

Research Article

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Social Media Affordances and Information Sharing: An Evidence from Chinese Public Organizations

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Abstract: The study aims to reveal the role of social media and its influence on information sharing within public organizations and emphasis on the distribution affordance to facilitate information processes. Existing literature emphasized different aspects of social media in the public sector to promote the relationship between government and citizens or provide better public service, for example, innovation, policies, openness, and communication. However, there is a wide gap in the literature to investigate social media use and information sharing within public organizations. The current study tries to accomplish the goal by conducting semi-structured interviews with 15 employees in public organizations in Chaohu city, China and applying content analysis on the interviews. Despite the existing literature, the targeted group for this study is divided into three levels (i) senior-level, (ii) middle-level, and (iii) junior-level employees to get a better view of social media. The study is based on grounded theory for coding analysis. We provide an overview of social media use within Chinese public organizations and discuss five social media affordances involved in the public organizations. Finally, we provide the implications, limitations, recommendation, and future research of this research area.

Keywords: social media, social media affordance, public organizations, information sharing, information distribution

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1 Introduction

Social media is “a group of Internet-based applications that build on the ideological and technological foundation of Web 2.0” (Kaplan & Haenlein, 2010) and “enable stakeholders and government to communicate, collaborate and engage in governance” (Oliveira, 2013). Recently, different public organizations, including government agencies and NGOs that do community-level work, have either tried or are considering social media as a way of interacting with stakeholders (Lampe & Roth, 2012). Social media, with attributes of information distribution, development of relationships, conversation, and connectivity (Kietzmann, 2011), has been rapidly developing in government organizations (Khan, 2014; Mergel, 2013a, b; Mossberger, 2013; Snead, 2013; Zavattaro, & Sementelli, 2014; Zheng, 2013; Zheng, & Zheng, 2014). Prior research highlighted several reasons for the limited social media research in public organizations, which are as follows: Samuel (2009) mentioned several deterrents that may affect the willingness of the public organization to embrace social media. Very few studies have conducted on the role of social computing application in the public sector which has specific characteristics affecting the perception, adoption, and use of social computing tools (Lampe & Roth, 2012). Picazo-Vela et. al. (2016) mentioned the need of understanding the relationship between technology, institution, and organizations in government are to better acknowledge the adoption, strategic approaches, and concrete application of social media (Criado, Sandoval-Almazan, & Gil-Garcia, 2013; Mergel, 2013b). Recently, studies are focusing on interaction between users on social media (Robertson et al., 2013; Sandoval-Almazan & Ramon Gil-Garcia, 2014; Tobias, 2011), social media adoption (Bonsón, Royo, & Ratkai, 2015; Mergel, 2013a, b; Nah & Saxton, 2013), and different types of individual government messages send via social media (Bonsón et al., 2015; Lev-On & Steinfeld, 2015; Zavattaro, French, & Mohanty, 2015).

In this way, we attempt to remedy the lack of study regarding social media use in the public sector, especially in emerging economies such as China. In China, with the rapid advancement in Wi-Fi and smartphones, different social media applications, for example, Wechat and QQ have won great popularity among Chinese Public. In 1999 and 2011, Shenzhen Tencent, a Chinese-based company launched QQ and Wechat, which become the most popular social media applications in China (Zhao, 2018). These social media applications are used for different purposes, that is, audio/video communication, sharing videos, photos, voice messages, files sharing, etc. According to the report released by GWI, “Social Global Webindex’s flagship report on the latest trends in social media 2019,” Wechat is one of the 20 most popular social platforms in the world and dominates the social media landscape in China.

We draw on this affordance perspective to interpret and organize prior research on social media within organizations such that it can help us to address the first concern outlined earlier: Organizational scholars have not yet paid much attention to social media because they view these new technologies as ancillary to their core phenomena of interest. Focusing on affordances providing by social media in the workplace, our view demonstrates that social media are at the centre of most activities within organizations. Affordance lens on macro-level concerning with knowledge sharing and coordination and on micro-level with decision-making and temporal orientation are poised to be shaped by the use of social media at work (Leonardi & Vaast, 2017).

Thus, we argue that the use of social media within organizations will affect individuals, groups, and organizational processes and enhance information sharing behaviour. Despite the prior research in which the connection of individual discussed in terms of blogs (Wattal, Racherla, & Mandviwalla, 2009), social networking site (Babajide & Hiltz, 2019), and communication between government and citizens, citizens provide opinions on government strategies and government discuss the strategies with public to get feedback as a collaboration (Chen, Xu, Cao & Zhang 2016). This study highlights social media within the public organizations for information sharing purposes among public employees.

In the current study, we examine public organizations in China and how social media affect these organizations in terms of information sharing, despite the prior studies in which information sharing took place between citizen and public organizations (Stamati, 2015). In this study, we investigate the information sharing among public employees which in our knowledge did not examine in

the prior studies. This study will also open a research area in this sector for future researchers to investigate the different aspect of social media in public sector and how social media can change the traditional structure of public organizations in terms of information sharing and innovation. Thus, the study comprises the following questions:

- (i) *What is the role of social media within Chinese public organizations to share information?*
- (ii) *What is the effect of social media affordances on information sharing in Chinese public organizations?*

The paper is structured as follows: We provide the details for the theory of affordance and propose five affordances of social media in public organizational context (Section 2). After presenting the methodology (Section 3), we discuss the findings based on the affordance theory (Section 4). Then, the paper concludes (Section 5) by highlighting its contribution to literature and suggesting future research avenues.

