Citizens' perceptions of government's participatory use of social media

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Abstract

Purpose – This paper aims to investigate the perceptions of Omani citizens toward the use of social media by the government for participatory and interactive relationships. More precisely, the descriptive nature of the study resides in its ability to explain how social media users regard the current status and levels of presence, transparency, engagement, responsiveness and trust about the current use of social media by the Omani Government.

Design/methodology/approach – A quantitative approach was used to collect data. This was done via a self-administered questionnaire from a return sample of 1,769 citizens drawn from different places in Oman. These citizens were considered as well-informed and regular active users of social media. The reviewed literature provided a basis for the construct of the questionnaire.

Findings – The overall results indicated modest levels of agreement in all of the investigated factors. The neutral findings suggest that there is a level of uncertainty among the respondents regarding how the government is determining the potential of social media for participatory and interactive relationships. Findings in this study advocate the outcomes of the recent Arab Social Media Report, plus the few relevant studies included in the literature, which nearly stated that although there is a growing use of social media among citizens, governments are failing to take full advantage of social media. Governments are also failing to engage citizens to design and deliver more efficient and collaborative services, per this study's findings.

Practical/implications – The findings call for the importance of strategically framing the use of participatory social media by the government. In a broader sense, the findings of this study are beneficial to all contexts that share similar political and socio-economic philosophy, especially the Arab states and most of the developing countries. The findings provide insights for governments in need of developing social media strategies to promote more collaborative and interactive governance.

Originality/value – The study aids in understanding the views of citizens who are the current major players in a highly technology-driven environment. This environment is found to be transforming the relationship between citizens and governments. The study adds knowledge to the currently scarce body of literature dealing with issues pertaining to citizen–government relationships in social media in the Arab states, and similar contexts in developing countries. Its findings may provide valuable insights for policy makers to leverage collaborative relationships between governments and citizens.

Keywords Social media, Civic engagement, Social networking sites, Oman, Civic participation, Government 2.0

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1. Introduction

Participatory and interactive technologies (such as social media tools strengthened by mobile internet connectivity) help citizens and governments alike to take advantage of and synchronously interact with each other to enhance decision-making and enable productivity. Kaplan and Haenlein (2010, p. 61) defined social media as a "group of internet-based applications that build on the ideological and technological foundations of web 2.0 and that allow the creation and exchange of user-generated content".

As citizens have been empowered by the use of social media, governments have found themselves obliged to listen and interact with them to a higher degree (Warren *et al.*, 2014). Social media tools have transformed the traditional norms of civic engagement. These previous forms of engagement used to be processed via systematized traditional media, typically incorporating newspapers, radio and television. Social media tools have also increased citizen connectivity, offering new opportunities and means for interacting with governments. As a result, governments are now expected to professionalize and regulate their participation with citizens in social media environments. Linders (2012) defined and examined the co-production relationship between governments and citizens in the social media environment. This relationship is transforming, as people no longer remain consumers of governmental services but become co-producers and collaborators in sustainable development and decision-making.

Ehrlich (2000) defined civic engagement as an activity that enables people to make a change in their community, develop knowledge and promote skills and values to enhance quality of life through political, cultural and socio-economic practices. Michael Carpini, a political scientist at the University of Pennsylvania, was cited in Adler and Goggin (2005), defining civic engagement as "individual and collective actions designed to identify and address issues of public concern. Civic engagement can take many forms, from individual voluntarism to organizational involvement to electoral participation". Brandtzæg *et al.* (2012) also defined youth engagement in social media as sharing information and thoughts, discussing and debating societal issues and collectively offering and suggesting solutions for societal problems and issues.

Although governments in most developed countries have rapidly seized the opportunity to make efficient use of social media to allow direct communication and collaboration with citizens (Mossberger *et al.*, 2013), and accordingly developed regulating policies, guidelines and strategies for efficient use, these tools have generally remained unpopular or arbitrarily used in most of these countries for the same reason. In some cases, these tools have even created a gap between citizens who used them for varied activities and the governments which have only slowly responded to their potential benefits.

While most developed countries have already taken advantage of social media to enhance the practice of open governments increasing transparency and leveraging trust (Chun *et al.*, 2010; Khan, 2015), the practice in most of the Arab States is quite different, where social media is largely used by governments for broadcasting news and updates on relevant topics (Schwalje and Aradi, 2013). Governments in the Arab states have reluctantly shown thoughtful interest in social media to enhance citizen engagement or encourage collaborative and interactive governance, regardless of the fact that social media use has witnessed a steady escalation during the recent decade (Salem and Mourtada, 2012; Schwalje and Aradi, 2013; Mohammed Bin Rashid School of Government, 2014).

The Omani National Center for Statistics and Information (2015) reported that citizen social media use gradually increased, with nearly 50 per cent of respondents using social media frequently. The report also indicated that users with higher educational qualifications use social media more frequently than counterparts with lower education levels. Facebook

and Twitter were reported as the most dominantly used social media tools among Omani citizens. Although the Omani Government [represented by the Information Technology Authority (ITA)] has been actively promoting e-government and e-services by initiating the "Digital Oman Strategy" (whose goals are projected to be completed by 2020) (ITA, 2015), the use of social media by Omani Governmental agencies to interact with citizens has not, in return, been fully exploited. Thus, they remain generally unregulated.

