimensional view of external social media as a purely recreational, inappropriate, and ultimately inefficient medium of collaboration (Baumer et al., 2013; Schlagwein and Hu, 2016).

Government innovation requires tremendous amount of commitment and resources. Public project managers should be encouraged to experiment with the use of external social media in order to leverage on the potential resources from various sources.

In an open collaborative environment, the boundary between private and professional, formal and informal, seems to be a rising issue, particularly for public organizations. The potential tensions from the use of external social media highlighted by our study thus calls for an explicit discussion in the practitioner community on how to devise shared guidelines and appropriate training for project managers involved in collaborative initiatives as such. Moreover, government may also need to embark on a rethinking of public governance regime to account such shifting boundaries.

6.4 Limitations and Future Research

There are a few limitations to this study, where we believe future studies can embark on. First, this study chose to primarily focus on the characteristics of the inter-organizational collaboration practices analyzed in the cases that are linked to the use of external social media. Future studies can look into the influence of other contextual factors – political, institutional, legal, or economic – and investigate how these factors interplay with social media use and together implicate in the context of collaborative e-government.

Second, our analysis starts to show that the way in which external social media change organizations is more complex than it seems. Some of the organization changes are enabled through a combination of
social media use and other characteristics of project settings (i.e., shared interest in the project). Given
the focus of this study, we did not look into other project management aspects in the analysis. Future
studies can develop this line of research by operationalizing inter-organizational collaboration with
regards to other aspects of project management, such as shared agreement on project charter, ownership
of project tasks, knowledge sharing, and resource sharing.

Third, due to the subjectiveness of participant observations, we recognize possible subjective biases in
the collection and analysis of our data. Such biases are reflected in the uneven distribution of interview
time among different stakeholders across industry, government, and university. This, however, can also
be understood as a manifestation of the different engagement of the various stakeholders in the
collaborative project. In the future, we would like to pursue the implications of stakeholders’ use of
external social media with regard to their engagement with the collaborative project.

Lastly, we acknowledge the limited generalizability of the current findings, given the uniqueness of the
project and of the Chinese context. However, we did not aim at providing generalizable findings
applicable to other empirical settings, but rather at generating theoretical concepts and principles that
could be applied in similar contexts (Lee and Baskerville, 2003). Future research can test our findings in
other settings and broaden generalizability.

7. CONCLUSION

The impacts of governments’ use of external social media is spread over a wide range of areas; it is not
only limited to service and information provision, but also inter-organizational collaboration practices.
In particular, external social media, characterized by a blurred private/professional boundary, can
potentially introduce changes and tensions to the well-established routines of collaboration in the public
sector.
In this study, we have analyzed the characteristics of external social media-facilitated inter-organizational collaboration by looking at the use of WeChat in a collaborative project between government, university, and businesses in China. Findings show a number of transformations enabled by external social media along the dimensions of time, task, team, and transition. Specifically, we observed the emergence of new organizing practices around collaboration that are characterized by the following: an ad-hoc and non-linear management of time; a sense of shared commitment to the accomplishment of tasks; a serendipitous recruitment of team members based on expertise rather than on organizational affiliation; and a transition from formal to informal collaboration. Our findings feed into the on-going research on collaborative e-government, and on the impact of external social media on organizational practices in the public sector.

