PUBLIC VALUE CREATION USING SOCIAL MEDIA APPLICATIONS FOR THE LOCAL GOVERNMENT CONTEXT

Research in Progress

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Abstract

In recent years, the use of various social media applications has received growing attention from local government agencies. This is because social media applications have the potential to offer public value to those agencies as well as citizens through enhancing public engagement and public services innovation. Despite the growth in the literature on social media, there is still a limited understanding of how the key stakeholders of local government agencies, around the world in general and Saudi Arabia in particular, can receive public value created through using various social media applications. To address this concern, this proposed study is initiated to develop a model for investigating public value creation using social media applications. The model is influenced by multiple theoretical lenses (e.g. social media capability, public engagement, public services innovation, public value theory, and stakeholder theory). This proposed research is based on a qualitative methodology with several phases of research (e.g. pilot study, multiple-case study and domain expert panel) for the Saudi Arabian local government context. The expected contribution of this research is a model with constructive associations between several variables identified from multiple streams of literature (e.g. social media, information systems literature and public administration literature). Furthermore, a classification of public services innovation associated with four types of public value are proposed. The findings of the study are expected to benefit public managers as well as citizens to better utilise social media for public value creation.

Keywords: Social media, public value, public service innovation, public engagement, qualitative research, local government, Saudi Arabia.
1 Introduction

Government agencies use social media applications to communicate with various key stakeholders such as citizens, business communities, emergency service agencies and sports clubs (Mergel a, 2013). Social media can help government agencies deliver better public services and greater safety and awareness for communities and can even increase democracy (Omar et al., 2013). At a local government level, social media enhances greater engagement with key stakeholders (Lee-Kelley & Kolsaker, 2004). This has enabled innovation in public services (Linders, 2012). Promoting public engagement and public services innovation would lead to the realisation of such public values as fairness, trust, transparency and integrity (Mergel, 2013). However, the perceptions and needs of each stakeholder could differ as they are motivated by different expectations. Therefore, differences in perceptions and needs should be considered during the process of public value creation (Hartley et al., 2016). While social media initiatives are found to be promising in promoting public engagement, there is a further lack of research aimed at understanding the phenomenon and eventually accessing its impact on decision-making processes for the context of developing countries (Dini et al., 2016). Unlike developed countries where the democratic process is already advanced and well-operationised, developing countries are usually associated with a low democratic progress. Social media in the developing context may potentially have a large impact on the democratic progress. This is valid for the local government context for developing countries in which the population is known for its wide use and reliance on social media applications to express concerns and viewpoints towards the government (Dini et al., 2016).

Despite the existence of a rich body of literature on how government agencies exploited the merits of social media applications, no rigorous studies have systematically examined the experiences and realisations of the notion of ‘public value’ involving social media applications for the local government in developing countries like Saudi Arabia. Moreover, there exists limited studies on the relationship between social media capability, public engagement, public service innovation and the resulting public values for the local government context. Furthermore, the divergent and convergent opinions in relation to public service innovation, public engagement and public value co-created by government and citizens on social media applications have not yet been examined in the social media literature. A number of scholars are calling the information system (IS) community to investigate these aspects (Jain & Kesar, 2011; Johannessen et al., 2016; Medaglia & Zheng, 2016; Mergel, 2013; Moon & Welch, 2005; Omar, Scheepers, & Stockdale, 2013). Thus, we have addressed the following question in this research-in-progress paper:

- How does the use of social media applications by local government agencies create public value?

The paper is organised as follows. Firstly, background literature is discussed, followed by the proposed research model and propositions. The research method is then briefly discussed. Finally, the current status of the research project is described.

2 Literature Review

A total of 71 papers were identified on the topic of social media use in government agencies at various levels (e.g. state, federal and local) from relevant bodies of literature concerning government and information systems by exploring leading journal and conference publications. This is indicated in Appendix A. Drawing on the notion of the stage model approach (Kwon & Zmud, 1987; Rogers, 2003), these papers were analysed and divided into three broad topics: social media adoption, social media implementation and social media use. Within each topic, a set of important themes was identified. These themes are shown in Figure 1. However, they are not elaborated in this paper due to page limitations. From our literature analysis, we found that although a few studies (Aladalah, Cheung, & Lee, 2016; Khan, Swar, & Lee, 2014; Omar et al., 2013; Sharif, Troshani, & Davidson, 2016) observe how social media can impact government organisations and/or citizens, none have explicitly addressed how social media use between organisations and their stakeholders contributes to public value creation. This is particularly significant for the context of developing countries, which are known to have a deficiency in designing and delivering public services guided by democratic principles. Given this gap,
this study aims to analyse the impact of social media for the context of local government in developing countries.

