

United Kingdom Local Authority Challenges in the use of Twitter and Other Social Media

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Abstract—Social media networks (such as Twitter) provide new opportunities for local government agencies to engage with citizens in their local communities. However, there are substantial challenges for such agencies to deal with in these social spaces. This paper provides a critical perspective on the challenges presented in the results of a focused research project on governmental communication through Twitter over a three month period from October to December 2011. The research presented in this paper, contributes to the growing number of research papers related to the effective use of social media platforms in governmental, organisational and other community spaces. Social media platforms are no silver bullet providing only another channel of communication with the customer. However, the identification of ways of using social media for transformative purposes in local government scenarios, are worth identifying and exploring.

Keywords-social media networks; social network analysis; eGovernment; communication channels

I. INTRODUCTION

In March 2012, Facebook reported a worldwide audience of almost 836 million users [1]. In the same month, Twitter reported 140 million active users with 340 million tweets per day [2]. These statistics demonstrate the global presence of networks that have only been in existence for less than ten years. These global audiences may be dispersed, and not always balanced across local communities. With such large user bases, companies are exploring how they can best engage users on these platforms, and leverage a return on investment, from time committed to social media spaces.

Social media platforms such as those named above provide opportunities for individuals to collectively discuss, share, participate, produce, and respond to specific materials dependant on platform (e.g., videos on YouTube and short text messages on Twitter). Many of the social media platforms provide an opportunity for individuals to provide a picture of themselves (often through a profile), and opportunities to obtain and engage with information, often in real time.

UK government is managed through a mixture of national government departments and local government authorities. A primary requirement of the UK democratic system is a need to engage with, and listen to, constituents through a multitude of different access channels. Recently, with the austerity measures imposed across the whole of Europe, and other parts of the world, the UK has had to look again at the delivery of public services. These austerity

measures have impacted on local government funding, meaning in places, cuts in front line services.

Organisations (including local government authorities) recognise the benefits that shifting customer enquiries from physical face to face customer contact centres, to online provision, can bring. These benefits include: reductions in the cost per transaction of customer enquiries; and where front end services are directly connected to back end services the potential for disintermediation. Social media platforms have been identified as platforms through, which to engage in providing front end service information, and in answering customer enquiries in cost effective processes.

Local councils in the UK, are present across a range of social media spaces with many individual councils engaging across multiple spaces. In addition to staff within local authorities engaging within social media spaces, many other publically funded organisations are also using these networks, as mechanisms to engage the local taxpaying public. This network of public sector engagement provides the citizen with direct access to queries about public sector services, and mechanisms for obtaining current localised information.

This paper builds on the research results presented in Mundy and Umer [3]. The previous paper presented the findings from a study focused on the engagement of ten local UK councils within the Twitter network. The paper outlined a range of quantitative statistics regarding the study and indicated a number of issues discovered within the textual analysis of the tweets. The aim of this paper is to explore the deeper challenges presented from the data, determined from detailed textual analysis of the tweets collected for the study. Whilst the study focused on Twitter many of the challenges presented within this paper, can be easily applied to other social media networks. The paper contributes to a growing number of research papers related to the effective use of social media platforms in governmental, organisational, and other community spaces.

This introduction has provided an overview of the importance of social media networks, and the potential for social media networks to impact on the government: citizen relationship. Section II gives an overview of literature in the area of social media communication, particularly highlighting the effective use of social media in government spaces. This is followed by a detailed review of the methodology used to analyse local government conversations in the 'Twitterverse'. These conversations are then used to identify clear challenges in the use of Twitter, and other social media platforms to engage the citizen.

Finally, a series of recommendations linked to the challenges are provided and the paper closes with a conclusion and the identification of further work.

II. SOCIAL MEDIA AND UK GOVERNMENT

The growth of social media is impacting the ways in which communities work, communicate, and socialize. According to Landsbergen [4] social media platforms can help to fulfill the needs of rapid communication, to engage individuals with multimedia artefacts and problematically to blur what is private and what is public. Similar to the demands imposed by users of the short messaging service (SMS) on mobile phones, social media networks demand prompt response, knowledge of and continued engagement with the platform. Twitter, Facebook and YouTube are examples of three multilingual social networking websites launched since 2004 that respectfully provide forums for social networking, micro blogging, and multimedia content sharing (text, video and photos). They give users the opportunity of being real time in a virtual world [5], and enable users to create their own accounts, content channels and interest group sites. Different governments, channels and groups also have their own individual pages and accounts on social media networking sites.

This paper focuses on the use of and challenges in the use of social media, in particular, Twitter by local government in the UK. Research into the use of social media networking sites by national governments, and organisations across the world continues to grow, as we continue to look for how transformative communication can be provided through such channels. Recently, Stephen Goldsmith used the term 'government by network' [6] to describe how online communication channels were being used at different levels of government, to engender a greater sense of participative relationship with citizens. In addition, there is evidence that social media networks when employed effectively have the power to create change in relation to political discourse, encouraging individuals to re-engage with democratic systems [7] and create a greater sense of the citizen voice [8].

Research in the area of government use of social media networks can be broken down into two primary areas of interest:

- Analysis at national level of how parties and political leaders utilise these communication channels to engage citizens with national and international political issues.
- Engagement with how local government organisations are using such platforms to engage citizens with local services and issues.