2 Theoretical Background

2.1 Social Media Affordance

The study is grounded on affordances theory, the concept of affordance for the first time defined by James Gibson (1979) as a perception of the environment that inevitably leads to some course of action (Chen, 2016). Affordance depends on the individual’s competencies and objectives. Parchoma (2014) noted that the notation of affordance “neither belongs to the environment, nor the individual, but rather to the relationship between the individual and their perception of environments”. The literature shows that affordance theory facilitates the understanding of the correlation between information technology and social practices (Stamati, 2015; Treem, 2012; Zammutto, 2007). Affordance theory not only avoids the trap of “technological determinism” (Parchoma, 2014) but also clarifies the similar and distinct communication and organizational behaviour using similar technology (Treem & Leonardu, 2012). Social media affordance deals with those hidden possibilities that establish a link between the user and social media (Cabiddu, 2014). Prior research shows that scholars used affordance theory to define the role of social media in organizational practices, which includes knowledge sharing (Gibbs, Rozaidi, & Eisenberg, 2013; Majchrzak, 2013), knowledge creation

(Mansour, 2013; Wagner, 2014), external communication (Argyris, 2015), intellectual capital production (Kane, 2011), election campaigns (Dyrby, 2012), activism (Obar, 2014), customer engagement (Cabiddu et al., 2014), and government openness (Malsbender, 2013; Stamati, 2015).

Several researchers investigated social media affordance in the public sector (Din, Øystein, & Wahid, 2017; Kreiss, Lawrence, & McGregor, 2017; Malsbender, 2013; Chen, 2016; Stamati, 2015; Vaast & Kaganer, 2013; Zheng, 2013). Majchrzak et al. (2013) argued that social media encourage knowledge sharing and conversation in the organization by four different affordances: meta-voicing, triggered attention, network-informed associating, and generative role-taking. Argyris and Monu, (2015) research showed the combination of affordance theory and public relations theory, and argued that eight actions of social media afford potentials for external communication including connectivity, self-expression, engagement, monitorability, reach, recordability, and availability. Malsbender et al.'s (2013) study was based on public organizations and identified six affordances visibility, persistence, editability, association, meta-voicing, and generativity (see Table1) for external regulatory interactions; the author proposed these social media affordances for interaction with customers and citizens aiming at the development of service innovation. Four fundamental affordances mentioned by Treem and Leonardi (2012) to discuss organizational communication in general, the authors argued that some of these affordances could influence many processes in an organization, and the author explained that visibility, persistence, editability, and association assist in characterizing what is new and, quite possibly, consequential about social media for organizational communication procedures. Majchrzak et al. (2013) discussed two affordances meta-voicing and generativity; the authors articulated social media affordances that affected public knowledge conversation and mentioned that these affordances have both positive and negative effects on the discussions. The study of Stamati et al. (2015) discussed social media affordance for government openness and mentioned five affordances, including visibility, interactivity, communicability, collaborative ability, and anonymity (see Table1).

These above studies discuss information sharing between users and public organizations. However, in this study, we investigate the information distribution process in the public organizations between public employees. Information sharing refers to share information with only one or a few members of the group but not all. Whereas, Information distribution refers to share any information

with several or all group members (Steinel, Utz, & Koning, 2010). In the Chinese public organization, the information distribution behaviour is more common. Social media shapes and is shaped by social processes that affect the way information flows through organizational networks (Ellison, Gibbs, & Weber, 2015).

Social media provide an affordance to enable the distribution of information within a social context. Social media shapes and is shaped by social processes that affect the way information flows through organizational networks (Ellison et al., 2015). Moreover, the distribution of information is supported by the collaboration affordance, in which distribution of information takes place for better decision-making. In such processes to make a better decision, multiple individuals should have the information distributed from higher authorities or the group members.

This article is focusing on investigating the use of social media within public organizations and information sharing on an individual level (employees). Therefore, reviewing existing literature on social media affordances and considering our research context, we refine and identify four social media affordances, association, interactivity/communicability, distribution, generativity, and put forward a new affordance, distribution, for our study to provide a broader view of social media affordances within the public sector.

Association: Treem and Leonardi (2012) argue that association establishes the connection between users and between actors and contents (Boyd & Ellison, 2007). It is also associated with the network-informed association (Marjchrzak et al., 2008), according to which new connection is more comfortable to build who are unknown to each other, and individuals can see the relationship between them and how those connections connected to any specific content. The authors mentioned the two forms of association in social media. First, a connection of an individual to another individual which is consider as the most common social tie in a social media environment. The second form is the association between an individual to information, for example, wikis, blogs, and tagging of the article. This kind of association shows a connection between individual and information either created or acknowledged. These arguments show that association enables individuals to get resources (information) from different sources. To support information sharing, even knowledge sharing, public organizations should focus on the association factor to increase the connection between employees, which will increase the information and knowledge sharing behaviour in this sector.

Table1
Social Media Affordance Involving in Public Practices

Authors	Focus	Method	Affordance	Definitions
(Malsbender et al., 2013)	Government service innovation	Contributing to previous studies Treem and Leonardi, (2012), and Majchrzak et al., (2013) by analyzing literature	Visibility	Social media visible user's actions, connection, and emotions to others.
			Persistence	Social media enable user to view prior contribution (i.e., comments and messages).
			Editability	Social media enable users to craft and recraft their communicative acts.
			Association	Social media facilitates to make the connection between individuals, organizations, and actions.
			Meta-voicing	Social media facilitate users to react to content.
Stamati (2015)	Openness and accountability in Greek government	Interview 10 top executive from the private sector and five senior employees from the public sector	Generativity	Social media facilitate users to express their ideas and experiences.
			Communicability	Social media enable users to communicate with others.
			Interactivity	Social media enable users to interact with each other.
			Visibility	Social media enable users to view public discussions, contributions, network messages and connections, and profile information.
			Collaboration	Social media promotes government-citizen collaboration to improve decision-making
			Anonymity	Social media enable users to express their opinion anonymously

Source: (Qiang, 2016)

Communicability/interactivity: Samati et al. (2015) mentioned communicability as a common language for communication. In their study, the authors suggested an interaction between government and citizens. The word common means a similar way of sharing and creating contents such as text, pictures, and videos. The main feature of social media is to establish the connection for communication between users for sharing text

and materials between common interest groups. The communication can be established on social media via different platforms, for example, micro-blogs. Interaction between employees in public organizations for information sharing often takes place through face-to-face or by email (Razmerita, 2016). Thus, for more enhanced interactions, the adoption of social media in public organization should be promoted in research studies.

