

Realisation of Social Media Enabled Public Value at a Saudi Municipality: A Perspective of Citizen Representatives

Completed Research Paper

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Abstract

Government agencies including municipalities around the globe have begun using various social media applications to provide useful and even innovative services and create engagement with citizens. The success of government agencies to creating engagement and delivery of services is often interpreted using the lens of public value. Despite a growth in the scholarly literature on social media and public value, scant attention has so far been paid to explain how citizens themselves or their representatives (known as citizen representatives) perceive public value created by social media through delivery services and fostering citizen-government engagement. To address this concern, in this paper we report on the development of a conceptual model to explain public value creation using social media applications. We further present an empirical evaluation of the model using the viewpoints of citizen representatives at a large municipality council in Saudi Arabia. The implications of the findings are then outlined.

Keywords: Social Media, Public Value, Municipality, Case Study, Saudi Arabia

Introduction

Over the past decade, social media has emerged as an important communication tool for individuals around the globe. Recognizing the enormous potential of social media, government agencies too have begun using a range of social media applications (e.g. Facebook, Instagram, Tweeter, Youtube) for engaging with their constituents, creating an awareness on public safety (Mergel 2013), and delivering public services (Merickova et al. 2016). For the local government context, social media is vital to fostering commitment with important stakeholders, and promotes innovation in the public service sector. Enhancing public engagement and public services innovation is crucial in achieving public values such as fairness, trust, transparency and integrity. Municipality councils generally deal with a diverse set of stakeholders (e.g. citizens, community, sports teams, people of special needs, small businesses). As such, how these stakeholders perceive public value through delivery of services and

two-way engagement through social media with the municipalities merit attention as their needs considerably vary (Moon and Welch 2005).

Even though there currently exists a growing literature on government agencies' social media benefits, no studies have systematically focused on the concept of 'public value' involving the application of social media for the context of local government. We argue that understanding public value through social media requires a richer understanding of several factors like social media capability of councils and trust of citizens in using social media with government agencies. So far scant research attention has been paid to understand they are linked resulting in public value creation for the local government context. On the same note, there is still a gap in social media literature in relation to public service innovation, public engagement and public value co-created from the perspectives of both government and citizens. Many scholars have therefore called for the Information Systems (IS) community to consider taking an initiative of investigating these aspects (Johannessen et al. 2016; Omar et al. 2013). We therefore, seeks to address the research question: *How does the use of social media applications by local government agencies create public value?*

In this paper, we acknowledge our current study that seeks to address the research question by developing a research model and then validating that model with empirical evidence collected from Saudi Arabia. As a part of our ongoing study, a conceptual model explaining how public value can be created using social media applications for a local government context has been reported (citation withheld). In this paper, we however report an empirical evaluation of that model drawing on the perspective of citizen representative (which is a key stakeholder for Saudi Arabian local government context) based on a pilot case study conducted at a large municipality in Saudi Arabia. From this case, a rich description is provided on how citizen representatives have perceived the value of social media in enabling them to receive innovative public services delivered by that council. The paper is organised as follows: First, the related background literature is reviewed. Next, the model, its theoretical foundation, propositions development, and evaluation are presented, and some conclusions are drawn.

Background Literature

The notion of 'public value' (PV) is regarded as the most popular topical area discussed in the last twenty years in the broader public administration domain Jørgensen and Bozeman (2007). This has resulted in multiple definitions of public value. According Alford and O'Flynn (2009), PV can be meaningfully interpreted as a "management paradigm; a government rhetoric, a narrative, or even a performance management tool". However, Rose et al. (2015) consider PV as "maximizing the utility of government to civil society by providing services directed towards the public good". Christensen et al. (2011) defines PV as "context specific preferences of individuals on the rights, obligations, and benefits to which citizens are entitled as well as the obligations of citizens and their designated representatives". For the purpose of this study, the definition of Christensen et al. (2011) has been adopted. This because, it contains designated representatives where they can be part of public value creation in our model developed in Section 3. The operational process of public services delivery should thus be guided by the values realised by citizens.

When it comes to considering how PV might best be realised, Moore's (1995) triangle represents the most well-known framework for understanding PV creation (Williams and Shearer 2011). Moore (1995) coined the term 'public value', and identified the basic idea behind public value as being the 'Strategic Triangle'. Such a triangle involves three vital factors: a) creating something substantively valuable, legitimate and politically sustainable, b) operationally and administratively feasible, and c) consideration of available internal and external capabilities. More specifically, the triangle is designed to ensure that decision-makers taking into consideration the following three key questions relating to the public service delivery: is it legitimate and politically acceptable? Is it operationally feasible? And, is its purpose publically valuable? In that way, the triangle is a guide for a collaboration among all stakeholders to be on the same page (Williams and Shearer 2011).