3 Theoretical Background

3.1 Social Media Capability

Multiple definitions exist for social media capability in the IS literature. Moreover, social media capability is also equated as social media affordance. These divergent ideas discussed in the existing literature can cause confusion due to their similar meanings. To avoid such confusion, we have integrated both concepts into a single one, which is referred to as social media capability. Therefore, we adapted the definition of social media capability from Braojos-Gomez, Benitez-Amado, and Llorens-Montes (2015) to “the ability of local government agencies to utilise social media functions, features and characteristics for fostering public engagement to execute government activities” (p. 445). Existing IS literature provides evidence that social media capabilities can have an impact on government activities (e.g. customer–citizen engagement) and the overall organisation performance (Dini et al., 2016).

3.2 Trust in Social Media

IS literature further highlights the importance of trust for a social media context (Mcknight, Carter, Thatcher, & Clay, 2011). Trust has been looked at from two perspectives: a) trust in government behaviour through business processes performed on social media applications (e.g. Aladalah et al., 2016; Park, Choi, Kim, & Rho, 2015) and b) trust in people, either government officials or citizens in their use of social media applications (Hong, 2013; Kim, Park, & Rho, 2015). However, trust in the technological part of social media has remained largely ignored (Mcknight et al., 2011). We adopted the model of Mcknight et al. (2011). They defined 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).

3.3 Public Engagement

Public engagement has gone through many developmental stages in different contexts and has been affected by ideological, social, political and methodological meanings (Nabatchi & Amsler, 2014). Due to the emergence of Information Communication Technology (ICT) tools in government agencies, there is now a shift 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 like e-government and social media, which are built on web 2.0 technology. Various levels of public engagement have been reported in the literature. For example, in Arnstein (1969), a famous ladder of citizen participation, there are three levels of public engagement which are further broken down into eight levels. In contrast, Macintosh (2004) and 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 infor-
mation 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 public 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 objective of this level is not to directly involve citizens in the decision-making process but rather to collect their feedback for future service improvement. Finally, the Co-creation level involves citizens on social media applications in 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 interactions where the government plays a supervisory role.

### 3.4 Public Service Innovation

Recently, there has been a great deal of professional and scholarly interest in ‘innovation’ in the public sector (Moore, 1995; Mulgan & Albury, 2003; OECD, 2005). However, there exists no universal definition of innovation for the public-sector context. Several scholars have mentioned the complexity of defining innovation for the public-sector settings. Koch and Hauknes (2005) suggested that defining innovation is entirely up to researchers in deciding what should be categorised as (an) innovation within an organisational setting that suits its aims, goals and strategies. In this paper, we thus have adapted the definitions of Criado, Sandoval-Almazan, and Gil-Garcia (2013), Mulgan and Albury (2003) and OECD (2005): “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”. We have chosen these components to include in the definition as they focus on the type of change, transformation or innovation, and they identify the expected outcomes.

![Types of Public Service Innovation on Social Media](image)

**Figure 2: Public service innovation classification**

Classifying innovation is essential for understanding its range and establishing the types of innovation to apply within the public sector services (Walker, Jeanes, & Rowlands, 2002). Several authors have attempted to make general typologies of innovation. For example, Brown and Osborne (2012) classified innovation based on: *types of services and types users*. We have adopted this classification because a) it is directly related to public service innovation in the government sector, b) it contains a variety of measures such as incremental change and/or radical change of public services to distinguish between each innovation type, c) it defines four types of innovation, which allows flexibility of public service classification, and d) it is the only classification of public service innovation that considers user type as a standalone criteria.

### 3.5 Public Value

The notion of public value was first introduced by Moore (1995). He came up with the basic idea of public value, which is called the ‘Strategic Triangle’. The strategic triangle consists of three important factors: *creating something substantively valuable, legitimate and politically sustainable, and operationally and administratively feasible with available internal and external capabilities*. Drawing on the strategic triangle, public organisations can generate 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, Mulgan, & Muers, 2002). The public value
concept is significant for public sector administrators as emphasised by Jørgensen and Bozeman. This is because there is “no more important topic in public administration and policy than public values” (2007, p. 355).