Generativity: Social media enable its users to express their ideas and experience with others. Malsbender (2013) mentioned it as it allows the user to articulate their thoughts and opinions. Social media allows users to post and contribute to the contents by combining different sources and resend their personal preferences and thinking to others (Bolton et al., 2013). Social media can allow users to engage with different communities, learn, and express their ideas and experience for the development (Malsbender, 2013).

Collaboration: Social media helps the users to collaborate in different situations such as decision-making and consultation. Samati et al. (2015) mentioned that the government sought discussion from citizens on social media for their new laws and actions. Social media provide different platforms for government and private organization to establish collaboration between the organizations and individuals so that the individuals can participate and make the activities of the organization more effective. In this article, we are studying collaboration between employees in their daily tasks to make their work more efficient.

Distribution: Social media enables individuals to distribute information among colleagues. Distribution of information is an interdependent factor affecting knowledge diffusion among individuals in an organization. We view the distribution affordance in terms of the proportional presence of information seekers and distributors. Havakhor, et al. (2016) argued that the effects of the distribution of information roles and reputation mechanism on information diffusion are interlinked, which clears the role of social media function of distribution and its effect on information sharing.

3 Methods

There are three methods used in the prior research to study social media affordance first, literature review (Majchrzak et al., 2013; Treem and Leonardi, 2012), in-depth interview (Cabiddu et al., 2014; Gibbs et al., 2013; Stamati et al., 2015), and survey (Obar, 2014). This article examines social media affordance by following the qualitative tradition (Lincoln & Guba, 1985; Yin, 2003) and conducting interviews.

We contacted several individuals from public organizations in Chaohu City, Anhui Province, China to provide a broad picture of this research area and sent our interview questions to them in advance to let them know about the nature of the survey. Due to time availability and willingness, finally, 15 employees from different

government bodies were interviewed such as state forestry bureau, government state-owned enterprise, and ministry of water resources, financial bureau, human resource, and social security. These individuals are chosen for the frequent use of social media in their daily work for communication and distribution of information. Thus, to get a better view of social media in public organizations, these individuals play an important role in this study. These individuals belong to different government bodies such as state forestry bureau, government state-owned enterprise, ministry of water resources, financial bureau, human resource, social security, etc. We choose these government bodies due to their higher use of social media for information distribution, through social media groups of individuals and experts. These individuals were divided into three categories: senior-level, middle-level, and junior-level employees to get in-depth understanding and a clear view of the social media (See Table A1, A2, and A3). These three categories of individuals use social media for different purposes. For example, senior-level employees have the access to different organizational units and handle different matters in these units as compared to middle-level and lower-level employee.

In this view, senior-level employees use social media to distribute information among these units and discuss different matters through social media groups. Middle-level employees of every unit take instructions and information from senior-level employees and distribute it among lower-level staff. Middle-level employees play a role of a bridge between senior-level and junior-level staff for information distribution, whereas junior staff uses social media for communication and sharing as well as gaining information from different sources. They take such information from seniors or employees at their level. Junior-level employees are very keen on the information needed for their daily tasks. Thus, to classify them into three groups is to get a better view of social media in public sector organizations.

The process of data collection includes two stages: a pre-test questionnaire and a one-on-one interview. First, we conducted the pilot study following (Guthrie, 2010), in which we piloted the interview questions that allow us to examine the better view of individuals about social media from different levels. Then, we used the insight gained to formulate our interview questions from our pre-test (the interview protocol is available from the authors). In the pre-test questionnaire, we include questions such as, what benefits do social media provide in your organization? How social media provide a better service in your organization to communicate, share information, important files, and other contents? How social media

facilitate you to share information within the organization? What is the role of social media in the collaborative design of your organization?

In the second stage, we conducted a one-on-one interview at the interviewee's office. The interviews were semi-structured, and each interview lasted for 35 minutes on average. Before starting the conversation, the interviewees were asked for audio recording; if the participant did not agree to be audio-recorded, notes were kept, which reflects the views of the participants (see Appendix for details of interviewers and interviews). Content analysis is applied to the data gathered from the interviews based on social media affordance theory.

4 Findings

In this section, we provide the reports from the interviews with senior, middle, and junior employees. Based on the findings from the interviews, we discuss the interviewees' attitudes toward social media, characteristics of social media, and social media affordances within public organizations. Below, we mention the illustrative quotes from the interviews.

4.1 Attitudes Toward Social Media

According to our interviews, nearly all interviewees mentioned that they are using WeChat and QQ (China-based social media platforms) for their communication and sharing purposes. These are the most popular social media platforms in China. These two social media platforms are both from Tencent Inc, which is a Chinese-based company providing several social media platforms. According to the honeycomb framework put forward by Kietzmann (2011) which is consist of seven functional blocks: identity, conversations, sharing, presence, relationships, reputation, and groups, and QQ and Wechat focus more on conversations, sharing, relationships, and group blocks. As instant communication tools, QQ and Wechat are based on the strong social network to create self-centred networks and concentrate more on maintaining relationships rather than creating new relationships. In addition to having conversations with friends, individuals can share information with friends and post in the QQ Zone and WeChat's Circles. Individuals can divide friends into several groups and set up content to be visible or hidden according to social media groups.

Interviewees generally believe that social media tools are easy to use, convenient, efficient, fast, low cost, and helpful

for their daily work. The commonly used functions are working group and WeChat's Circles. They issue messages, forward notifications and documents in workgroups, and share personal and work life with text, pictures, music, web links, and video in WeChat's Circles. Employees from different levels have a different attitude toward social media. Junior and middle employees are more familiar with social media and more likely to communicate with others and share personal and work life on social media for taking notes of life and image building, etc. Junior employees think social media helps to promote relationships between colleagues. Senior employees use social media as well but are more relying on traditional communication methods, such as telephone calls, face-to-face meeting.

Different communication strategies are used in different situations. For example, employees will send common files through social media while the OA system is the priority for important documents; and if it is urgent, the telephone is better.