Social Media and E-government: Public Value-based Frameworks

The use Information and Communication Technology (ICT) across the public sector is regarded as an important step in generating public value, thus linking it to the development of the e-government in a citizen-government focused cooperation (Kearns 2004). As a result, the adopted technologies, policies and outcomes of e-government initiatives can be assessed with regard to the resulting increment of public organisation's ability to deliver public value (Kearns 2004). Consequently, public value mainly takes into account the roles citizens may have (e.g. users and administrators), and the significance of such systems as realised by the citizens when they interface with public organisations or when they access public services (Castelnovo and Simonetta 2007; Karunasena et al. 2011).

There are a number of studies that empirically tested the propositions of public value for e-government context (Grimsley and Meehan 2007; Karunasena and Deng 2012; Karunasena et al. 2011; Kearns 2004) and social media (e.g. Aladalah et al. 2017; Fuchs 2015; Hui and Hayllar 2010; Omar et al. 2013). Meehan and Grimsley, for example, created an evaluation system for electronic services established on public value structure and heuristically authenticated hypothesis based on two case studies in UK. A comparable analytical framework for social media was also developed by (Omar et al. 2013). Their work was to assess the effect of electronic services and was founded on the public value structure (trust, outcome, and services). However, such studies with approaches mainly based on defined indicators meant to assess economic performances and the effect of public administration's adoption of e-government often fail to include the political and social effects of the creation of public value. Public value may be better conceptualized with the help of social media springing from Moore's (1995) strategic triangle which is an empirical device for use by public officials. Past research failed to heuristically test whether such values could be realised at an aggregate level and whether the tools of public value could actually impact public manager's thoughts and actions.

To this end a research conceptual model designed to address the main research question, explains social media enabled public value. The research conceptual model and the individual constructs are discussed.

Research Model Development

This model consists of five main constructs generated from the relevant IS and public administration literature sources and structured to establish the linkages between the constructs: social media capability, trust in technology, public value theory (Moore, 1995), public engagement, and public service innovation. The conceptual model is presented in Figure 1.

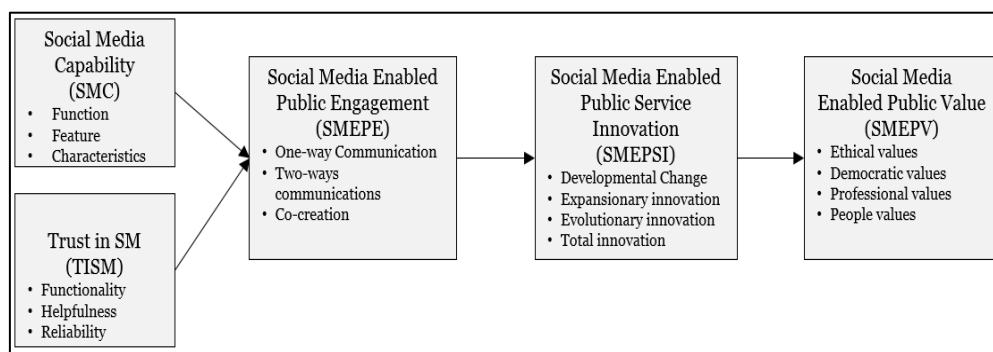


Figure 1: Research Conceptual Model

Social Media Capability

Many definitions reported for social media capability in the IS literature (Braojos-Gomez et al. 2015; Kane 2015). Furthermore, social media capability is also equated as social media affordance (Dini et al. 2016). These different views of social media in the existing literature can cause confusion due to their similar meanings. To avoid such confusion, we have combined both concepts into a single construct, which is referred to as social media capability. Therefore, we adapted the definition of social media capability from Braojos-Gomez et al. (2015) to "the ability of local government agencies' to

utilise social media functions, features and characteristics for fostering public engagement to execute government activities”. A set of three main dimensions form the social media capability construct: functions, features and characteristics. Social media functions such as information editability, and private messaging event creation allow the user to perform certain activities that are typically expected and required to complete required tasks. Features represent the aspects of the social media applications systems that, while not necessary, provide enhancements to better complete required tasks such as manage contacts capability, social media analytics capability, Access content capability, Customisable modules capability, and anonymity (Rauniar et al. 2014). A social media characteristic can be described as the special, distinctive aspects of the social media applications in terms of interactions between two parties such as information sharing, visibility, interactivity, and idea storming capability.