The case of Oman is also not different from what has characterized this use in most Arab States: more one-way communication for broadcasting news and updates regarding ongoing activities than two-way collaborative communication (Schwalje and Aradi, 2013; Mohammed Bin Rashid School of Government, 2014). Although findings of published reports relied heavily on aggregate data and statistics, and Web-based random polling, it can still be suggestive. However, measuring the views and perceptions of citizens is important to broadly understand what creates this reluctance toward efficient use.

From this point, this study attempts to investigate citizen perceptions and insights toward relevant issues, to draw a clear picture of how the Omani Government is using social media. This growth of social media use among citizens offers opportunities for governmental agencies to exploit its potential for a positive, interactive relationship with citizens. Governmental units can receive vital feedback from citizens regarding public issues, as citizens play a central role in determining what works well and what does not. With all research demonstrating the power of social media, there is no justifiable excuse for governments to resist citizen interaction in this platform. Based on the aforementioned information, the growing use of social media among Omani citizens triggers the need for scientific research that investigates perceptions regarding their relationships with the government.

Therefore, this study aims at providing understanding and insight into the perceptions of Omani citizens regarding governmental use of social media, particularly when dealing with issues that affect their daily lives and use of public services, as well as helping the government improve services and leverage quality of life. In light of the study's main purpose, the guiding research questions are as follows:

RQ1. What are the perceptions of Omani citizens regarding the current participatory use of social media by the government (based on the following factors)?:

- presence;
- transparency;
- engagement;
- responsiveness; and
- trust.

RQ2. Is there any statistical significance in the perceptions associated with gender, educational qualification, marital status, age, place of work, length of use, most frequently used tool and period of use?

The body of research on citizen–government interaction by means of social media tools is growing considerably. In addition, research conducted to examine the potential of social media in the government–citizen relationship in the Arab states is relatively scarce (Abdelsalam *et al.*, 2013; Klischewski, 2014). It is anticipated that the findings of this research will contribute to knowledge by enriching the literature, which lacks identification of similar empirical studies conducted in developing countries. The findings will also

practically assist the governmental agencies in Oman and similar contexts by exploiting the potential of social media to foster government–citizen collaboration.

2. Conceptualizing and modeling social media in governments

Lack of understanding the potential of government social media use in developing countries has left these governments unable or hesitant to develop in-house strategies to make the best use of these interactive channels (Khan, 2015). The literature has frequently attempted to address this gap and suggested a number of strategic initiatives to help governments leverage their use of social media.

For instance, Khan (2014, 2015) recently conceptualized social media-based governments. These are centered on a model encompassing three phases: beginning with information socialization, moving toward mass collaboration and ending with social transaction. This conceptual framework was suggested based on a review of 200 government websites in 40 countries. However, this particular conceptual model was built on assumption and, therefore, may lack practical implications. The social transaction stage (practical benefits and services) of the model may not be applicable to most of the developing countries, as it requires high levels of e-government readiness, applicable to what Khan (2015) calls "hybrid governments", which many developing countries are lacking.

Lee and Kwak (2012) proposed the Open Government Maturity Model, after realizing that American open government initiatives did not fit every governmental structure, due to financial, organizational and technical encounters. The model was intended to assist and direct open governments that focus on transparent, interactive and collaborative relationships with the public. The model comes with five maturity levels: initial conditions, data transparency, open participation, open collaboration and ubiquitous engagement. This model is structured to follow a subsequent process in order to increase public engagement. However, the model was developed based on five case studies conducted within US healthcare agencies. Yet, there is no evidence that this particular model can be applicable in a broader range, to include governments in developing countries.

Following the similar structure of Lee and Kwak's (2012) model, Schwalje and Aradi (2013) claimed that the models or strategies initiated and developed in Western democracies are not applicable to current Arabic governing traditions. Therefore, they proposed an Arab Open Government Maturity Model, which they believe is more applicable to the contexts of most Arab States. This model also lacks practical testing.

We may conclude that there is no single cohesive or free-range-size initiative, strategy or model appropriate for efficient application and utilization of social media in governments. It is, therefore, understandable that each government, with its unique political and socio-cultural characteristics, can only develop and test in-house strategies or contextual approaches.

3. Benefits and opportunities for local governments

The impact of social media tools such as Facebook, Twitter, YouTube, Instagram and other platforms has influenced the cultural and political attitudes of citizens and their participatory behavior with local governmental bodies.

The literature indicates many potential benefits that a government can take advantage of through using social media. They can provide current and updated information on continuing and upcoming events or projects. They can also be used to alert and direct people in the event of natural disasters such as floods or disease outbreaks (Bertot, Jaeger, and Grimes, 2010). They can also be useful for marketing their services to the public and making

them more accessible, as well as co-designing or co-producing services through collecting relevant feedback from participating citizens (Hoffman *et al.*, 2013).

Social media can be a legitimate enabler of collaboration between the government and its citizens. Practically, benefits were revealed when Panagiotopoulos *et al.* (2014) decided to conduct a discourse analysis of 1,746 tweets produced by 81 local governmental accounts. Their goal was to investigate the impact of social media on government–citizen collaboration, to reduce the negative consequence of the 2011 UK riots. In this context, Twitter empowered citizens to challenge the government and hold it accountable.