Classifying public value represents another area of ongoing research that ranges 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; Bannister & Connolly, 2014; Hood, 1991; Jørgensen & Bozeman, 2007; Kernaghan, 2003). From a careful review, the taxonomy provided by Kernaghan (2003) is chosen for this research project as the basis for measuring public value. Kernaghan (2003) has classified public value into four dimensions including ethical values, professional values, democratic values and social values. Ethical values such as integrity and fairness refer to the principles and morals that govern the interactions between government officials and citizens when public services are designed, implemented and delivered. Professional values such as quality and effectiveness refer to the degree of professionalism that distinguishes how well the designing, implementing and delivering of public services are taking place. Democratic values such as openness and accountability refer to the ideas and qualities that are necessary in a democratic society. They also set limits on how much say the government can have over its citizens and vice versa. Social values such as caring, fairness and compassion refer to people having a high concern about themselves and their societies in terms of public services received from governments.

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’s (2003) work, which has not yet been criticised (Rutgers, 2008); b) it has been classified based on public services, whereas other taxonomies have been classified on a general knowledge of values in the public administration disciplines; c) there are many duplications in the value sets of other taxonomies (e.g. accountability, user democracy and professionalism can be found twice in at least three dimensions of Jørgensen and Bozeman’s (2007) work; d) it introduces professional values as a separate dimension, which relates more to internal activities such as effectiveness and efficiency; and e) each dimension in Kernaghan’s (2003) taxonomy is applicable to social media use in the government context.

3.6 Local Government Stakeholders

Drawing on the stakeholder theory developed by Freeman (1984), the term ‘stakeholder’ refers to “anyone who can affect or be affected by an action of an organisation” (p. 25). For local government context, there exists a variety of stakeholders whose perceptions, needs and expectations must be evaluated. Therefore, identifying each stakeholder group is important to fulfil their needs and create values. The identification of stakeholders who interact with organisations and local government agencies has been reported in the literature (Conradie, Mulder, & Choenni, 2012; Gomes, 2004; Kamal, Weerakkody, & Irani, 2011; Murray, 1999; Rowley, 2011). These studies have identified stakeholders based on several classifications such as salient stakeholder groups (Mitchell, Agle, & Wood (1997), primary and secondary stakeholders (Clarkson, 1995) and internal and external stakeholder groups (Sirgy, 2002). Different types of identification are in line with the definition of stakeholder as produced by Freeman (1984). Moreover, Donaldson and Preston (1995) have developed and classified the use of the stakeholder theory by proposing three approaches: a) managers should behave in certain ways (normative), b) certain outcomes are more likely if managers behave in certain ways (instrumental) and c) the actual behaviour of managers (descriptive/empirical). In this study, we have focused on the instrumental analysis of the identified internal and external stakeholders. This is because our study seeks to explore how stakeholders may use social media applications to attain the performance objectives of an organisation as a tool to be deployed in strategic decision-making (public service innovation) in which certain results (public value) are derived from enacting certain behaviours.

4 Research Model

A conceptual model (Figure 3) is now proposed. It is influenced by the underlying spirit of the concept of social media capability, trust in technology, public value theory (Moore, 1995), public engagement, public service innovation and the stakeholder theory (Freeman, 1984) and addresses the research ques-
tion formulated in Section 1. This model consists of five main constructs chosen from the relevant IS and public administration literature sources. The linkage among these constructs is further developed and then propositioned accordingly.

Figure 3: Research Model

4.1 The impact of social media capability on social media enabled public engagement
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 by an organisation. Such a capability can assist organisations to run mass collaboration between executives, employees and citizens. The local government agencies’ proficiencies in sharing, co-creating, discussing and modifying user-generated content facilitates information sharing, interaction and connection with citizens (Linders, 2012), thereby improving citizen participation and interrelatedness. 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 & 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, Hoffmann, & Becker, 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:

\[ P1: \text{Social media capability is positively related to social media enabled public engagement}. \]

4.2 Trust in social media impact on social media enabled public engagement
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, Sulaiman, & Jaafar, 2014). Alada-lah et al. (2016) argued that citizen participation on social media applications encourages a feeling of belonging, boosts government legitimacy and increases trust in government. 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. Park et al. (2015) concluded that the direct involvement of a government’s leading officer increases the public’s trust in using social media. Therefore, the following proposition is derived:

\[ P2: \text{Trust in social media applications is positively related to social media enabled public engagement}. \]
4.3 Social media enabled public engagement impact on social media enabled public service innovation:

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, Svidronova, & Nemec, 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, Estevez, & Janowski, 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:

\[ P3: \text{Social media enabled public engagement is positively related to social media enabled public service innovation.} \]

4.4 Social media enabled public service innovation impact on social media enabled public value:

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 countries’ administrative reforms. This is because governments have questioned the traditional concept of public service delivery in the context of New Public Management (Moore, 1995). 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 (Osborne, 2006). 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:

\[ P4: \text{Social media enabled public service innovation is positively related to social media enabled public value.} \]