Trust in Social Media

Mcknight et al. (2011) has further highlighted the importance of trust in the IS literature. Trust has been looked at from two viewpoints: a) trust in government behaviour through business processes performed on social media applications (Park, Choi, Kim, & Rho, 2015), and b) trust in people, either government officials or citizens in their use of social media applications (Hong 2013). However, trust in social media from technical perspectives has remained largely ignored (Mcknight et al. 2011). We however adopted the viewpoint of Mcknight et al. (2011), who define trust in technology as the actual relationship between users and the technology in terms of functionality, helpfulness and reliability. Functionality refers to the question of whether or not the technology functions as promised by completing tasks that are required. Helpfulness represents the users’ beliefs that the technology provides sufficient support and represents a thorough help and support function (Mcknight et al. 2011). Reliability means that the technology or IT artefact operates continually (i.e. with little or no downtime) or responds predictably to inputs (Mcknight et al. 2011).

Public Engagement

The emergence of Information Communication Technology (ICT) tools in government agencies, has shifted the way of communication from traditional communication to digital communication. As a result, the concept of public engagement is still taking place but through new means of digital communications such as e-government and social media, which are built on web 2.0 technology. Different levels of public engagement have been reported in the public administration literature. For example, in Arnstein (1969), a well-known ladder of citizen participation, there are three levels of public engagement which are further broken down into eight levels. In contrast, Men and Tsai (2012) have only two levels of communication. In this paper, we adopt classifying public engagement into three levels: Information Dissemination, Consultation and Co-creation. The Information Dissemination level refers to the posted information on social media applications by citizens and government officials for their own benefit. Consultation is a limited two-way communication channel that allows stakeholders and citizens to contribute their opinions on some issues; the objective of this level is to collect citizens feedback. Consultation could be initiated by either the government or the citizens, but the change is led by the government. Citizens also expect a high response rate at this level. However, the main purpose of this level is not to directly involve citizens in the decision-making process but rather to collect their feedback for future service enhancements. Finally, the Co-creation level involves citizens on social media applications in the decision-making processes such as planning and designing policy, services and strategies, and allocating budgets, etc. This phase could be led by citizens through citizen-to-government sourcing or citizen-to-citizen collaborations where the government plays a guiding role.

Public Service Innovation

Recently, there has been a great deal of professional and scholarly interest in ‘innovation’ in the public sector (Moore 1995; Mulgan and Albury 2003; OECD 2005). However, there exists no consensus about the definition of innovation for the public-sector context. In this paper, we have adapted multiple definitions to include different components of public service innovation such as type of change, transformation or innovation. These definitions (Criado et al. 2013; Mulgan and Albury 2003; OECD 2005) are combined as follows: “The implementation of a new or significantly improved product (good

or service), or process which results in significant improvements in and/or a complete transformation of outcomes in the form of efficiency, effectiveness and/or quality". This definition is incorporated in the four categories of public service innovation developed by Brown and Osborne (2012). The four categories are 1) developmental change (the significant improvement of existing services delivered to existing users), 2) expansionary innovation (utilising an existing service and delivering it to a new group of users); 3) evolutionary innovation (creating new services for current users); 4) total innovation (supplying new services to new users).

Public Value

Based on the strategic triangle, public organisations can create value that could be genuinely considered useful for the citizens in many ways, such as improving the quality of public services through three main sources of public value: outcome, trust and services (Kelly et al. 2002). Public values range from professional and managerial values to encompassing issues such as social and democratic values. Many studies have classified public values based on different dimensions (Andersen et al. 2012; Hood 1991; Jørgensen and Bozeman 2007; Kernaghan 2003). From a thorough review, the taxonomy provided by Kernaghan (2003) is chosen for this research project as the basis for evaluating public value. Kernaghan (2003) has classified public value into four dimensions including ethical values, professional values, democratic values and social values. They have been used to facilitate the interaction between government officials and citizens. The taxonomy of Kernaghan (2003) has been chosen for this study because a) most classifications being proposed lack even the most basic requirements to assess their validity and usefulness, except for Kernaghan (2003) work, which has not yet been criticized (Rutgers, 2008); b) it has been classified based on public services; c) there are many duplications in the value sets of other taxonomies; d) it introduces professional values as a separate dimension, which relates more to internal activities such as effectiveness and efficiency. These values are also considered as economical values according to the New Public Management (NPM) (Moore, 1995); and e) each dimension in Kernaghan (2003) taxonomy is applicable to social media use in the government context.