Regarding the current governmental use of participatory social media, some have already turned to e-participation and e-rulemaking to consult citizens about their political and social affairs (Linders, 2012). E-rulemaking is considered an easier and more efficient way of sharing and collecting comments and citizen viewpoints (Carlitz and Gunn, 2002). For instance, various agencies used consulting tools using information and communication technology (ICT) to gather citizen comments and opinions on the national broadband plan (Carlitz and Gunn, 2002).

Another example was in Chile, where citizens were enabled to contribute online in law-making through a mechanism named "virtual Senator" (Padget, 2005). Sweden has also encouraged "e-democracy": Political parties whose votes are a result of online polls conducted by their members (Boyd, 2008). Hoffman *et al.* (2013) investigated how governmental entities used social media for external communication with citizens. They analyzed more than 15,000 posts and 19,000 Facebook comments in 25 large German cities. The purpose was to determine the benefits that social media holds for efficient government–citizen relationships.

In an Arabic context, Abdelsalam *et al.* (2013) examined the presence and use of Egyptian governmental social media sites based on the theory of New Public Service (NPS). The authors used content analysis to examine the use of Facebook by governmental units. The findings showed that social media was used by the government mostly to share information one-way, lacking any two-way/interactive participation with citizens. As a result, the findings did not support the NPS theory.

Generally, the literature indicates that developed countries are at the frontier in terms of exploiting the potential of social media for participatory collaboration with citizens. On the opposite end, the majority of developing countries lack identification of the potential that these tools play comparatively. It is difficult to identify true examples in which regional countries make proficient use of social media for civic engagement.

The benefits of social media deployments by governments are numerous. Sometimes, they cannot be exclusively anticipated, as social media is still developing and transforming public administration. The literature is reviewed to reveal benefits to issues related to the factors investigated in this study.

4. Research factors

For the purpose of this research, which seeks to understand citizen perceptions of issues related to the participatory use of social media by the Omani Government, the literature guided the conceptualization of the following factors to include in this study (which are by and large interconnected):

- *Presence*: the government's official availability in social media;
- *Transparency*: the openness and honesty of the government's participation in social media;
- *Engagement*: the government's availability when citizens require information;

- *Responsiveness*: the government's ability to react in a timely manner on important issues; and
- *Trust*: gained trust by citizens based on social media use by the government.

4.1 Presence

The literature indicates a number of studies that attempted to examine the presence of governments in social media (Gruzd and Roy, 2016; Btouch, 2014; Abdelsalam *et al.*, 2013; Mossberger *et al.*, 2013; Kuzma, 2010). These studies used content analysis by reviewing social media accounts of local or regional governments in certain countries. The purpose was to reveal the extent to which social media is used, reveal the purpose for which it is used (Abdelsalam *et al.*, 2013; Mossberger *et al.*, 2013; Kuzma, 2010) or develop or improve a strategic presence of governments in the social media environment (Gruzd and Roy, 2016).

The overall results of the aforementioned studies showed relatively low and non-standardized use of social media by governments for purposes of interactively communicating with citizens. For instance, of the 50 Asian governments that Kuzma (2010) studied, she found that only 30 per cent of social media use was for the purpose of communicating with citizens. Instead, it was used mostly for disseminating information (one-way communication). The study recommended that Asian governments re-evaluate their strategic use of social media. Abdelsalam *et al.* (2013) also found similarities in Egypt's government with the majority of happenings in remaining developing countries: low use and rather inactive communication with citizens. Comparably, the presence of Jordanian governmental agencies in social media is considered low (Btouch, 2014).

4.2 Transparency

Transparency has often been related to open governments and freedom of information legislation. It has also been linked to satisfactory governance (Bonsón *et al.*, 2012). Therefore, access to government information is now regarded as essential to democracy, preventing corruption and better decision-making (Bertot *et al.*, 2010). Social media now promises better accessibility to government information. Mergel (2013) asserted that social media use by the government increases transparency and improves relations between governments and citizens.

Through reviewing and analyzing the related literature, Bertot *et al.* (2010) investigated the impact of ICT (including social media technologies) on the cultural attitudes of citizens toward transparency and openness. Their findings asserted that social media has a transformative power to leverage transparency and reduce corruption by stemming and identifying such behavior. Social media has also been found as applicable for practicing open government. That is, a government which improves transparency and collaboration (Lee and Kwak, 2012).

Sobaci and Karkin (2013) investigated the impact of Twitter use by Turkish mayors on transparent civic services, by implementing content analysis of tweets. The findings showed that the mayors' primary Twitter use was oriented toward self-promotion and marketing. Thus, their use for transparent participatory use to enhance their services was not, typically, a consideration. Bonsón *et al.* (2012) pointed to a positive use of social media by European local governments to enhance transparency.

According to Friedland (2001) and Pryor *et al.* (2014), communities can quickly handle difficult issues, apply and test different solutions and solve public, social and political problems if they are backed by fully used, effective social networks. Governments work better when citizens participate. Moreover, transparency, access to government information,

people's participation in law-making, fighting corruption and providing accurate information to citizens have been internationally considered as citizen rights and essentials for democracy (Cullier and Piotrowski, 2009; Mulgan, 2007; Reylea, 2009; Bertot *et al.*, 2010).