4.5 Key local government stakeholders’ perceptions of public value:

Governments have been paying increasing attention to the implementation of social media technology to help innovate the design and delivery of public services. Such innovation includes the delivery of improved (e.g. efficient and effective) public services to citizens. However, there are concerns about who decides to what public services innovation should be applied, as citizens and government are considered to be co-producers of such services. Therefore, the realisation of the delivered services should be guided by the opinions of both government and citizens (Moon & Welch, 2005). In particular, it is unclear whether and how citizen and government perspectives on social media coincide and/or diverge in terms of the scope and objectives of innovation in public services and, therefore, the value created. The majority of studies on government use of social media reported in the literature has focused on the actual use. However, not many studies have provided insight into the unique experiences and realiza-
tions of value on social media at various levels (i.e. government and citizens). Current studies have failed to integrate government and citizen perspectives on the public value creation process via social media. It is important to study these divergent and convergent opinions because the expectations regarding the (desirable) effects and outcomes of public engagement and public services in the creation of public value on social media might differ between government officials and citizens. Lee-Kelley and Kolsaker (2004) stated that government officials are confident about e-government’s effects and outcomes, but citizens are apparently less sure. The ways in which citizens and government officials perceive value can differ because government officials may demonstrate bias about the role of social media for value creation due to their investment in and commitment to the use of such technology. This may not be reflected in the opinions and viewpoints expressed by citizens about public value created through social media because they are unlikely to have a technological bias or unfavourable perceptions of social media applications supported by local government agencies (Lee-Kelley & Kolsaker, 2004). Therefore, the following proposition is derived:

**P5:** There exists a difference in the perceptions of local government stakeholders (e.g. government officials and citizen representatives) towards how social media affects public value.

### 5 Research Approach

The research question (in Section 1) would be evaluated for a rapidly developing but still conservative country like Saudi Arabia. This research project is thus considered to be an exploratory and theory building in nature. This is particularly because a) our goal is to understand ‘how’ public value is created through the use of social media applications for local government context—Yin (2009) suggested that such questions are better addressed using qualitative methods; b) little research exists that 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; and c) this research will shed light on the divergent and convergent perceptions, between key internal and external stakeholder groups with regard to how social media affects public engagement, public services innovation and public value creation for the Saudi Arabian local government context. Within a framework of exploratory research, our study will be conducted in four phases: conceptual study, pilot case study, multiple-case study and domain expert panel.

In the first phase, a conceptual analysis has been used to derive an initial model (Figure 3) from social media literature analysis, which will subsequently be refined through a pilot study. The first empirical phase is to find out whether the propositions linking the variables in the model can be evaluated. The research propositions will be evaluated using pattern matching (Yin, 2009) to identify an emergent theme, configuration or explanation about relationships among constructs in our model. The pilot case study will also help us refine the interview protocol so that we have greater confidence in its application during the subsequent multiple-case study. In the third phase, a multiple-case study involving a minimum of three case organisations (i.e. city councils) will be requested to participate for semi-structured interviews. This will enable us to deeply evaluate the model and will provide the opportunity for knowledge development and explanations. At each case site, a total of eight to ten participants will be interviewed including government officials and citizen representatives. In the last phase, a panel of domain expert members consisting of eight participants will be assembled. The members include a) four academics from Australia and Saudi Arabia whose area of research interests include social media use, b) two government officials who are responsible for policy formulation of social media use, c) two Saudi citizen representatives who extensively use social media within a local government context. The responsibility of the expert panel will be to critically reflect on the research findings and to permit the experts to express their insightful opinions about potential emerged issues in phases 1, 2 and 3 of our research.

### 6 Conclusion

In this research-in-progress paper, we have presented an initial theory-driven model that was derived from a careful analysis of social media literature. This model seeks to explain how public value is gen-
erated and realised by different local government key stakeholders through the use of social media applications. The next phase of this research would involve evaluating and refining the initial model through a pilot case study, the findings of which will be reported in future publications. The model, when fully validated, is expected to make contributions to theory and practice alike. The model would provide a richer understanding of how public value is produced through social media applications and perceived by multiple stakeholders for the context of local government in Saudi Arabia. It will also help public managers formulate suitable policies and appropriate strategies on how to best use social media applications for promoting engagement while delivering public services and therefore realise public value.

References
Gomes, R. C. (2004). Who are the relevant stakeholders to the local government context? Empirical evidences on environmental influences in the decision-making process of English Local Authorities. BAR-Brazilian Administration Review, 1(1), 34-52.


Appendix A: Systematic literature on social media literature

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<td>Australasian Conference on Information Systems</td>
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No. IR* means: number of irrelevant papers. No. RE* means the number of relevant papers