In summary, these constructs depicted in a formalised structure afford the opportunity to establish how social media assists local governments to create public value. However to further enhance this supposition propositions between the constructs facilitate this enabling as shown in Figure 2. Each set of propositions are presented below:

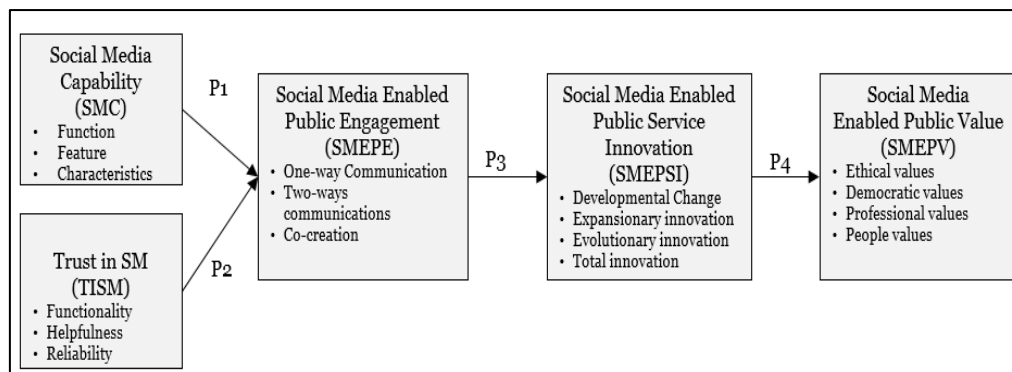


Figure 2: Research Model (Social Media Enabled Public Value)

Social media capability: Social media capability refers to the ability of an organisation to use the key functionalities (e.g. information sharing, visibility and editability) of social media applications to perform business activities. Social media capability is used to engage with citizens with the aim of developing service innovations to create public value. Having the skills and the abilities to perform certain tasks such as creating hashtags, information sharing through different applications etc. can assist organisations to run mass collaboration between government official and citizens. The local government agencies skills in sharing, co-creating, discussing and modifying user-generated content facilitates information sharing, interaction and connection with citizens (Linders 2012). As a result, citizen participation and interrelatedness can be improved. For example, citizens might engage in the council's social media applications and want to stay informed about its activities and future launch of services

(Oré and Sieber 2011), or there could be collective intentions to deliver better and higher quality services. Moreover, providing a useful and easy way to access information through social media influences the public to interact with others and return to the organisations' social media applications and websites (Kane 2015; Malsbender et al. 2014). Social media capability is used to engage with citizens with the aim of developing service innovations. These capabilities can be successfully utilised to support public engagement at various levels. This directly leads us to the following proposition:

P1: Social media capability is positively related to social media enabled public engagement.

Trust in social media: Citizen's trust in government social media is important to increase public engagement with citizens. The public's degree of trust of the government is a measure of the extent to which the government achieves its goals. The relationship between trust in social media applications and public engagement has also been reported in recent studies (Park et al. 2015; Warren et al. 2014). Aladallah et al. (2016) argued that using social media applications encourages a feeling of belonging, boosts government legitimacy and increases trust in government and therefore more engagement is to occur. Likewise, Park et al. (2015) have reported a number of factors related to social media use affecting the level of confidence between government and citizens. Warren et al. (2014) noted that trust in using social media applications influences the public's propensity to engage with government officials. Similarly, concluded that the direct involvement of a government's leading officer is increased because the public's trust using social media applications. Therefore, the following proposition is derived:

P2: Trust in social media applications is positively related to social media enabled public engagement.

Social Media Enabled Public Engagement: Public engagement between citizens and government officials in the development and subsequent implementation of innovations in public services is important in terms of the success of the public service innovation process (Merickova et al. 2016). This is because they are the recipients of the public service. The delivery of public services is challenged by many factors such as social needs, ageing societies, digitally informed populations, economic pressure and an unsatisfactory level of satisfaction within and across countries (Bertot et al. 2016). To successfully overcome such challenges, innovation could create and sustain relationships between government agencies and citizens to participate in the provision, implementation and consumption of public services delivery, bringing them even closer to the consumers. This requires digital intermediate channels such as social media to produce innovation in public services. In general, ICT in the production of innovation in services for the public sector has received less attention in the broader IS literature. However, several authors have addressed the potential of social media for the innovation of public sector organisations' (Criado et al. 2013). Most of these studies have focused on the technological aspects of social media, while other aspects have not received equal attention. It is argued that the engagement between citizens and government officials in the process of public services delivery could bring innovative ideas (Linders, 2012). Mergel (2013) suggested that the innovation in public services is not limited to the use of social media applications, but compared with other ICT applications, public engagement is publicly observable. Therefore, the following proposition is derived:

P3: Social media enabled public engagement is positively related to social media enabled public service innovation.

Social Media Enabled Public Service Innovation: Emerging alternative approaches to public service delivery and changing social expectations make social media use at the local level a prerequisite. Today, public service innovation constitutes a vital part of a countries' administrative reforms as governments question the traditional concept of public service delivery in the context of New Public Management (NPM) (Moore, 1995). NPM value is business oriented that in interest of the organisation not the citizens (e.g. efficiency and effectiveness of the business processes). Therefore, alternative approaches have been introduced by facilitating innovation in public services and allowing citizens to be part of the process of designing, planning and implementing innovation (Brown and Osborne 2012). Alongside this, the public value introduced by Moore (1995) could go hand in hand with innovation in public services. Today, citizens expect public institutions to not only provide public services in an efficient way but also in a participatory and accountable way. In fact, it is believed that the involvement of citizens through social media applications in every stage of public service design and delivery, as an

innovative approach, can help improve public services through a better understanding of citizens' changing priorities and through the accumulation of citizens' information and ideas (Linders 2012). In return, public value can be maximised. Therefore, the following proposition is derived:

P4: Social media enabled public service innovation is positively related to social media enabled public value.