4.3 Engagement

Social media has enabled engagement due to its ability to be omnipresent. It empowers the capacity of engaging people and organizations (Zavattaroa and Sementellib, 2014). One of the principle factors that encourages people to connect with their governments by using social media is the fact that this medium can act as a channel for citizen-based reporting. People can share knowledge, complaints and situational awareness with their governments clearly and efficiently via online platforms (uploading photos and records), which in return facilitates citizen–governmental collaboration. This leads to fast and efficient decisions toward making improvements. This digital participatory environment enables people to report and track their postings and participation, which holds the concerned authorities accountable when they do not respond. For instance, in the Philippines, citizens informed the government of pollution caused by smoke-belching vehicles and reported cases of tax evasion (Lallana, 2004).

Obar *et al.* (2012) surveyed 169 respondents belonging to advocacy groups, to investigate whether social media promotes engagement and collective action. The results showed a positive impact of social media (Facebook reported as the strongest/receiving the highest scores) in facilitating civic engagement, such as educating people about meaningful issues. The results also indicated the perceived benefits of social media tools on different issues. Among the important benefits were strengthening outreach services, engaging feedback loops, speeding up communication and doing more for less. Bonsón *et al.* (2012) found that the ability of local governments in Europe to engage citizens and promote e-participation is still lagging behind.

In a study conducted by Smith (2010), the findings asserted that social media is changing how people interact with political and civic information, and that their use of social media for such purposes is growing. The study also found a significant relationship between age groups and people's use of political and civic information. For example, younger respondents (aged 18-29 years) use social media twice as much as older respondents (aged 30-49 years). Rosentiel *et al.* (2011) also found that people aged younger than 40 years tend to use social media for accessing local news more than those who are aged above 40 years, who are more in favor of traditional means, such as newspapers.

The literature also showed evidence that unemployed citizens have a higher tendency to use social media for civic engagement than those who are employed (Vicente and Novo, 2014). Moreover, Zavattaro and Sementelli (2014) indicated that although governments have been adopting social media use, their efforts to engage citizens may not be well-anticipated and recognized.

4.4 Responsiveness

Responsiveness is viewed as a functional administrative tool. Social media has transformed the ability of governments to respond more quickly to public inquiries. Responsiveness is also associated with engagement: to respond quickly to the public and engage with them by following up (Panagiotopoulos *et al.*, 2013; Lee and Kwak, 2012).

Zhang *et al.* (2009) conducted telephone interviews with nearly 1,000 American residents to examine whether social media helped engage citizens in civic and political activities. The results suggested that there was a significant contribution by social media tools, but more on civic matters than political participation. The results also showed that there was no

significant impact by these tools on the confidence of participants in government responsiveness and reaction.

Panagiotopoulos *et al.* (2013) investigated the relationship between government responsiveness in social media through the case of the Food Standards Agency. The results showed an even balance between responding quickly and correctly. However, this holds some degree of challenge if the level of interaction increases. The study suggested that responsiveness is about not only being responsive to issues that matter but also being responsive to a specific audience for certain matters.

4.5 Trust

Trust is largely interconnected with transparency, in that the more transparent the government, the more trust it gains from citizens (Bonsón *et al.*, 2012). Song and Lee (2016) reported that social media use is positively associated with perceived transparency, which in return leads to increased trust in government. The study proved that social media can be a vital channel to leverage trust between governments and their citizens.

Gil de Zúñiga *et al.* (2012) surveyed 475 American citizens who were reported as users of social networking sites. The findings reported positive signs on the use of social networking tools for civic and political participation. They also indicated a relation between the use of social networking sites and increased levels of social capital. The overall results claimed that these tools increase trust and generate opportunities for civic and political engagement.

Tang and Lee (2013) investigated the impact of exposure to shared political issues, time spent, heterogeneity of social connectedness and connections with political actors on Facebook in the online and offline political participation of young students surveyed in Hong Kong. The results indicated that there were positive relations between the exposure to political information on Facebook, the structural heterogeneity of social connections of the participants, their direct connections with public political actors and the likelihood of participants engaging in politics.

Moreover, the literature showed opposing views between the use of traditional media (e.g. radio and television) and the use of the internet and digital environments for increasing public trust in government. In that, Putnam (1995) argued that traditional media creates distrust, which reduces civic and political activity. Uslaner (1998) also indicated similar views, where traditional media generates distrust and negative views of government. These lead to a lack of confidence in the political process.

Warren *et al.* (2014) surveyed 502 Malaysian citizens to investigate the impact of social media on building trust among citizens and supporting participatory civic engagement. The findings indicated that governmental use of social media increases people's trust in the government. Furthermore, findings based on a study conducted by Jennings and Zeitner (2003) indicated that using internet for political communication decreases political distrust. People are more likely to participate in political activities when the level of trust is high (Putnam, 1995; Uslaner, 1998).

Moreover, political trust affects citizen compliance with governmental authority. Indeed, social media is the easiest, fastest and most powerful avenue for establishing trust in a way which leads to democracy. A telephone survey of 998 randomly selected respondents was conducted in the USA between February 27 and March 11, 2008. It showed that the relationship between civic and political discussion and confidence in government were interrelated (Zhang *et al.*, 2009).

