A Systemic Review of Social Media Studies in Government Organisations

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Billions of individuals around the world are using smartphones, and this development has also increased the use of social media applications in daily communications. Many studies have stated that social media can help government organisations to improve communication services and create better engagement with citizens as almost all citizens are using social media applications. The objectives of this study were to perform a systematic literature review to identify important themes in social media research in government organisations. A systematic review of articles related to social media research in government organisations is done by using Google Scholar and other academic databases such as Jstor and Science Direct. Two researchers reviewed each publication for inclusion and relevant data extraction. Through the analysis of past research, a systematic literature review has been grouped and represented in four different themes including governance, citizen trust, participation and transparency. The studies are analysed, gaps in the literature are identified, and further research directions within the themes are proposed.

\textbf{Key words:} Social media, public sector organisations, Facebook, Twitter.

\textbf{Introduction}

The benefit of modern social media applications around the world today enables individuals and organisation to disseminate information in a fast and cheap way that was never possible before. It reaches an audience on a global scale and is so diverse, and its impact is so significant that it can bring down a government. Pushed by the swift improvement of individual social media use, many government organisations choose to adopt social media to be in line with current trends and to achieve various objectives in many dimensions such as marketing, public health, safety and mainly communication (M Hisham M Sharif, Troshani,
& Davidson, 2015). Social media applications provide a dynamic platform for web-based interactions that can create better public engagement between government organisations and citizens (Agostino & Arnaboldi, 2016). Many studies have highlighted that social media can help in cutting marketing costs and can provide new and innovative ways for government organisations to improve delivery of services to citizens. Social media applications also provide a platform to get feedback from citizens in an informal manner (Khan, 2017). In order to reap all the benefits offered by social media to government organisations, clear objectives and systematic plan are needed when implementing social media in government organisations to assure that the openness that results from social media use is carefully managed. This is to ensure that all types of communications whether formal or informal meet the organisation standards and protocol in terms of content development and procedure adherence (Meijer & Torenvlied, 2016). Furthermore, the impact of social media on private and public organisations in terms of financial benefits could rise to billions (Jones, Borgman, & Ulusoy, 2015; M Hisham M Sharif et al., 2015), which is gained from effective and efficient communication and collaboration between individuals and organisations.

While there are scant academic work examining social media issues in government organisations; which includes the use of social media applications in local government (Bonsón, Royo, & Ratkai, 2015; M Hisham M Sharif et al., 2015), procedures and protocols in implementing social media (Meijer & Torenvlied, 2016), social media use by public organisation for disaster management (Gao, Barbier, & Goolsby, 2011) and social media impact to government organisations (Bonsón et al., 2015; Karakiza, 2015; Mohd Hisham Mohd Sharif, Troshani, & Davidson, 2018), little has been written about the overall use of social media in government organisations, particularly on the specific theme used in social media research. Given the importance of social media to many sectors of government organisations agencies and the investments being made in social media engagement in the government organisations (Sivarajah, Irani, & Weerakkody, 2015), policymakers stand to benefit from a systematic review of relevant evidence, to guide future practice. This review would also contribute to the growing body of literature in social media and government organisations. This study aimed to address this knowledge gap by utilising the systematic review technique to identify, classify and critically analyse important themes of social media research in government organisations.

**Literature Review**

There is much more to social media other than Facebook, Twitter and YouTube. Social media terminology was first coined in 2005 to embody various forms of Internet-based applications that are created on Web 2.0 platform where users is highly involved in updating the Web content (O’Reilly, 2007). The term social media has been defined by several notable scholars, for example Kaplan and Haenlein (2010) specified social media as a collection of Web based
applications that emphasizes content generation and interactions. Meanwhile O’Reilly (2007) describes social media as a group of applications that are built on open user involvement. Social media has also been proposed as Internet-based applications that can drive social interactions where communities can collaborate in creating Web content (Kietzmann, Hermkens, McCarthy, & Silvestre, 2011). Boyd and Ellison (2007) discussed social media as a set of applications that could provide opportunities to its users to construct a public profile, articulate a list of other users with whom they share a connection, and view their connections and those made by others within the applications. More recently, social media has been suggested as a collection of real time channel that allows web audiences to derived value from content generation and live interaction (Carr & Hayes, 2015). Based on the above definitions, content creation by Web users and interactions between them are the two most important aspects in describing social media. Hence, this study refers social media as a collection of innovative Web applications that enables active and real time interactions between Web users to create, share and derive value from existing information on the Web.