Research Design

Drawing on the purpose of research (Neuman and Dickinson 2003), this research project is considered to be an exploratory and theory building in nature. This is because little research exists investigates relationships among important concepts like trust in social media, social media capabilities, public engagement, public services innovation and public value creation through social media for local government context in Saudi Arabia.

Yin (2017) asserts that questions about 'how' and 'why' are better answered through qualitative methods. In our study, we used a single case approach in capturing concepts (social media capability, trust in social media, public engagement and public service innovations that are interlinked to produce 'public value'. The unit of analysis in this study would be a single local government agency that implemented at least one social media application for its services activities.

Data was collected from a large municipality council in Saudi Arabia. To gain a deeper understanding, semi-structured interviews were undertaken with four citizen representatives. Municipal councils in Saudi Arabia are different entities from the municipality. The municipal councils were first introduced in 2005. Two thirds of the municipal council members are elected by citizens every 4 years. These elected members represent citizens in council matters. Four elected citizens' representatives were interviewed. The duration of the interviews varied from one interview to another depending on the positions of the participants. However, the average time was around 30 minutes.

Data coding analysis through deductive reasoning is important in qualitative research. A coding scheme was developed based on the interview questions derived from the literature. Data coding was analysed at two cycles following the approach of (Saldaña 2015). In the first cycle coding, we primarily used provisional coding. It began by compiling a predetermined "start list of set codes prior to field work" (Miles and Huberman 1994). These codes can be anticipated categories generated from literature reviews. Codes were created to label a chunk of a 'descriptive paragraph to group empirical data into themes and subthemes reflecting social media capability, trust in social media, public engagement, public service innovation and public value. After that, the second cycle coding methods were performed, during which pattern-matching coding was applied. Codes and propositions were evaluated using pattern matching (Yin 2017), which enabled us to identify an emergent theme, configuration, or explanation about relationships among constructs in our model. This is well-suited for the implementation of deductive reasoning to determine how public value can be created using social media applications.

Empirical Findings

The municipality uses multiple social media applications, including Facebook, Twitter, WhatsApp, and Instagram, to communicate with citizens for council matters. The viewpoints of citizen representatives are now reported at two levels: the individual construct level and at the level of relationships between constructs.

Individual construct level

The viewpoints of citizen representatives regarding the important characteristics (labelled as dimensions) of each key construct included in our model are summarised and shown in Table 1. Clear evidence supports the existence of each dimension for each construct from multiple participants. The evidence for each construct is now briefly described.

Table 1. Summary of the participants' responses on key constructs included in the model

Constructs	Dimensions	Participants			
		P1	P2	P3	P4
Social media capability	<i>Functions</i>	X	P	P	P
	<i>Features</i>	P	P	X	P
	<i>Characteristics</i>	P	P	P	X
Trust in social media	<i>Functionality</i>	P	X	X	X
	<i>Helpfulness</i>	P	P	X	P
	<i>Reliability</i>	P	P	P	P
Social media enabled public engagement	<i>One-way communication</i>	P	P	X	X
	<i>Two-way communication</i>	X	X	P	P
	<i>Co-creation</i>	X	X	X	X
Social media enabled public service innovation	<i>Developmental change</i>	X	P	P	P
	<i>Expansionary innovation</i>	P	X	X	X
	<i>Evolutionary innovation</i>	X	X	X	P
	<i>Total innovation</i>	X	X	X	X
Social media enabled public value	<i>Ethical value</i>	P	P	P	X
	<i>Democratic value</i>	P	X	P	P
	<i>Professional value</i>	P	X	X	X
	<i>People value</i>	P	P	P	P

Legend: P: Positive, X: No comment

Social media capability: All three dimensions describing social media capability received positive support from multiple participants. With regard to the functions dimension, three participants positively perceived its presence through social media. For example, participant P4 mentioned the event-creation function on Facebook. According to him, “[As a citizen’s representative] I created some events for having meetings with citizens... many citizens turned up, so we discussed current issues, and it was useful discussion session with the citizens” (Code: SMC-FU-P-CR-004-P4). Likewise, a majority of the participants also positively mentioned the existence of the features dimension in enabling social media capabilities. For example, participant P4 commented that the look of the social media account is important because it shows that the account is official and belongs to a government agency. According to him, “It helps to find the account so quickly on Twitter and Facebook and makes the account look good and [like it] belongs to an official government agency” (Code: SMC-FE-P-CR-015-P4). Finally, with regard to the characteristics dimension, three participants expressed positive viewpoints on issues such as visibility and information sharing. For example, participant P2 argued that social media helps to achieve visibility only for individual cases that are easy to resolve, rather than collective issues that matter to the whole society. According to participant P2, “Yes information on social media can be more visible and provide more visibility, but it’s only for individual cases when a certain topic or issue just goes viral on social media” (Code: SMC-CH-P-CR-027-P2).