8. REFERENCES


Tables

Table 1. Dimensions of Temporary Organization

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<thead>
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<td>Project duration</td>
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<td></td>
<td>Project pacing</td>
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<tr>
<td>Task</td>
<td>Project goal</td>
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<td></td>
<td>Team member responsibilities</td>
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<td>Team</td>
<td>Individual to team</td>
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<td></td>
<td>Team to team environment</td>
</tr>
<tr>
<td>Transition</td>
<td>Post goal Achievement</td>
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<td></td>
<td>Shifting ways of organizing</td>
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<tr>
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<th>Organizational Affiliation</th>
<th>Position</th>
<th>Informant code</th>
<th>Interview N</th>
</tr>
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<td>Shanghai Municipal Commission of Economy and Informatization (SMCEI)</td>
<td>Information Chief</td>
<td>G01</td>
<td>2</td>
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<tr>
<td>Non-government 1</td>
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<td>Vice-CEO</td>
<td>NG01</td>
<td>2</td>
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<td>Kesci</td>
<td>Co-founder</td>
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<td>Director</td>
<td>NG03</td>
<td>4</td>
</tr>
<tr>
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<td>NG04</td>
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<td>CEO</td>
<td>NG05</td>
<td>1</td>
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<td>Non-government 6</td>
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<td>NG06</td>
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<td>Shanghai Jiaotong University</td>
<td>Lab member</td>
<td>NG07</td>
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<td>Non-government 8</td>
<td>Fudan University</td>
<td>Professor</td>
<td>NG08</td>
<td>1</td>
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<td>Non-government 9</td>
<td>Fudan University</td>
<td>Lab member</td>
<td>NG09</td>
<td>1</td>
</tr>
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<table>
<thead>
<tr>
<th>Observations</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Initial meeting</td>
<td>Review 1st SODA Initial plan for 2nd SODA</td>
<td>SMCEI, CIDI Shanghai, OMNI Lab, DMG Fudan, Kesci, Enerlong</td>
</tr>
<tr>
<td>Other meetings</td>
<td>Regular DMB Lab meeting Task assignment and report</td>
<td>DMG lab member</td>
</tr>
<tr>
<td>SODA Road Show</td>
<td>SODA final</td>
<td>All stakeholders, contest participants, public audience</td>
</tr>
<tr>
<td>Informal communication</td>
<td>During daily work Via WeChat</td>
<td>All stakeholders</td>
</tr>
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</table>
### Table 3. Summary of Findings

<table>
<thead>
<tr>
<th>Dimensions of temporary organization</th>
<th>Sub-Dimensions</th>
<th>Practices without External Social Media</th>
<th>Emerging Practices with External Social Media</th>
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</thead>
<tbody>
<tr>
<td>Time</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project duration</td>
<td></td>
<td>Fixed duration of project based on official agreement</td>
<td>Fixed duration of project based on agreement among stakeholders</td>
</tr>
<tr>
<td>Project pacing</td>
<td></td>
<td>Linear management of time through regular coordination activities</td>
<td>Ad-hoc, non-linear management of time through virtual co-presence of team members</td>
</tr>
<tr>
<td>Task</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project goal</td>
<td></td>
<td>Following top-down, centralized e-government strategy</td>
<td>Following top-down, centralized e-government strategy</td>
</tr>
<tr>
<td>Team member responsibilities</td>
<td></td>
<td>Spelling out responsibilities for each team member (stakeholder) in policies and regulations</td>
<td>Discursive task creation, assignment and engagement among team members (stakeholders)</td>
</tr>
<tr>
<td>Team</td>
<td>Individual to team</td>
<td>Top-down engagement from government to business based on matching demands and resources; Top down engagement with research institutes/universities based on shared interests; The identified team members are often affiliated with well-known organizations</td>
<td>Serendipitous recruitment of stakeholders based on expertise; The team members are not necessarily affiliated with known organizations</td>
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<tr>
<td>Team to team environment</td>
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<td>Legitimization of the team through official agreement</td>
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<tr>
<td>Transition</td>
<td>Post goal Achievement</td>
<td>Termination or another iteration of the project</td>
<td>Termination or another iteration of the project</td>
</tr>
<tr>
<td></td>
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<td>Shifting formal and informal organizing practices</td>
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## Table 4 Research Agenda for Future Studies

<table>
<thead>
<tr>
<th>Research Agenda</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Time</strong></td>
</tr>
<tr>
<td>How does team members’ perceptions of time change through external social media in a collaborative e-government context?</td>
</tr>
<tr>
<td>Which types of organizing practices of collaboration are enabled by the use of external social media that result in a certain perception of time?</td>
</tr>
<tr>
<td><strong>Task</strong></td>
</tr>
<tr>
<td>How can the boundary between sectors (i.e., public and private) be changed through the use of external social media in collaborative e-government project?</td>
</tr>
<tr>
<td><strong>Team</strong></td>
</tr>
<tr>
<td>What means to be a team in the era of social media, in particular, regarding the participation of citizens and non-government organizations through social media?</td>
</tr>
<tr>
<td><strong>Transition</strong></td>
</tr>
<tr>
<td>How can the institutional arrangements of government be changed using external social media in inter-organizational collaboration?</td>
</tr>
<tr>
<td><strong>Technology</strong></td>
</tr>
<tr>
<td>How social media can enable different forms of temporary organization along the four dimensions in different contexts?</td>
</tr>
<tr>
<td>What are the organizing practices of collaboration enabled by social media at different phases of the project?</td>
</tr>
<tr>
<td><strong>Other Factors</strong></td>
</tr>
<tr>
<td>How do political, institutional, legal, economic, project setting factors interplay with social media use and together implicate in the context of collaborative e-government?</td>
</tr>
</tbody>
</table>
Appendix A. Interview Guide