Methodology

This study adopts a desk-research approach in reviewing the recent literature in social media studies particularly in government organisations. This systematic review is based on methodology used by Alzahrani, Al-Karaghouli, & Weerakkody (2017) and Saad & Farouk (2019). The review has been divided into three significant phases to identify concerning articles to information system study: (1) review planning; (2) conducting the review; (3) review documentation.

The first step in the systematic review is to investigate the literature based on the research aims. The search of the published literature covers literature since 2008 to 2019 that focused on social networking applications and social media activities used by citizens and government to communicate to, or otherwise interact with each other. The keywords of searching include: “social media”, “social networking sites”, “Facebook”, “Twitter”, “politic/civic engagement”, “political participation”, “government organisations”, “citizens” and “social media government”. The published literature was identified through several electronic databases including Google Scholar, ScienceDirect, ACM, Proquest, UUM library, Scopus etc.

In conducting the systematic analysis, the present study draws specific criteria based on the abstracts reading. The criteria are as follows: (1) published after 2012; (2) containing a relevant discussion of social media use in government organisations; and (3) published in English. Articles that focused on the conceptual and qualitative data or had a limited discussion on the primary topics were excluded. After a critical process, the study finally reviewed 24 articles which were considered as relevant to the purpose of this study. Each
article was read prudently to identify the themes. These studies were then clustered in the identified themes. Four themes emerged from the reviewed articles: public participation, citizen trust, governance, and transparency & accountability.

**Study Profile**

There are many branches of literatures that addressed social media in government organisations. For this study, the selected four (4) categories of literatures reviewed are participation, governance, citizen trust and transparency. Numbers of papers selected for each area are shown in Table 1.

**Table 1: Findings of Literatures of Social Media in government organisations**

<table>
<thead>
<tr>
<th>Selected Areas</th>
<th>Number of Articles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation</td>
<td>7</td>
</tr>
<tr>
<td>Governance</td>
<td>6</td>
</tr>
<tr>
<td>Citizen Trust</td>
<td>7</td>
</tr>
<tr>
<td>Transparency</td>
<td>4</td>
</tr>
</tbody>
</table>

The reviewed articles on papers related to engagement shows that the main body of work is analysing public engagement within government organisation through social media platform, either using Twitter, Facebook, Instagram, etc. The contribution of these social media as one of the medium for citizen engagement is critically analysed in order to understand the level of organisational impact that social media gives to the organisations.

In regards to governance and social media in government organisations, it shows the pattern of academic articles that is aiming to understand the concept social media governance. This includes institutional governance of social media implementation or Internet governance. In term of citizen trust, analysed papers shows that organisations use social media to understand citizen attitudes towards the adoption of government organisations, and to further comprehend the reason they continuously use the government organisations services. Furthermore, critical factors that influence citizen trust in government organisations are highlighted and how individual differences influence the adoption and usage of government organisations is also discussed.

Researches related to transparency and social media tend to illustrate government efforts to increase transparency and accountability of information in social media. Several issues and challenges towards increasing the transparency in social media are also discussed in the reviewed articles.
Majority of the studies (24 studies) are not based on a theory or model. Based on the Table 2, it shows that, only three (3) studies utilized existing model or a theory in their research studies. This includes the use of Agency Theory and Stakeholder Theory to explain engagement and governance in government organisations. DeLone and McLean's IS Success Model is utilized in one of the studies to understand the salient factors affecting e-filling continuance usage intention (Veeramootoo, Nunkoo, & Dwivedi, 2018).

Table 2: Theoretical Foundation Findings

<table>
<thead>
<tr>
<th>Theory/ Model</th>
<th>Number of Articles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agency Theory</td>
<td>1</td>
</tr>
<tr>
<td>Stakeholder Theory</td>
<td>1</td>
</tr>
<tr>
<td>DeLone and McLean's IS Success Model</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 3 illustrates the approach used in the reviewed papers. From the table, it is shown that both qualitative and quantitative methods have been frequently used in most of the researches. The other two (2) studies used mixed methods approach (both quantitative and qualitative).

Table 3: Results of Research Approach

<table>
<thead>
<tr>
<th>Research Approach</th>
<th>Number of Articles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantitative Approach</td>
<td>11</td>
</tr>
<tr>
<td>Qualitative Approach</td>
<td>11</td>
</tr>
<tr>
<td>Mixed (Quantitative + Qualitative)</td>
<td>2</td>
</tr>
</tbody>
</table>

Findings and Discussions

Based on the systematic literature review conducted, this study found several common themes that emerged in the area of social media adoption by public institutions. The themes are public participation, citizen trust, governance and transparency and accountability. Each of these themes are discussed in detail in the following paragraphs.