Trust in social media: Multiple participants supported the existence of the three dimensions described above for trusting social media. With regard to the dimension of functionality, only one participant out of four positively commented on the existence of the functionality dimension, while the others made no comments. P1 believes that social media allows users to do whatever they want on the social media applications. His evidence of this is that billions of users are joining the applications. P1 stated:

“I think people trust using social media functionalities. The evidence of that is the huge number of people using Twitter, Facebook, and WhatsApp” (Code: TISM-FN-P-CR-028-P1).

Regarding the helpfulness dimension, a majority of the participants supported its presence and made positive comments about it. Their observation was that technical support on social media can be solved using two sources: the application itself, as P1 and P4 stated, and other technology-savvy users looking for more social media followers by providing technological advice on how anyone can use social media. This view was supported when P1 and P2 stated, respectively:

“Twitter provides help in a very clear and visible way. You will find lots of information about how to use Twitter. This kind of information can be found with the help and support button” (TISM-HE-P-CR-030-P1).

“I never use the help button, I think if there is a technical problem, and the solution will come to me from the social media itself. People will start talking about it, and they will send the solution for any problem. If those other people use the functionality, I do not know about it, but I have never faced any problems with any of my social media accounts. If anything, the solution will come to me from other technology-savvy users who also have big numbers of followers and likes on the pages. We just need to wait for them if there is technical problems” (TISM-HE-P-CR-028-P2).

Regarding the reliability dimension, all of the participants positively supported its existence. For example, P1 and P2 believed that social media is reliable, depending on the functionalities provided by the applications themselves, such as the limited characters in Twitter. P1’s opinion was that users can provide incomplete information. This view was supported when P1 stated:

“Yes, for this one, it depends on the application. For example, Twitter provides a limited number of characters. Each tweet has to be succinct. Some of them provide series of tweets in the form of numbers, but this can be easily misleading. The same goes for Snapchat, where the videos are made only for 10 seconds or 30 seconds, I guess” (Code: TISM-RE-P-CR-033-P1).

On the contrary, P4 believed that social media is reliable and easy to use, and provide complete information. P4 remarked:

“I think social media provides complete information. The way the applications are designed makes them easy to use, and the interface—whether you are using the mobile or computer site, you can still see the whole page without cutting off missing information.” (Code: TISM-RE-P-CR-033-P4).

Social media-enabled public engagement: Concerning using social media for public engagement, the viewpoints varied from one dimension to another. Two participants (P1 and P2) agreed that the council was only using social media to broadcast information to citizens, through publishing news, awareness campaigns, etc. This view was supported, for example, when P2 stated:

“I think it is mostly one-way communication. I am as a citizen; the council has to be in the field, not just virtually on social media waiting for people to report problems” (Code: SMEPE-P-L-CR-038-P2).

Similarly, two participants (P3 and P4) agreed that the council may use social media for two-way interaction. Both participants commented that the council uses two-way communication only for the public services that are easy to deliver. This view was supported when P3 commented:

“Yes, the council officials communicate with citizens through social media accounts. We can see that in Twitter and Facebook in the replies, but most comments and replies are coming from the social media coordinator taking information from the citizens about the problem so he or she can report it in the internal systems—the 940 systems”(Code: SMEPE-P-E-CR-042-P3).

As for co-creation, in which citizens are more involved in decision-making processes through social media, all of the citizen representatives agreed that the council has not used social media to enable collaboration with citizens. Although suggestions and opinions are triggered by citizens, the council is not willing to take those suggestions seriously. This view was supported when P4 made the following remark:

“The current situation is two-way communication between citizens and government officials.... For example, citizens suggested a solution to dumping rubbish at public parks through social media, but the council did not engage well to solve the problem. So instead, voluntary initiatives were then introduced by citizens on their own” (Code: SMEPE-P-E-CR-042-P4).

Social media-enabled public service innovation: With regard to using social media for service innovation, most of the participants agreed that the level of innovation is still in its infancy. It is true that social media has helped to deliver public services quicker and at a higher quality than ever before. This view was supported, for example, when P2 commented:

“The council has a plan for public service delivery for the whole city. If the requests coming through social media are not part of the plan or are beyond the capabilities of the council in terms of money and resources, then the services will not be delivered. Citizens are always in a hurry. For example, lighting services are scheduled based on certain criteria in five years’ time. The social media role in this may mean the delivery of this service is rescheduled to certain suburbs based on if the suburbs pushed harder on social media” (Code: SMEPSI-DH-P-CR-048-P2).