In addition, the internet and social media have reduced the cost of collecting, distributing and accessing governmental information. These mediums also increase people's efficiency through interactivity (Chadwick, 2006; Roberts, 2006). Social media tools, enabled by

advancements in ICT, are considered to be avenues for reducing corruption because they promote satisfactory governance, enhance relationships between citizens and governments and enable people to speak and exchange information in real time (Shim and Eom, 2008).

5. Methodology

This study took an exploratory quantitative approach that used a print questionnaire distributed to a sample size of 3,000 individuals. The sample included college students, employees and adolescents drawn from different academic and work places, covering all regions in Oman. Only respondents who reported to use social media and accepted voluntary participation responded to the questionnaire. A random cluster sampling was deemed practical when surveying a large and diverse population. Allowing complete representation was not easy to determine in such a large population, but efforts were made to distribute as many questionnaires as possible to all subjects in selected clusters.

5.1 The instrument

The questionnaire's design was based on the literature and particularity of the socio-cultural context of the developing country where this study took place. The questionnaire contained five factors that measure respondent perceptions of government–citizen participation in social media. It also included an open-ended question at the end, to allow respondents a sufficient opportunity to express further comments or concerns regarding the investigated issues. The questionnaire was translated into Arabic for the convenience of the respondents.

Content validity of the questionnaire was ensured through local expert review from several academic departments in Sultan Qaboos University, as well as experts representing several governmental agencies in Oman. The wording of the statements in the questionnaire varied to include positive and negative voices, ensuring validity in responses.

The questionnaire was also pre-tested with a small-scale convenient sample before major distribution took place. The questionnaire's face validity was examined and reviewed. The reliability of each variable of the questionnaire was measured by calculating coefficient alpha. The average internal coefficient alpha for the questionnaire was 0.85. The five-point Likert scale of agreement was used.

5.2 Context of the study

The study took place in Oman, located in the southeast corner of the Arabian Peninsula. Oman has an area of 309,500 square kilometers, including significant areas of mountains and deserts. The climate is diverse, with humid coastal areas, and hot/dry interior areas yearly from April to September. According to the most recent available information (National Center for Statistics and Information, 2016), Oman has a population of 4,428 million, of whom almost 55 per cent are citizens and the rest are expatriates. Oman has a monarchical government, the leader of which is currently His Majesty Sultan Qaboos bin Said, who came to power in 1970. Economic and civic development in Oman has largely relied on oil and gas revenues.

Information technology in Oman has become a central concern in its development. It has been given great emphasis by His Majesty Sultan Qaboos since his accession, but increased dependence on information technology has become established in the long strategic development plan Vision 2020. This plan puts great emphasis on the development of ICT infrastructure and the establishment of the knowledge-based economy, which has been identified as the essential element for enhancing Oman's economic productivity and the concept of eOman (ITA, 2015).

The penetration of internet and mobile services, according to the Telecommunication Regularity Authority statistics (TRA, 2016), is relatively strong. Of the total population, almost 47 per cent of households have fixed internet services, and more than 150 per cent (some people keep more than one mobile line) subscribe to mobile services.

The nearest available data on Facebook usage statistics in Oman for 2015 revealed that there were almost 549,000 users, of whom 72 per cent were male and 28 per cent were female. In terms of age groups, almost half of the users were between 25 and 34 years, followed by those who are aged 18-24 years (Socialbakers, 2016).

Analysis of the governmental presence in social media showed that most of the surveyed governmental units ($n = 52$, 88 per cent) maintain at least one social media platform. Facebook (88 per cent) and Twitter (81 per cent) were the most publically used social media platforms by governmental units in Oman (Al-Salti *et al.*, 2016).

5.3 Sample
This is a national study, targeted at people who use social media tools. A sample of 3,000 questionnaires was distributed across the country. Clustered random sampling was decided as more feasible, conveniently accessible and more proximate for this type of study, which essentially investigates user perceptions and attitudes in a widely distributed population. Of the 3,000 distributed questionnaires, the total number of citizens who responded to the survey was 1,769. Participation was voluntary and all respondents were assured about the anonymity and confidentiality of their participation.

6. Findings
Data were entered and manipulated using statistical package for the social science (SPSS). Both descriptive and inferential analyses were conducted to answer the study's questions. The study also examines whether statistical significance exists in relation to certain demographic variables of the respondents and their perceptions. To indicate the positions of means in the descriptive tables, the following measurement scale was applied: (low: 00.1-2.32; medium: 2.33-3.65; and high: 3.66-5.00).

6.1 Demographic profile
Table I presents the demographic charactersitics of the sampled respondents. Of 3,000 distributed questionnaires, the total number of citizens who responded to the survey was 1,769. This was divided into 752 (42.5 per cent) males and 1017 (57.5 per cent) females. The majority of the respondents (55.5 per cent) had qualifications of BA/BSc degrees (or higher academic achievements), while 524 (29.3 per cent) indicated that they had high school-level qualifications. In terms of marital status, the majority of the respondents indicated that they were single ($n = 1127$, 63 per cent).

As for the age, almost half of the respondents ($n = 865$, 49.4 per cent) were aged between 18 and 23 years, while those who were aged 30 years old or above came next ($n = 482$, 27.5 per cent). Those who were aged between 24 and 29 years represented 23.1 per cent ($n = 405$) of the total respondents. The majority of the respondents indicated that they work in the public sector ($n = 817$, 47.4 per cent), while 42.8 per cent ($n = 738$) indicated that they were students.