4.2 Characteristics of Social Media

On the bases of the social media theme, we code data and found four categories in which social media influence public organizations. The four categories are as follows:

Attribute: The interviews mentioned many attributes of social media through which social media can help them in their daily task. These attributes include helpful, convenient, timely, efficiency, effectiveness, and low economic cost.

Function: Social media facilitates public organization regarding fast communication and exchange of information (message, notice, documents, and files). Besides information transfer and communication, these platforms enable employees to create social groups freely where they can discuss different issues. WeChat's Circles function and QQ Zone function add a social networking component to the service so that employees can share anything they want for the aim of recording, sharing, image building, etc.

Resources: The interviewers motioned different resources, for example, message, information, notice, knowledge, documents, ideas, and files which they distribute among organizations using social media.

Multi-Media: Social media provides different multi-media through which employees can communicate and share information. The interviewers mentioned different media, including text, picture, audio, video, weblink, etc. These multi-medias provide richer information content and more communication choices.

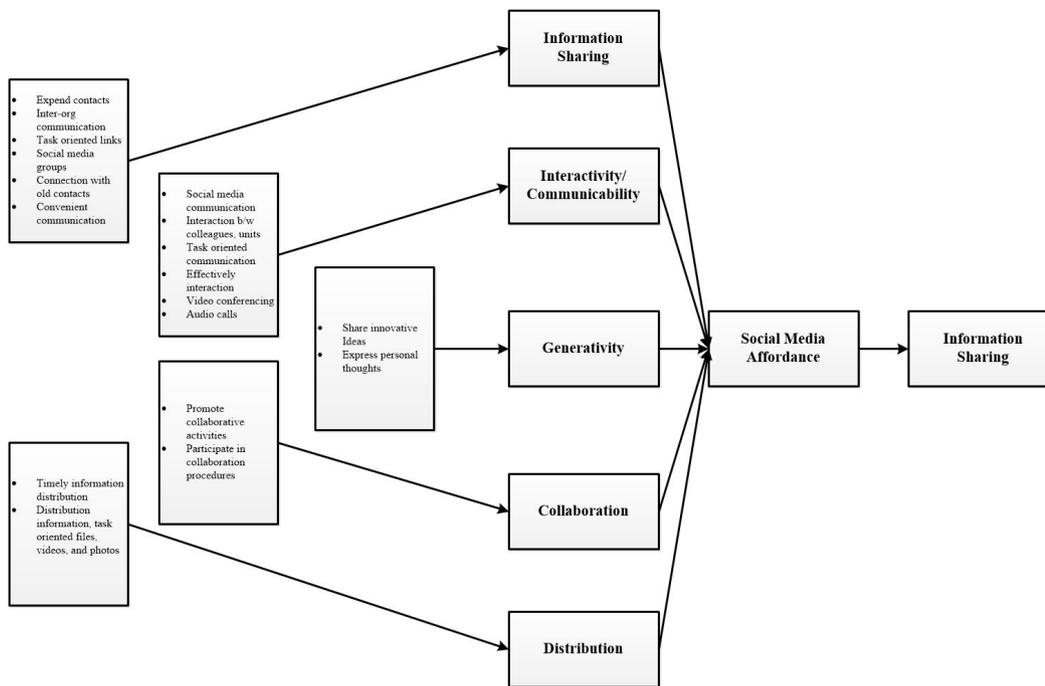


Figure 1. Social media affordance in public organization for information sharing

4.3 Social Media Affordances within Public Organizations

Communication between public employees is different from that between government and citizens, and it is more related to work tasks, collaboration, and information distribution. Therefore, based on prior studies, such as Traeem and Leonardi (2012), Majchrzak et al. (2013), and Stamati et al. (2015), we refined social media affordance and put forward a new affordance, distribution, for our study. Finally, we identify five affordances of social media: association, interactivity/communicability, distribution, generativity, and collaboration to investigate the role of social media in public organizations (see Figure1).

4.3.1 Association

The interviewees mostly use QQ and Wechat in public organizations. Social media tools, such as QQ/Wechat, provide a social network which is based on a strong tie in the real world. Individuals send a friend request to the other, and after being allowed, the association between two individuals will be created until one deletes the other from his friend’s list. Such association is always based on strong relationships in the real world, such as family, friends, and colleagues, and is usually two-way and permanent.

For public organizations, social media is a critical factor in establishing a connection between employees. It enables them to create a permanent and strong relationship between colleagues and those of the contents which are needed for various tasks. Employees will establish a working group from the same public organization or the same management level through social media, which is based on the organizational structure to facilitate communication, such as Wechat group. Wechat group are created for temporary tasks, and employees will focus more on association maintenance other than association creation.

“Social media (WeChat) groups enable me to communicate with private friends as well as my co-workers, and with those whom I worked in the past. In my organization, task-oriented communication is carrying on text messages using social media applications.” (Org. A)

The affordance of association in Chinese public organizations helps senior employees connect with their subordinates so that they can release notice, assign tasks, share information, and instructions to their subordinates.

“By making the social media group on social media application, the work can be assigned easily.” (Org. F)

Association on the middle level in the organization enables the middle-level employees to make a better connection with senior-level and junior-level colleagues,

as they are playing the role of a bridge between senior-level and junior-level employees. They distribute notices or tasks received from senior employees and get feedback from junior employees through social media tools with high efficiency.

“I use (QQ, WeChat) social media tools, and these tools make my daily work and communication easier and more convenient. I can get more information and smoothly interact.” (Org. L)

For junior employees, the affordance of social media association has a significant role in Chinese public organizations. Social media tools help them contact anyone concerned to their work in the organization efficiently, provide better access to information they need from a higher level or at the same level and feedback to the higher level on their work.

In addition, the affordance of social media association helps create connections between employees and contents by functions of bookmark and sharing.

Associations can bring some overloads as well; too many social media groups bring individuals management burden and information overload. Some interviewers have noted that there are too many social media groups.