As for the other types of innovation, all of the participants agreed that the council had not reached this level yet.

Social media-enabled public value: The last construct of our model is about public value realisation by citizen representatives using social media. For the dimension of ethical values, a majority of the participants agreed that values such as integrity, accountability, and transparency are not fully realised by citizens at all times. These values can be realised when certain problems go viral on social media and the council then has to issue a statement of clarification. According to P2:

“I think the realisation of such ethical values is very low, and I think when a citizen pushes too hard on the council or the mayor to solve a certain issue, if the solution can be done by junior staff at the council, the council will not respond to him/her. Citizens want to hear from the highest authority in the council, even if their problem is so minor. Also, the senior managers or the mayor have to understand the nature of the citizens and that they have to provide more clarification through communication channels, including social media, which I believe is the fastest way to reach the citizens” (Code: SMEPV-EV-P-CR-059-P2).

With regard to democratic values, three participants out of four provided evidence of their presence. For example, P1 commented:

“Yes, I think so. Government officials are now cautious. We saw many examples of government officials being arrested for corruption and not doing their jobs. They are arrested after being documented by pictures, videos, and documents on social media” (Code: SMEPV-DV-P-CR-064-P1).

Professional values received almost no comments from the citizen’s representatives. The professional values are mostly related to internal use, which is related to the efficiency and effectiveness of day-to-day business activities. For this reason, citizens are not aware of what is happening behind the scenes. In fact, P1 believed these values can only be realised by citizens when problems get out of control on social media, where the council has to react in a professional manner. According to P1:

“Social media has an impact on efficiency, effectiveness, and quality in public service in general. Again, when problems are reported publicly, the council has to do the job based on excellence, quality, and high standards, but not doing this for the issues that are not open to the public. And the problems that are not reported in social media far outnumber the ones reported on social media. Social media cannot do everything” (Code: SMEPV-PRV-P-CR-069-P1).

For people’s values, all of the participants agreed that these values are realised because of the people’s nature. Social media is just a tool to show these values in the virtual world. These values can be wrongly interpreted by citizens. The council may issue orders that appear uncompassionate and unfair. These orders may be reasonable and work for the best of the community. Such misunderstandings occur because of a lack of clarification from the council side. This view was supported when P3 commented:

“Our problem is that our society is a companionate society; therefore, people interact with each other with compassion and ignore realistic facts sometimes. For example, if the council has suspended a restaurant or butcher shop because it does not comply with the health standards, people will look into the matter with compassion and not understand the public interest. Therefore, when the council announces such things on its social media pages, the council has to explain to people why exactly it was suspended and what violations were committed. Unfortunately, they do not tell why. These kinds of things will affect the level of trust between the citizens and the council. So yes, the council should reveal more information. In general, citizens are looking for an immediate solution to their problems. This is very difficult, and I think when the council provides more clarification, people will understand” (Code: SMEPV-PEV-P-CR-071-P3).

Empirical findings at the relationship level

The first relationship (P1) is that social media capability is positively affecting the level of engagement. It seems that users have the ability to utilise social media functions, features, and characteristics to support both one-way and two-way communication with municipality officials about their needs and concerns. We find evidence that the level of engagement caused by social media capabilities is restricted to a broadcasting level (one-way), either from the citizens’ side or the officials’ side, as well as to two-way communications in which citizens ask for a service and officials respond to it. No evidence has been found to suggest a high level of communication in support of co-creation using the functions, features, and characteristics of various social media services. Therefore, the proposition P1 is moderately supported.

The second relationship (P2) is that the level of trust in social media technology is affecting the level of engagement. Citizens and government officials alike seem to have no major technical concerns that could impact how they engage with each other over social media applications. In fact all of the participants believed that they could engage with the council, as they trusted the functionality, helpfulness, and reliability of social media applications. However, no direct evidence was reported that functionality, helpfulness, and reliability caused a high level of engagement. Therefore, proposition P2 is moderately supported.

The third relationship (P3) is that different degrees of public service innovation require different levels of public engagement. Our findings highlight that, for developmental changes that happen over time, one-way communication may be suitable for public engagement. However, the high level of engagement required for total innovation, for example, was totally absent. In order to create new services for new users, significant social media engagement has to exist. This was not the case in our findings. Another interesting finding is that evolutionary and expansionary public service innovation through social media can be achieved through collaboration among citizens themselves. Thus, proposition P3 is moderately supported.