Public Participation

Participation is a crucial factor in determining the success of social media used by public institutions such as government agencies and non-profit organisation such as zakat institution (Zainal, Abu Bakar & Saad, 2016; Saad, Farouk, Abdul Wahab & Ismail, 2019). Through social media platforms, not only can the public institutions deliver the information, but also get feedback from the people who interact with them. Previous studies have examined the types of social media used, the content of social media posts by the public institutions, and the factors influencing society’s participation in the social media. Previous studies on
society’s participation in public institutions have been conducted in developed countries, such as UK (Boyd & Ellison, 2007), US (Smith & Gallicano, 2015), Italy (Agostino & Arnaboldi, 2016), Germany (Hofmann, Beverungen, Räckers, & Becker, 2013) and European Unions (Bonsón et al., 2015). However, limited study is found on society’s participation in public institutions in developing countries including in Malaysia.

Previous studies have identified various social media platforms commonly used by public institutions. The most common platform is Facebook (Agostino & Arnaboldi, 2016; Bonsón et al., 2015; Ellison & Hardey, 2014). Other platforms used are Twitter, Flicker, and YouTube (Ellison & Hardey, 2014). Society’s participation can be categorised as either public communication or public participation (Agostino & Arnaboldi, 2016). Public communication is a one-way communication from the public institutions to society, whereas public participation is a two-way interactive communication between the public institutions and the society. In public participation, society interacts and provides feedback to public institutions.

Previous studies have also examined the factors that influence the level of participation. Among the factors identified are the content of the information provided by the public institutions. The information provided by public institutions must be useful to the society to encourage the participation by the society (Bonsón et al., 2015; Smith & Gallicano, 2015). For example, information about healthcare (Park, Reber, & Chon, 2016). The information provided also must be of interest to the society. The huge interest can be enhanced by allowing the society to participate actively in the discussion by the public institutions. This is considered as a crucial factor in driving social media engagement as it is fulfilling the emotional and individual needs (Wang, Tchernev, & Solloway, 2012). Other factors identified are the existence of a sense of presence or the state of being online (Smith & Gallicano, 2015). Finally, the society participates in social media by public institutions to get social approval (Smith & Gallicano, 2015). Society finds valuable experience when they get approved by others in social media interaction (Wang et al., 2012).

**Citizen Trust**

Citizen trust plays a significant role in the successful adoption of government organisations (Bélanger & Carter, 2008; Ghazali, Saad & Wahab, 2016). Despite the significant advantages of ICT and its great influences to the society, many studies (Bannister & Connolly, 2011; Khasawneh, Rabayah, & Abu-Shanab, 2013; Weerakkody, Irani, Lee, Osman, & Hindi, 2015) found that most of them do not trust online services or government organisations and prefer to use traditional ways (over the counter) to access the services offered by government.
In order to explain the citizen trust in government organisations, there are several things to be comprehended. This relationship appears to be complex as the interactions are not only between government and citizen but the inclusion of technology and business as well (Bélanger & Carter, 2008; Mahmood, Osmani, & Sivarajah, 2014). In regards to citizens’ trust, extant literatures have found to examine this area in many dimensions; citizens’ attitudes towards government organisations (Alzahrani et al., 2017), critical factors influencing citizen trust in government organisations (Alzahrani et al., 2017), citizens’ use of social media in government (Song & Lee, 2016), the determinant success of a government organisations service (Veeramootoo et al., 2018), the imperative of influencing citizen attitude toward government organisations adoption and use (Al-Hujran, Al-Debei, Chatfield, & Migdadi, 2015), the impact of citizens' trust toward the successful adoption of government organisations (Alzahrani et al., 2017), etc. However, the majority of these studies were conducted in developed countries and were less likely to be found in developing country like Malaysia.

In addition, previous findings reveal that limited consideration is paid to citizen’s aspects of trust (such as personality, culture, gender, experience, education level, beliefs and value of systems (Alzahrani et al., 2017). It is also indicated that, the level of interest in government organisations by the citizens is generally low; however they appreciate personalisation, user-friendliness and the ability to communicate (M Hisham M Sharif et al., 2015). According to Song & Lee (2016), the use of government social media is significantly associated with the perception of government transparency which is highly related to trust in government. Therefore, the perceptions of government transparency mediate the relationship between use of government social media and trust in government. This can become an important indicator for government to improve citizen’s trust in government by enhancing their perceptions of government transparency.