“There are 18 WeChat groups.” (Org. C)

4.3.2 Interactivity/Communicability

Social media affordance “interactivity” facilitates the employees to communicate and share content. In public organizations, compared to the OA system, social media provide better platforms for employees to communicate and interact with colleagues in different ways.

“Social media is very quick in communication and prompt reply during working hours. I mostly use social media for communication and association.” (Org. G)

Employees can send text, voice, video, pictures, emoticons, etc. to colleagues, and make voice or video calls with colleagues through social media tools which are convenient, fast, and low economic costs for daily work. In Chinese public organization, more and more tasks and notices are distributed through social media tools. Social media affordance communicability helps the top-level leaders and middle-level managers to interact with other employees in the organization. They use social media groups for better communication with their working teams. For junior employees in Chinese public organization, the process of interaction and communication mostly takes

place on social media. Interaction affordance of the social media enables them to communicate with each other and discuss their issues, share their ideas and thoughts, and promote their relationships.

After work, employees prefer to post text with pictures, weblinks, videos to express their ideas, feelings, opinions, and so on in WeChat’s Circles or QQ Zone, while other employees may comment, like, or even forward the web links. Junior employees are more active in interacting with colleagues as compare to the middle or senior employees. Social media affordance interactivity helps promote their relationships.

I use social media to interact with my contacts in this regard. I use social media tools for audio, video, communication. Social media is constructive for me to interact with other employees. Social media is mainly used in my organization for sharing information to facilitate work and parallel tasks. (Org. A)

Social media carries information services, whereas documents are shared by a processing system, social media, etc. social media increases influence and visibility. The best ways to organize communication with colleagues are by phone and social media. We can communicate with each other in the organization through social media. To further analyze and solve problems and establish a good communication environment by full understanding timely and effective communication, reporting of work and other situations is this way, and I interact with middle and senior managers. (Org. K)

However, due to social media openness, employees may distract while they communicate with friends during working hours, which is a big challenge for leaders to be aware of.

4.4 Distribution

The distribution of information takes place when the members of the organizations have different information, and they use this information to complete different tasks, that is, decision-making. Zhang, Basadur, & Schmidt (2014) mentioned three reasons for information distribution.

First, common information can be socially validated (Stasser, 1992). In group decisions, uncertainty occurs in terms of meaning, implication, and accuracy of the information. In such an uncertain situation, organizational members should recall and process all relevant information and evaluate with each other (Wittenbaum, Hollingshead, & Botero, 2004).

Second, shared information can result in mutual enhancement; in this process, members enhance the evaluation of each other’s task-relevant capabilities

(Wittenbaum, Hubbell, & Zuckerman, 1999). When one-member share information in a group, other members validate it; in this sense, common information enables to establish a base where group members acknowledge and relate to each other (Clark & Brennan, 1996).

Third, the limited capacity of an individual to recall information. When one-member present common information, it is easier to get collective attention and help others to recall that information.

Social media have an attribute to facilitate user to distribute resources and tasks among different individuals. According to our interviews, we found that the distribution behaviour is more common than sharing in Chinese public organizations. Therefore, based on our research context, we put forward the affordance of distribution, which is also applicable to different sectors.

Interviewers mentioned that social media enable them to distribute different resources (documents, notices, information, and knowledge) during work, which make their work easier and efficient. Due to confidentiality, employees are very cautious about file transfer, but ordinary documents/files are distributed through social media tools more frequently (in social media workgroups) for the convenience and perceived ease of use.

“Through social media, work can be distributed easily, and time-efficient, communication barrier-free, and feelings can be express easily.” (Org. F)

In public organizations, employees use social media tools to distribute information more and more often, and the main structure of resources distribution flow is a tree structure, which is similar to the organizational structure. Through social media, senior employees distribute some resources (instruction, documents, notices, information, etc.) with their subordinates while middle employees get instructions and content from the top level and distribute it to junior employees via emails and social media applications. Besides, it is more convenient and consumes less time for employees to distribute information with different departments when they collaborate for a task. In addition, employees are careful to resources transferred through social media tools and OA system is the priority for important resources while they use social media more often.

“It allows me to distribute information with different departments.” (Org. E.)

4.4.1 Generativity

Social media tools provide informal channels for employees to express their thoughts, ideas, and opinions. This affordance of social media is very helpful for those employees working in public organizations; leaders may ask for advice on social media groups while employees put forward ideas freely so that leaders can generate new ideas and information by combing multiple resources. On the other hand, employees can post text, picture, video, and web links to express their opinions and thoughts implicitly and to shape images.

“Using social media, I contact, share ideas and information with my colleagues. The role of social media is important in my daily work.” (Org. E)

In China, the local social media application such as WeChat and QQ enable employees involving in the same task to create a social media groups to share ideas and information so that issues can be discussed earlier before important and formal meetings and gather essential information related to those issues. Generativity on a high level in Chinese public organization is very helpful for leaders to use social media groups to discuss their ideas without calling a meeting. As the bridge of senior employees and junior employees, middle employees can share their thoughts with leaders and generate new knowledge and ideas from junior employees for better performance.

On the middle-level social media play an excellent role in expressing and sharing ideas. It is also handy for me when I want to share some information with other members, including senior and junior employees as well as the employees from my level in the organization. It is a very convenient way for me to make connections in the organization. (Org. I)

Due to much involvement in a different task, junior employees' exposure can be higher. Their ideas during work which they get from any problems can be useful for organizational processes. They can share these ideas through social media, and the minor issues can be solved through social media discussions in social groups available in the organization, which is ultimately the way of sharing resources (information) and different thoughts, and ideas to solve issues.

As a junior employee in the organization, social media make much of the work easy. Due to workload, employees are very busy, and it is hard to communicate face-to-face. The problem has been solved by social media to talk and share documents, ideas, and other contents. (Org. N)

4.4.2 Collaboration

Collaboration refers to social media that help users to collaborate in different situations such as decision-making and consultation. Interviewers mentioned the importance of social media in collaboration approach. Interviewers have noted that social media have broken space constraints, and they can participate and exchange views through social media groups. This approach is useful in the case of working with teams and other units in the organization for any particular task. However, formal decisions are negotiated through meetings. Inter-departmental cooperation will be issued in official documents, and some relatively independent departments have less collaboration with other departments, such as the Forestry Bureau.