Basic Information

<table>
<thead>
<tr>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational Affiliation</td>
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<tr>
<td>Organizational Position</td>
</tr>
</tbody>
</table>

Stakeholders and their relationships

- Which organizations have participated in the organization of SODA and sponsorship? Who are the key organizers?
- Which organizations do they belong to? And what are their positions in their own organizations?
- Can you tell me how did the organizers meet? And how long did it take when the stakeholders started to form an organizing group?
- Which organization/stakeholder would you consider as the main organizer of the contest? Why do you divide them as such?
- What is the goal(s) of SODA this year? How did you identify the goal among the organizers? Did the relationships between stakeholders influence the definition of the goal?

Responsibility/tasks

- Which responsibilities these organizations have mainly taken in the preparation of SODA (Cue: Operating the project, coordinating communication, providing advices)?
- Are any of the responsibilities assigned to certain types of organizations (Cue: government, business, or university)? Are there any overlaps in terms of their responsibilities? Why?
- What are the responsibilities of each organizer?
- Do you think these organizers have done something that exceeded their responsibilities? Can you raise an example?
- How do you see your role in SODA? (Cue: For example, are you a leader, decision-maker, operator, consultant, or all of the above?) What do you think your main responsibilities are about?

Collaboration and Organizing Platform
- How do the stakeholders communicate and coordinate during the preparation of SODA (Cue: Which forms of communication are there? Are these communications online or offline)?
- What is the proportion of online and offline communication? Is there any difference in terms of content between online and offline communication?
- How do you communicate in your affiliated organization? Is there any differences between the way how collaboration
- Which online platform(s) have you used this year to organize the preparation?

**General description about platform**
- How would you describe this platform to people who don’t know about the platform?
- What types of communication do you think this platform is apt for?
- What are the differences between this platform and other Social Media platforms?
- What are the pros and cons about using this platform for coordinating collaboration?
- Are there any platforms or ways of communication you would consider to replace WeChat? What are they? Why?

**Reason to choose a specific platform**
- Why do the stakeholders choose to use this platform than other platforms to communicate about the tasks?
- What kind of tasks do you think this platform is good for? Can you raise a concrete example to describe this? Why do you think so?

**Actual use of the platform**
- In organizing SODA, do you think it is effective to use the platform for communication? What criteria did you use to assess that? Can you raise a concrete example?
- Which type of tasks did you actually complete on this platform? Are there any changes in terms of its usage, during the development of the contest?
- Which features do you usually use on this platform? In what circumstances do you use them?
- Could you maybe raise an example when this platform performed a task as expected?
- Could you maybe raise an example of when this platform did not perform an expected task?

- Did the way in which people talk on this platform change when new members join? If so, could you maybe raise an example? Why do think that happened?

- Do you think the use of this platform has brought changes to the organization of SODA (Cue: the relationship among stakeholders, or the distribution of resources)? What are these changes? Why do think these changes have happened?

**Authority, decision-making**

- Who or which organization do you think is leading the project?

- Who or which organization do you think makes decisions in the group? Why is that?

**Macro Context**

- During the preparation of SODA, do you recognize any specific rules, or polies, institutions that have led to a certain way of collaboration between government and non-government stakeholders? Could you please raise an example about that?

- Do you recognize any resemblances or differences between the organizing pattern of SODA, and the organizing pattern in certain sectors (cue: for example, government, businesses or universities)? What are they? Why do you think that has happened?

**Follow up**

Is there anything you would like to add?