The fourth relationship (P4) is an association between public service innovation and the realisation of public values by citizens. It seems that local councils are interested in delivering public services to create value through social media. We found evidence to indicate that not all four types of values (ethical, democratic, professional and people) have been realised because of all four types of innovations in services per se. As reported in the last proposition (P3), most of the participants asked for current services to be delivered to current users; thus, all four types of values were reported to have been realised. Most of the participants emphasised that these values are only realised when social media is used as an expression tool. Nevertheless, some values among the people dimension, such as fairness, tolerance, decency, compassion, courage, and benevolence, were reported from using social media for the council's matters. However, these values were created by services designed and initiated by the citizens themselves. Thus, this proposition is weakly supported. An overview summary of all propositions is provided in Table 2.

Table 2. Outcomes of the research propositions.

No.	Propositions	Degree of relationship	Outcome
P1	Social media capability is positively related to social media-enabled public engagement	Moderate	Supported
P2	Trust in social media applications is positively related to social media-enabled public engagement	Moderate	Supported
P3	Social media-enabled public engagement is positively related to social media-enabled public service innovation.	Moderate	Partially supported
P4	Social media-enabled public service innovation is positively related to social media-enabled public value.	Weak	Partially supported

Discussion

Evidence supports the perceptions of the citizen representatives that social media has helped their municipality to generate several types of public service innovations. Such innovation took place in existing services as well as in creating new services. This finding is in line with Linders (2012), who reported that citizens can collaborate to design and deliver public services for themselves. Innovation in terms of creating new services for new users required high engagement between citizens and the decision makers of the municipality. This engagement helped them to formulate new interesting ideas. This observation is in line with the view expressed by Muninger et al. (2019), who labelled it as 'ideation'. This is because of the nature of social media, which allows users to create, access, and share

their own content (Malsbender et al. 2014). Therefore, social media is considered useful for innovation in public services.

We found further positive evidence about how citizen representatives perceive the contributions of social media towards creating public value. This perception can be interpreted in terms of the notion of 'strategic triangle' discussed earlier. In terms of the authorising environment, Moore (1995) claimed that the key player for public value is the public service manager, who is responsible for the provision of services. This is too much responsibility for a public manager to decide the values for society. However, in his latest work, Moore (2014) recognized the role of citizens in service provision through engagement. Citizen engagement is facilitated through social media (Malsbender et al. 2014; Mergel 2013; Mergel et al. 2018). As a result, the findings of this study are largely in line with this argument, in that engagement was found to have facilitated the creation of public value through improving existing public services and creating new ones. Although evidence supports how engagement led to new service creation and service enhancements, no strong evidence has yet been found in support of higher-level engagement, which is necessary for co-creation. This is possibly because there are other means of engagement, in which the mayors and municipality's decision makers can actually meet the citizens face to face. Moore (1995) identifies technology as an integral part of operational capability (Benington and Moore 2011). In this study, we consider social media capability and trusting it as a part of operational capacity to establish its relationship with other constructs (public engagement). This relationship has been supported by our findings. Most of the participants did not express any concerns with trusting social media applications and were capable of using them.

We also consider the public service innovation construct to be a part of operational capacity that will create public value. Our findings confirm that innovation in services through engagement on social media did create public value. This argument is in line with Hartley (2012), who stressed that innovation is tied with improvements in services. In our case, a majority of the participants confirmed the improvements in services. This had led to creating various types of values. Social media has helped citizens to realise values beyond the economic ones to social and democratic ones. The public sector primarily focuses on economic values such as cost and efficiency while being less focused on accountability, transparency, and fairness. However, with the emergence of social media technology, problems and issues can be open for public discussion to formulate public opinions. This could have pressed the government to face consequences and be transparent and fair.

Overall, drawing on the findings, we suggest the existence of four distinct and individually important relationships that are necessary to create public value through social media. No evidence has been found that refutes these four propositions. As a result, the model is supported for public value creation, from citizen representatives' perspectives.

Conclusion

In this paper, we have reported an initial empirical evaluation of a theory-driven model on creating public value through social media within the context of a large municipality in Saudi Arabia. Our findings confirm that citizen representatives perceived a positive role by social media for encouraging citizen engagement with councils as well as helping councils to deliver public value to citizens through public service innovations. Our proposed model and findings contribute to theory by enriching the IS and public administration literature and extending the applicability of PV to the context of a developing country. Despite these contributions, our study has two limitations. First, this study is cross-sectional in nature. A longitudinal study is thus preferred to develop a richer understanding of the evolution of how social media has enabled public value creation. Second, it is difficult to generalise our findings across all city councils in Saudi Arabia. We are currently undertaking multiple case studies covering three large municipalities in Saudi Arabia selected based on religious, political and commercial importance, which will help to make comparisons among municipalities. Involving a wide range of municipalities in our research may result in different viewpoints of how PV can be created using social media applications.

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