“In my organization, I feel social media serve as a bridge to cooperation with our colleagues. It is beneficial in cooperation processes.” (Org. C)

The collaboration approach through social media in high-level management is higher as compared to other levels in the organization. During cooperation procedures, data and information can be sent through social media platforms, and employees can use social media applications for better discussion via audio and video calling.

For middle employees, social media tools facilitate them to collaborate regarding strategic designing and taking part in the decision-making process.

“By social media, middle-level employees can participate in strategic designing processes and share resources and information for better decision-making and participate in collaboration processes.” (Org. J)

Junior employees have less chance to participate in organizational strategies in designing processes. However, they can participate in open ballots in social media groups through some widgets provided by social media, such as voting widgets. The interviewers mentioned the process of sharing relevant information in collaboration processes across the organization through social media, and by this approach, junior employees could also participate in the collaboration process, which is taking place within the organization.

“For decision-making, formal decisions are often made in the form of meetings, and so on. Using the method of WeChat’s Circles (social media groups) to let my colleagues, leader, and other units know about my idea and information.” (Org. L)

Overall, the five affordances enhance the abilities of employees and facilitate them in their work environment from different perspectives. Association affordance of social media enables employees to establish a connection while working. These connections can be useful for communication, shared purposes, and distribution information. From an interactive approach, employees can interact and communicate with others by sending text and voice messages to share their ideas and information so that they can collaborate within the organization. This affordance of collaboration enables the employees to generate new ideas and information. Moreover, the distribution of information is supported by the collaboration affordance, in which distribution of information takes place for better decision-making. In such processes to make a better decision, multiple individuals should have the information distributed from higher authorities or the group members. Our study also addresses the socio-material properties of social media (Leonardi et al., 2013) and a better understanding of social media affordance so that the information can use for the decision-making, strategic designing, and carry everyday tasks.

5 Discussion

This study explores how public employees use social media within public organizations based on social media affordance theory. Social media affordances have socio-material nature (Stamati, 2015) and the socio-material feature of social media provides different functions in the organization which offer new ways of communication and sharing. Previous studies on social media affordance mostly focus on private sectors or communications between governments with citizens, seldom on social media use within public organizations.

In recent years, with the popularity of social media and its benefits, public organization welcome social media in the organizations and employees working in public organizations start using social media tools to communicate and collaborate with colleagues frequently during work time. Therefore, it is significant to investigate social media affordances within public organizations to use social media tools better and improve performance and efficiency.

This study conducted in-depth interviews with 15 employees working in Chaohu city public organizations in three administrative levels, which helped to understand the role of social media in public organizations. We

provide an overview of employees' attitudes toward social media and the characteristics of social media within public organizations. More importantly, we use five affordances (association, interactivity/communicability, distribution, generativity, and collaboration) to analyze the role of social media within public organizations and provide an insight of social media affordances within public organizations.

Communications within public organizations are different from that between government and citizens, which are more about work tasks collaboration and information distribution. Therefore, considering our research context and based on studies of Treem and Leonardi, (2012), Majchrzak et al., (2013), and Stamati et al., (2015), we refined the social media affordances and put forward a new affordance, distribution, for our study. Finally, we identify five affordances of social media: association, interactivity/communicability, distribution, generativity, and collaboration, to investigate the use and role of social media within public organizations.

With regard to association, employees in public organizations are strongly connected by social media tools, and it is fast and convenient to contact with each other. More importantly, social media groups are created easily so that employees from the same department or different departments can get connected for tasks. However, too many social media groups bring individuals management burden and information overload.

Regarding interactivity/communicability, compared to traditional OA system, social media provides better platforms for employees to communicate and interact with colleagues by multi-media. Additionally, social media has great flexibility not only in terms of contact time but also in terms of communication/interactivity ways. But because of social media's openness, employees may be distracted when they communicate with friends during work time, which is hard for leaders to be aware.

Our study put forward the affordance on distribution based on our research context, which is applicable for another research context as well. Sharing represents the extent to which users exchange, distribute, and receive content. Sharing is an important functional block (Kietzmann 2011) of social media, which is one of the most important functional blocks for Chinese most popular social media platforms (WeChat, QQ, Weibo) as well. In Chinese public organizations, sharing refers to the distribution of resources (notices, instructions, documents, files, information, knowledge, etc.). Because of confidentiality, employees are very cautious about file transfer, but ordinary documents/files are distributed through social media tools more frequently for the

convenience and perceived ease of use. In addition, social media is an important information source for employees. Due to the same organization vision and common interest, employees easily get useful information shared by colleagues in WeChat's Circles or QQ Zone, functions provided by social media which is similar to Facebook.

With regard to generativity and collaboration, the other affordances, social media tools provide informal channels for employees to express themselves and collaboration before formal decision-making. Junior employees are more likely to express themselves in social media platforms, whereas senior leaders are more relying on traditional methods. Senior employees can exchange views through social media without space limitation, and junior employees can participate in decision-making through social media widgets.

However, in our study, the collaboration between departments and employees has not a good space to express views toward public issues. As collaboration increases, social media may need to provide a platform or widgets for employees to pool ideas and information so that organizations can benefit from the mutual discussion.

The five affordances enhance the abilities of employees and facilitate them in their work environment from different perspectives. Interviews stated the importance of these affordances in the Chinese public organizations as well. Association affordance of social media enables employees to establish a connection while working. These connections can be useful for communication and shared purposes. From an interactive approach, employees can interact and communicate with others by sending text and voice messages to share their ideas and information so that they can collaborate within the organization. This affordance of collaboration enables the employees to generate new ideas and information. Our study also addresses the socio-material properties of social media (Leonardi et al., 2013) and a better understanding of social media affordance so that the information can use for the decision-making, strategic designing, and carry everyday tasks.