The continuance usage intention by citizen is also influenced by system quality, user satisfaction and habit. Among them, user satisfaction plays a significant role (Veeramootoo et al., 2018). Besides, citizen attitude toward using government organisations services is also found as a strong determinant of citizen intention to adopt and use government organisations services, which are jointly determined by perceived public value and perceived ease of use (Al-Hujran et al., 2015). These findings have managerial implications that the government needs to pay closer attention to citizen attitude and satisfaction of using government organisations services. On the other hand, another study found that females are more confident and have a more positive evaluation of online services compared to males and interestingly the same pattern shown by the old people compared to the younger people (Veeramootoo et al., 2018).
Governance

Governance is another important aspect in social media especially among public institutions (Saad, Idris, Shaari, Sawandi, & Derashid, 2017). According to Stakeholder Theory, the purpose of governance is to align stakeholders’ interest with the organisation’s interest. Public institutions must fulfill the public’s need of information with the institutions’ objective and interest (Saad, Sawandi, & Muhammad, 2016) Therefore, it is important for the public institutions to provide reliable information and monitor the use of information available from social media, so that the information can then reused by the public to meet their need (Misuraca & Viscusi, 2015).

Previous studies have examined the issue of governance in social media in both private and public institutions. Among the main issue discussed was the non-existence of regulation in monitoring the use of social media. In fact, there is lack of critical studies examining the effect of social media on governance especially in private and public organisations as compared to political setting (Hoffmann & Lutz, 2015).

In the past five years, recent studies focus on theoretical aspect rather than empirical aspects of the importance of governance in social media (DeNardis & Hackl, 2015; Hoffmann & Lutz, 2015; Linke & Zerfass, 2013). Although many institutions claimed that governance of social media has been included as part of their management strategy, however very few developed a regulatory framework related to governance of social media (Linke & Zerfass, 2013).

There are other issues or challenges in governing social media. In the design aspect, there is challenges in developing an effective architecture of the platform (DeNardis & Hackl, 2015). An effective design of social media structure will enhance the effectiveness of communication between the organisations and the public. Another challenge is the public policy related to governing the use of social media (DeNardis & Hackl, 2015). The increase use of personal social media to share work-related information by employees and other stakeholders provides risks and opportunities to the organisation (van den Berg & Verhoeven, 2017) Therefore, it is crucial to develop a public policy that is people-friendly so that the organisations can benefit from social media as an interchange of communication and information (Hoffmann & Lutz, 2015).

Transparency

Social media provides a platform for public organisation to have better transparency in communicating with the public. It provides the opportunity for the public to get access to information, participate and collaborate with government organisations, which can enable
improvement in public service delivery. Transparency is an important element which promotes openness in the delivery of information (Shabri, Saad & Bakar, 2016). Information transparency is a quality that is highly appreciated by the public (Bertot, Jaeger, & Grimes, 2012).

Recent studies have been conducted to examine the use of social media to increase transparency among government organisations. For example, in the context of European Union, many studies highlighted that the use of social media enhanced the level of information delivery transparency in government organisations and enable the citizen to communicate in a more informal manner (Bonsón et al., 2015; Guillamón, Ríos, Gesuele, & Metallo, 2016; Stamati, Papadopoulos, & Anagnostopoulos, 2015).

However, government organisations faced challenges to monitor the two-way communication between the organisations and the public (Bertot et al., 2012). It is difficult to control and verify the information provided by the public and this may influence the dialogue. The role of the public organisation to promote transparency and accountability will continue to evolve in the future despite the challenges faced.

**Conclusion**

Social media has provided an opportunity for government organisations to communicate and interact with the public at large. Due to its various advantages, many public institutions have used social media as a communication tool in serving the public. This study aimed to systematically review the literature to identify emerging themes in social media research in public sector organisations. Based on the findings, four themes emerged in the literature: participation, citizen trust, governance and transparency. The findings informed that social media in public institutions can be harnessed to its optimal potential, but it must be monitored and managed to ensure the effectiveness and efficiency of the social media. This finding can enable managers in government organisations to carefully plan their social media presence based on the identified theme so that it will be beneficial to the organisation, hence enabling ample resources to be channelled into important themes that will improve social media implementation benefits.

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