6.2 Patterns of use
Table II presents the patterns of social media use. It includes issues related to favorable device, most frequently used social media tool, length of use, favorable period of use and length of use on a daily basis.

Variable	*N*	(%)
Gender		
Female	1,017	57.5
Male	752	42.5
Total	1,769	100
Educational qualifications		
Less than high school	204	12.1
High school	524	30.4
Beyond high school	993	57.5
Total	1,726	100
Age		
18-23	865	49.4
24-29	405	23.1
30+	482	27.5
Total	1,752	100
Marital status		
Single	1,127	64
Married	634	36
Total	1,726	100
Work place		
Public sector	817	47.4
Private sector/unemployed	170	9.8
Student	738	42.8
Total	1,725	100

Table I.
Demographic profile

Note: Italic data significant important for comparison in the referential analysis of the results

The vast majority of the respondents stated that they use their smartphones ($n = 1354$, 81.8 per cent) to access social media tools. But the result also unexpectedly indicated that tablets (such as the iPad) were the least favored ($n = 52$, 3.1 per cent). In terms of social media tools, Instagram was indicated to be the choice of the majority ($n = 519$, 30.6 per cent) followed by Twitter ($n = 431$, 25.4 per cent), while YouTube was indicated to be the least frequently used social media tool among the respondents ($n = 180$, 10.6 per cent). Facebook is also considered the most preferred social media tool by governmental units in Oman (Al-Salti *et al.*, 2016).

The majority of the respondents indicated that they had been using social media for 3-5 years ($n = 524$, 32.0 per cent). In terms of the period of use on a daily basis, more than half of the respondents ($n = 859$, 50.6 per cent) indicated that they used social media tools on a constant daily basis, while those who chose evening periods came next ($n = 610$, 36.0 per cent). More than one-third ($n = 552$, 33 per cent) used social media for 1-2 h daily, while there was still a considerable number of respondents ($n = 442$, 26.6 per cent) using social media tools for 3-5 h daily.

6.3 Presence
The respondents were asked to indicate their agreement level to five statements that measured their perceptions about the presence of their government in social media.

While the overall results indicate a positive level of agreement among the respondents for most of the statements in Table III, there is an exception to the final statement. The respondents agreed less on their satisfaction with the presence of government in social

Variable	N			(%)
Most favorable used device				
Desktop	110			6.6
Laptop	131			7.9
Tablet (ex. iPad)	52			3.1
Smartphone	1,354			81.8
Other	9			0.5
Total	1,790			100
Most frequently used social media tool				
Twitter	431			25.4
Facebook	237			14.0
Instagram	519			30.6
YouTube	180			10.6
Other	331			19.5
Total	1,698			100
Length of use				
Less than one year	257			15.7
1-2 years	486			29.7
3-5 years	524			32.0
More than 5 years	369			22.6
Total	1,639			100
Period of use				
Morning	227			13.4
Evening	610			36.0
Constantly	859			50.6
Total	1,696			100
Use in a daily basis				
Less than one hour	340			20.5
1-2 h	552			33.3
3-5 h	442			26.6
More than 5 h	326			19.6
Total	1,660			100

Note: Italic data significant important for comparison in the referential analysis of the results

Table II.
Patterns of use

Variable	N	M	SD	Level
I feel reassured by the presence of the government in social media	1,735	3.37	1.02	Medium
I believe that the government's way of participating and posting topics on social media is meaningful	1,751	3.34	1.05	Medium
I trust the government's presence in social media	1,756	3.21	1.05	Medium
I believe that the government's presence in social media is strong	1,746	3.10	1.12	Medium
I believe that the government's presence in social media is satisfactory	1,763	2.50	1.20	Medium

Table III.
Presence

media (mean = 2.50). Several comments in the open-ended question also showed that government presence is relatively weak or happens coincidentally. This finding was similar to data in literature mentioned by Abdelsalam *et al.* (2013) and Sobaci and Karkin (2013). Also, comparably, the literature indicated low presence levels of governments in social media, especially in developing countries (Gruzd and Roy, 2016; Btouch, 2014; Abdelsalam *et al.*, 2013; Mossberger *et al.*, 2013; Kuzma, 2010).

When applied, analysis of variance (ANOVA) analysis showed no statistical significance at the 0.05 level, except for the place of work (sig = 0.001), whereas a least significant difference (LSD) test revealed that respondents who work in the government sector have more positive perceptions about the presence of government in social media than those who work in the private sector. This result suggests that employees in the public sector are more involved and engaged with the government in social media than their counterparts in the private sector.

6.4 Transparency
The respondents were asked to indicate their level of agreement to four statements that were intended to measure their perceptions about the transparency of government participation in social media.

The overall results indicated a modest level of agreement among the respondents for most of the statements in Table IV. However, the respondents tended to agree less on the obtainability of transparency between citizens and the government on social media (mean = 2.88). Even so, they also believe that there is a positive level of transparency in social media (mean = 3.07).

The literature, however, asserted in several places the potential for social media in increasing transparency (Mergel, 2013; Lee and Kwak, 2012; Bertot *et al.*, 2010). Relevant empirical studies showed positive use of social media to boost transparency (Pryor *et al.*, 2014; Bonson *et al.*, 2012). Conversely, the literature also indicated incidences where social media may be used more for self-promotion and self-marketing than enhancing transparency (Sobaic and Karkin, 2013).