Besides contributions to prior literature, this study has some limitations. We used the qualitative study method and chose municipal public organizations to interview 15 employees from different public units in Chaohu city. Although it provides an insight into social media affordances in Chinese public sector, it needs to conclude the influence of social media on public organizations more broadly. Additionally, China is different from other countries in terms of language and culture toward technology, which is relying on local companies that are providing different technology-based service. Thus,

findings in our study may not be generalized to worldwide. Future research should be extended to more organizations in different regions and countries.

5.1 Conclusion

This study explored how Chinese government employees use social media within public organizations based on social media affordances theory. More specifically, this study first discusses social media in four categories within the Chinese public organizations where social media environment exists. Second, adds a new affordance, distribution, to the social media affordances theory, which may be applicable for another research context. Third, uses five affordances (association, interactivity/communicability, distribution, generativity, and collaboration) to analyze the role of social media within public organizations and provides an insight of social media affordances within public organizations.

Social media is welcomed in Chinese public organizations and is frequently used in work. Our study highlights the importance of understanding the different characteristics of social media that motivates employee's actions and behaviour and how they interact on social media. Our study provides a broader view of social media in Chinese public organizations and contributes to the literature by studying social media and its influence on public organizations.

The paper makes some recommendations to public organizations: public organizations should support employee social media in their sub-bodies more to promote the decentralization which will enhance the collaboration processes more specifically knowledge sharing; training sessions are needed to improve the skill of employees in terms of positive and fruitful utilization of social media.

Future studies may explore more in-depth on social media within public organizations. As this study is covering a specific area in China, future research should be extended in terms of theoretical frameworks provided here to more organizations in different regions and countries, which will help to investigate the role of social media in different environment and cultures. We use a qualitative method to provide an insight into the influence of social media within Chinese public organizations; quantitative method and mixed-method are needed in future studies.

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Appendix

Table A1
Details of Interviewers and Interviews at Senior Level

Position	Organization	Profile of Organization	Expect from interviews
Senior employee (Org A)	Old cadres service bureau	The organization provides services for the retirees of the organization unit	<ul style="list-style-type: none"> • Expand the numbers of the individuals which is very helpful for getting information from different sources • Converting tacit knowledge into explicit knowledge • Share information through files broadcasting • Interorganizational social media tools for communication and sharing • Expand social media channels • Improved transmission speed, efficiency, and scope • To interact with contacts • Use social media tools for audio and video communication • Helpful for me to communicate with other employees • Used to share information • To facilitate work and coordinate tasks • Send information • Share documents • Get comments and suggestions • Breakthrough space limit • Communication and cooperation more convenient and timely • Use social media application • Share information and express opinions • Achieve the function of the symposium • Participate together • An essential element for knowledge sharing • The efficiency of knowledge dissemination • Effective platforms for knowledge sharing
Senior employee (Org B)	Office of political consultation	To serve CPPCC (Chinese people's political consultative conference) members and special committees and organize meetings	<ul style="list-style-type: none"> • Enable me to communicate with my friend's circle • Communicate with my co-workers, units • Task-oriented communication is carry on text messages using social media applications • Social media will also enable to support the communities of experts • Social media carries information services to share some of the information and content • Very much feasible, fast, and convenient for communication • Need to communicate with many people for different tasks • Very useful in daily tasks • Easy to handle text, voice, and video calling • Allow me to send information in my social media groups • Helpful for collaboration activities • A better platform for knowledge sharing • Open to get information from the friend's circle

Continued **Table A1**
Details of Interviewers and Interviews at Senior Level

Position	Organization	Profile of Organization	Expect from interviews
Senior employee (Org C)	State Forestry Bureau	To deal with the safety and environmental development of forest	<ul style="list-style-type: none"> • Very helpful to access more information, interactive, and files can be shared in a short time • Selective attention to the expertise • I use some of the data with my co-workers • Confidential documents are not involved • The traditional way of communication • Social media is very influential in task-oriented dialogue • Social media is relatively simple and preliminary • Share my ideas and information • An easy way to contact • Social media services as a bridge to cooperation with our colleague • Helpful in the cooperation process • A perfect platform for resonating to share knowledge
Senior employee (Org D)	National health and family planning commission	The organization provides healthcare and family planning services	<ul style="list-style-type: none"> • Very helpful for communication purpose • Communicate with co-workers • Much useful for accessing information • I use social media to interact with other units • Social media application can send data to employees promptly • An employee can give feedback • Upload and share files and videos to designated people • Help us to learn, talk, collaborate and help each other • Useful and easy to express ideas • Share information • To get comments • Facilitate internal communication • Promote knowledge dissemination and social progress • Upload sharing function, real-time send and receive information • Timely and convenient role in the collaborative organizational design • Great platform for sharing information • Convenient to use through mobile phones
Senior employee (Org E)	City Political Consultative Conference	Participation in major national decisions and expression of the demands of the people affect gastrointestinal and government decisions	<ul style="list-style-type: none"> • Improve work efficiency • More selective • Communicate better with subordinates • More interactive with authoritative and impartial mass dependence • Used to cooperate in the organization work • Improve communication efficiency and work efficiency according to work plan • Share ideas and information with my colleague • Distribute information with different departments • A platform for point-to-point communication • Improve productivity • Helpful to share information with many people

Table A2
Details of Interviewers and Interviews at Middle Level

Position	Organization	Profile of Organization	Expect from interviews
Middle employee (Org F)	Party working committee of Anhui (China)	Organization for training, development, and administration of party members	<ul style="list-style-type: none"> • Work can be distributed efficiently and time-efficient • Communicate barrier-free • Improve communication • Express easily • Social media groups • Social media applications • Stabling social groups • Distribute a tremendous amount of information with a colleague • Unimportant work can be done face-to-face • Top to bottom information can be forwarded • Share information • Work for the exchange group • Discuss, negotiate, and revise the work plan • By social media applications, we circulate documents • Communicate strategic solutions • Refine and reach consensus • Share information • Send letters • Increase the breadth of earning knowledge • Improve efficiency
Middle employee (Org G)	Government state-owned enterprise	Providing services such as infrastructure construction, land consolidation, and development	<ul style="list-style-type: none"> • Convenient to use • Communicate with top and lower staff quickly • Quick connection and prompt • Communication and association • Reduce the frequency of face-to-face reports • Efficiency and quick response • Interact with my colleague and share express information ideas • Meeting and social groups those are created on social media • A useful way of sharing information • Better connection • Media groups for coordination process • Convenient to integrate • A platform for communicating quickly • Affect the way of thinking, strategy, decisions, and knowledge level • Develop an environment for knowledge sharing