ANOVA analysis showed statistical significance at the 0.05 level in the transparency of the government participation on social media associated with the level of education (sig = 0.009), marital status (sig = 0.028), age group (sig = 0.000), place of work (sig = 0.000) and the most frequently used social media tool (sig = 0.012).

A further LSD test indicated that respondents who have higher qualifications agreed less on the transparency of government participation on social media. Married people agreed more on the transparency of the government on social media than single respondents. The findings showed that younger respondents agreed more on the transparency of the government than older groups. Student respondents tended to agree more on the transparency of the government on social media than other groups.

Variable	N	M	SD	Level
I follow government news on social media because of its clarity	1,764	3.08	1.03	Medium
I make sure to follow the government on social media because I believe it provides accurate information	1,767	3.07	1.06	Medium
I believe that government agencies provide a satisfactory level of transparency on social media	1,767	3.07	1.07	Medium
I believe that transparency between citizens and the government is obtainable in social media	1,767	2.88	1.17	Medium

Table IV.
Transparency

Moreover, it was found that YouTube and Instagram presented more transparency than Twitter and Facebook. Such findings may be linked to the social particularity of Twitter and Facebook, which enable higher levels of penetration for civic engagement and participation, which respondents may consider less transparent. In addition, lack of transparency was also frequently mentioned in the open-ended survey question.

6.5 Engagement

The respondents were asked to indicate their level of agreement to five statements intended to measure their perceptions about the government's level of engagement in social media.

The overall results indicated a modest level of agreement among the respondents for the statements shown in Table V. The respondents generally agreed with the level of participation of the government on social media. However, they were slightly doubtful about the seriousness of the government to interact with citizens on social media (mean = 3.01). In this regard, the literature indicated on several occasions the potential of social media to promote engagement between governments and citizens (Obar *et al.*, 2012; Bonson *et al.*, 2012; Smith, 2010).

ANOVA analysis showed statistical significance at the 0.05 level of engagement of the government on social media associated with marital status (sig = 0.002), age group (sig = 0.037), period of use (sig = 0.007) and length of use in a daily basis (sig = 0.001).

To identify which group of respondents showed significance, an LSD test was applied. In terms of marital status, the results indicated that unmarried respondents agreed more on the government's level of engagement. This finding may be a result of the particularity of the context, which allows extensive time for unmarried respondents to participate in civic engagement, due to less familial involvements.

In terms of age group, the findings showed that younger respondents agreed more on the level of government engagement than older groups. The literature, in line with this result, shows that younger people (aged 18-29 years) tend to participate in civic engagement more than older groups of people (Rosentiel *et al.*, 2011; Smith, 2010). Also, respondents who use social media during the morning agreed more on the level of engagement. Moreover, the respondents who use social media less than an hour per day agreed more on the level of engagement of the government.

The literature indicated a positive impact where social media is seen as an enabler for civic engagement and collective action, such as supporting feedback loops and doing more for less (Obar *et al.*, 2012). Conversely, the literature also showed that social media has not been well-exploited by governments to engage citizens (Zavattaro and Sementelli, 2014). The

Variable	N	M	SD	Level
I believe that the government is not serious about interacting with citizens on social media	1,767	3.01	1.17	Medium
The government does not take substantial steps on social media to stop rumors about its performance	1,754	2.83	1.13	Medium
The government's reaction to posts of citizen concern is not clearly evident	1,763	2.75	1.06	Medium
The government is not following up on citizen complaints and concerns on social media	1,767	2.73	1.05	Medium
There is no clear mechanism for the government to deal with or respond to what is published on social media	1,766	2.69	1.13	Medium

Table V.
Engagement

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open-ended part of the questionnaire also showed that the respondents believe the government is not serious about using social media to interact with citizens.

6.6 Responsiveness
The respondents were asked to indicate their level of agreement with five statements intended to measure their perceptions about the responsiveness of the government on social media.

The overall results indicated a modest level of agreement (mean = below 3.0) among the respondents for all statements in Table VI. However, according to the results of this part of the study, the current level of response by the government on social media is generally in between satisfaction and non-satisfaction.

ANOVA analysis showed statistical significance at the 0.05 level on the current participation of the government on social media associated with level of education (sig = 0.007) and marital status (sig = 0.026) only. When an LSD test was applied, the results showed that respondents with a lower level of education agreed more on the inadequate responsiveness of the government on social media. Moreover, in terms of marital status, the results indicated that unmarried respondents agreed more on the lack of response by the government on social media.

However, in the open-ended question, lack of responsiveness was the second most frequently raised issue by respondents. The literature points to similar findings, where social media did not significantly increase public confidence in the responsiveness of governments (Zhang *et al.*, 2009). The literature also showed that responsiveness can be a challenge for governments when levels of participation increase (Panagiotopoulos, Barnett, and Brooks, 2013).

6.7 Trust
The respondents were asked to indicate their level of agreement with five statements intended to measure their trust in the participation of the government in social media.

The overall results indicated a modest level of agreement (mean = below 3.0) among the respondents for all statements in Table VII. However, the findings suggest that the current level of public trust of the government on social media will increase if the government takes serious steps toward enhancing and regulating the use of social media for civic engagement.