Continued **Table A2**
Details of Interviewers and Interviews at Middle Level

Position	Organization	Profile of Organization	Expect from interviews
Middle employee (Org H)	Party and government institution	Promoting the overall administration of the party and building a grass-roots organization system.	<ul style="list-style-type: none"> • Very useful for my work and it is easy to use • Need to improve the network security and strengthen online and offline interaction • Transfer instructions in notifications or documents • Helpful to improve the efficiency • Share files, videos, and other information with my co-workers • Develop the interaction process between the top-level and low-level employees with a middle level • Knowledge sharing • Mutual interest • Role in reducing the sense of distance and send of hierarchy • Communication for sharing • A good platform for information visibility • Notify the workgroup and departments • Communication channel • Involving specific matters • A platform for information sharing • Help to learn • Facilitate us to improve
Middle employee (Org I)	Public Logistics support	Providing logistics support for investment companies	<ul style="list-style-type: none"> • Link role for better communication • Promote affection in an organizational environment • Share files and other information • Sharing process • Key role for communication and sharing information • Exchange information enhance feelings • Forward information to top and a low-level employee • Express ideas and information • A very convenient way for me to make connections • An essential part of communication and interaction between individuals and departments • Social media platforms establish social media groups • Easily interact, transmit information and learn • Convenient in knowledge sharing
Middle employee (Org J)	Education Management	Providing services in education undertaking	<ul style="list-style-type: none"> • Social media make the communication convenient and can predict all of the information ahead of time • Convenient to transfer information • Making the task open and transparent • Helping to speed up the progress • Workgroup to share files and information • Creating various social media groups • Communication and sharing is easier • Middle-level employee to share the information with its co-worker • Easy to share knowledge • Fast than meeting someone face-to-face • time limitation • useful while contacting employees • communication straightforward and easy • the efficient way to access information • participate in strategic designing • broaden the scope of knowledge sharing

Table A3
Details of Interviewers and Interviews at Junior Level

Position	Organization	Profile of Organization	Expect from interviews
Junior employee (Org K)	Human resource and social security bureau	The organizations provide fair and impartial adjudication of labour disputes between two parties	<ul style="list-style-type: none"> • Social media tools such as WeChat, QQ, ITM • Very easy to use • Can help me accept file transfer for work information • Timeliness and integrity • The function of file storage • Information reminder • Organizational strategy reform • Carries information services • Documents are shared by the processing system • Increase influence and visibility • Organize communication with colleague • Communicate with each other • Analysis and solve problems and establish a good communication environment with a full understanding • Timely and effective communication and reporting • Interact with middle and senior managers • Make my work easy • help me to express my ideas and expression • send documents and other information • convenient by social media to get feedback • connect me with other employees and units • forward their views and opinion through multiple channels and make decisions promptly • Share them through the phone, WeChat, QQ, etc. • Share information with colleagues • Share pictures and forwarding files
Junior employee (Org L)	Local state-owned enterprises	The organization provides engineering support for the development of the economic development zone	<ul style="list-style-type: none"> • Use QQ, WeChat social media tool • Easy to use • Make daily work and communication more accessible and more convenient • I get more information and smooth interaction • Best communication method • WeChat group • Communication with other colleagues • Instant interaction • Promote mutual understanding • Effective sharing • A convenient way for employees to establish interaction • Report working status to the middle and senior leadership • To speed up the timeliness • Deepen mutual understanding • An easy way to share my documents, videos, and audio information with my colleagues • Give me feedback timely • Decision-making • Help employees at a low level to make decisions • WeChat friend's circle to check their required data, ideas, and relevant information on social media groups • Track of the public information released

Continued **Table A3**
Details of Interviewers and Interviews at Junior Level

Position	Organization	Profile of Organization	Expect from interviews
Junior employee (Org M)	Ministry of water resources	Provide Water conservancy services, the main goals of the organization is to serve the society	<ul style="list-style-type: none"> • Social media tools • Easy to use and can help me to get more information, strengthen the connection • Finish the task assigned by leaders promptly • Attention to the circle of friends, share work-life status • Work easily • Hard to communicate face-to-face • Communicate and share documents get comments and contact with other organizational units • Vote in the WeChat and QQ groups • Make decisions and share information via phone • Help lower-level staff • Forwarding information via WeChat and QQ
Junior employee (Org N)	Financial Bureau	The organization provides the financial management services	<ul style="list-style-type: none"> • Use QQ, WeChat, and Weibo and social media tools • Easy to use and can help me effectively communicate • Convenient for me to communicate • Use social media for interviews • Group of employees • Communicate through email and messages • Participate in decision-making • Share ideas and discuss • Help employees at a low level • Share ideas with others • Share information with colleagues
Junior employee (Org O)	Municipal economic development	The organization provides services for enterprises and aim to act as a bridge between government and businesses	<ul style="list-style-type: none"> • Use social media tools such as Weibo, QQ, Wechat • Help me to get more information • Strengthening work and contact • Social media timely receiving tasks • More convenient • Best communication way • Get urgent matters through the phone and WeChat • through WeChat group employees in my organization establish good communication • work and life can be share timely • leadership instruction can be received immediately • help to interact with middle and upper management • involved in strategic reforms by sharing ideas • before meeting we discuss issues and present our thoughts on social media • easy and helpful to work together • communicate with different employees from a different level • participate in voting on WeChat and QQ group • opinions can be forwarded at any time • Share information and knowledge by calling through social media • employees share ideas and information with other units • usually, share data by working for social groups