The literature provided evidence where social media is positively associated with increased trust between governments and citizens (Song and Lee, 2016). Another study also claimed that social media increases trust and generates opportunities for civic engagement (Warren, Sulaiman, and Jaafar, 2014; Tang and Lee, 2013; Gil de Zúñiga *et al.*, 2012).

Variable	*N*	M	SD	Level
The government withdraws when there is an increase in the number of inquiries addressed on social media	1,741	2.95	1.07	Medium
The government only clarifies its position on social media without following-up subsequent posts	1,744	2.90	1.17	Medium
The government does not respond to inquiries addressed on social media	1,742	2.88	1.05	Medium
There is no specialized employee or representative authorized to respond to what is posted by the public on social media	1,742	2.76	1.14	Medium
The government does not take real actions in practice that reflect what has been addressed by the public on social media	1,737	2.71	1.12	Medium

Table VI.
Responsiveness

Variable	N	M	SD	Level
I do not consider social media to be reliable when communicating with the government	1,736	2.98	1.19	Medium
The government does not seek to gain public trust through social media	1,738	2.80	1.09	Medium
The government has a long way to go to earn the trust of citizens on social media	1,744	2.50	1.07	Medium
Inconsistent government presence on social media reduces the trust of citizens	1,744	2.49	1.15	Medium
It is possible to earn the trust of individuals if government presence on social media is thoughtful	1,740	2.39	1.13	Medium

ANOVA analysis showed statistical significance at the 0.05 level on the perceptions of the respondents about the earned trust by citizens for its responsible participation on social media. The statistical significance was only associated with the level of education (sig = 0.002), marital status (sig = 0.000) and age group (sig = 0.000).

In terms of the level of education, an LSD test showed that respondents with a lower level of education had lower trust in the participation of the government on social media. Moreover, in terms of respondent marital status, the results indicated that those who were unmarried have a lower level of trust in the participation of the government on social media. Also, younger respondents have lower levels of trust on the participation of the government on social media.

7. Implications for policy and practice

Social media is currently leading a major change in the flow and use of information. It represents a powerful channel for the direct exchange of information, ideas and suggestions, for the purposes of collaboration and civic participation. From a policy management perspective, participatory and interactive social media may be a strong enabler to enhance policy-making and well-informed decision-making.

This study's findings stress the need for the implementation of well-thought out social media policy use across governmental units in Oman for supporting informed decision-making. The quantitative finding offers insights for Omani practitioners and policy makers (and workers in similar contexts worldwide) toward building educated guidelines that can leverage trust between citizens and the public performance of government. It may also encourage wider interactive participation from citizens. Understanding why respondents in this study showed more neutral perceptions about government interaction in social media may help policy makers identify ways to properly turn this into a positive approach with a more significant audience. The overall findings of this study can motivate policy makers to implement strategic guidelines for efficient use of participatory social media.

8. Conclusion and future research

This paper aimed at investigating the perceptions and opinions of Omani citizens in the participatory use of social media by the government, based on five identified factors: presence, transparency, engagement, responsiveness and trust. These factors were considered important to help the government better understand its current relationship with citizens in the social media environment.

The findings of this quantitative study indicated neutral levels of agreement to all investigated elements. This neutral finding suggests a level of ambiguity among the

respondents to clearly identify the status of the current government-citizen participatory use of social media. However, such findings also fall in line with most of the studies indicated in the Arabic literature, which investigated the current use of social media by government as more passive than interactive or collaborative. It can be stated that while the use of social media among citizens is naturally growing, Arab Governments are failing to take full advantage of social media and engage citizens to design and deliver more efficient and collaborative services.

Governmental agencies in Oman (and similar developing contexts) cannot resist the potential that social media holds to reshape citizen relationships. They can benefit from the findings of this study by revisiting their current practices and re-building their relationships with citizens by regulating and enhancing the use of social media for collaborative civic engagement. Social media has brought about opportunities for collaborative decision-making and civic engagement that was not possible a decade ago. It is now time to reinforce a change in the current relationship with citizens and benefit from the potential of social media. This will lessen human mistakes in planning and decision-making, as well as increase transparency, accountability and public trust.

This is the first study in Oman to investigate citizen's perceptions and opinions on the use of social media by the government. Although this study does not attempt to model the citizen–government participatory use of social media, its goal is to develop a clearer picture that can help strategically plan for a more efficient use of social media nationwide by governments. Future research that investigates motivating and impeding predictors is also needed. This may also include qualitative studies using case studies, content and discourse analysis and interviews with specific governmental agencies or groups of users to deeply scrutinize government–citizen participatory use of social media for civic engagement. Such endeavors will create better understanding of the attitudes and opinions of different key-role players and, ultimately, place the layout of a strategic framework for efficient use of social media by the Omani Government.

A netnographic study to analyze the current presence of the Omani Government in social media, along with extensive analysis of the current international models and frameworks, and interviewing key employees from governmental units which use social media will complement the findings of this study and help researchers broadly understand government–citizen relationships, to develop a strategic framework to leverage the use of social media in the Omani Government.

Government–citizen relationships on social media can also be investigated through a theoretical basis of social networks analysis, social ties, planned behavior or collective action. This field of study is growing, as ICT is rapidly changing. Therefore, there will always be venues available for new research in this area, which promise a better understanding of government–citizen collaborative relationships.

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