Research related to local government usage of Twitter is not as well established as national level research, as the national issues often generate more substantial interest. In this national space, the most interesting study to date has focused on how Barack Obama (current president of the USA), utilised the web and social media networks in his historic election victory in 2008 [7]. Other researchers have focused on an analysis of the use of social media networks in relation to encouraging political dialogue [9], the use of social media for political public relations [10] and analysis of

social media channels as political communication channels [11]. Researchers have found from a national perspective that broadcast information over these channels is broadly favoured, and that individual channels are not in themselves 'game changers', but merely an additional communications channels for contact with citizen groups [9]. From a national perspective, it is useful to note Tumasjan et al. [11], which suggests that these network channels can be used to provide a prediction on the results of national elections. This in itself is not unique (given perhaps we could also use analysis of party prevalence in other forms of media or surveys), it does suggest that political discourse at the national level is frequent, and the size of it is nationally relevant on social media channels.

Whilst national issues are of interest this paper focuses primarily on investigating local government discourse. One of the key issues for local government is engendering citizen interaction in positive, and progressive ways. Social media platforms can offer opportunities for individuals within local communities to provide their view on a local issue, report a broken street light, or to simply interact with a local councillor. Researchers such as [6][12][13] have indicated that these channels can enable a transformation in the way in which local government, and citizens communicate leading to transformative relationships developing. In particular, Danis et al. [13] argues that these networks can enable "an atmosphere of co-operation" as citizens work with local government in developing better physical communities.

A barrier to the co-operative atmosphere highlighted in the above paragraph, arises in the ways in which local government utilise social media spaces. Rooksby and Sommerville [14] suggest that the ways in which many local government organizations, manage their information technology infrastructure, and the ways in which local government service structures are established, can limit the ways that such organisations are able to utilise social media systems. They state within these circumstances the use of social media channels "*can only practically be used to broadcast announcements rather than to interact with people*". As a practical example one could posit the traditional ways in which customer service interaction, and public relations are managed in local government organizations, can often lead to uncertainty with regards to the translation of such services on to social media platforms.

Noting the growth in usage, by local government of social media, recently research has been published to try to provide such organisations with a framework of good practice [15]. However, this area continues to evolve and further work is needed to understand where local government is now with its engagement in social media spaces, what the challenges are with regards to this engagement, and how such engagement can continue to evolve. This paper represents work towards establishing a response to the above, highlighting in particular, the challenges to local authorities effective use of social media platforms such as Twitter, Facebook and YouTube.

III. METHODOLOGY

Over the period October – December 2011, tweets related to ten local councils in the UK, were analysed. The councils selected for analysis were drawn from a group of UK councils with active accounts within Twitter. Therefore, the analysis focused only on those councils who were experimenting with this social media network, and were already engaging in some way, with their local populace in the ‘Twitterverse’.

Tweets were collected from within defined council spaces and from outside of defined council spaces. This effectively translates through to collection of tweets that each council had made, collection of citizen tweets to the council, and tweets made which made reference to the council or the local community. It should be noted that no collection was possible for those communications happening within Twitter through private communication channels (e.g. through Twitter’s direct messaging system).

The aggregated data collected provided quantitative metrics covering aspects such as:

- The number of tweets;
- The number of followers;
- The number of re-tweets etc...

In addition, the text within each tweet was analysed in relation to:

- Categorising the focus of the content;
- The direction of the communication (e.g., whether it was just broadcast or a response to another Twitter user);
- An indication of the feel of the tweet (e.g., whether it expressed positive, negative or neutral emotions);
- A detailed content analysis of the messages contained in the tweet content.

In relation to the detailed analysis of the messages in the tweet content, each tweet was read, and broader issues were identified within the tweet content. This paper provides a critical analysis of these broader issues, and identifies the challenges presented by these.

There were a number of limitations presented in the research data gathered within this project. The main issues were linked to the choice of councils, the time of year studied, and the maturity of various councils’ use of Twitter as a communication channel. However, these limitations have limited impact on the broader challenges presented through this analysis work.

In addition to this direct identification of challenges from analysis of the research data, a reverse approach has also been used. Conversation with individuals responsible for social media management in local authority spaces has helped to inform and identify other challenges present within the research dataset.

In total, 1,565 tweets, were analysed from within council defined spaces in Twitter. In addition to this, a substantial number of tweets were also reviewed in spaces outside of council control. Content from the tweets analyzed can be found throughout Section IV in providing evidence, to support the challenges identified.

Mundy and Umer [3] provides initial analysis of the study detailed above. General information about the study is presented including the number of tweets analysed (n=1565), no of followers for each council, and total number of re-tweets made in the sample set (n=191). Detailed quantitative analysis is also provided regarding categorisation of the content of each tweet and the directionality of the communication.

It was found that the most popular reason for councils to make announcements through Twitter is to publicise entertainment, sport or leisure activities occurring in the local area. In addition, the focus of re-tweets made by local councils centred on those services that individual councils wished to highlight most in their local area. For example, Newcastle upon Tyne City Council highlights local library services, Salford City Council highlights local health related services, and the City of Lincoln council highlights local business services. The ways in which many councils engaged with responsive texts were fairly limited, or in some cases non-existent. The most popular categories for responsive tweets from UK Councils were centred on transportation, entertainment, waste and housing services.

Finally, within Mundy and Umer [3] analysis is provided of a range of conversations which occurred within the council Twitter spaces. These conversations point to issues regarding the type of conversation which occurs through Twitter, the presence of offensive content, Twitter best practice, and individual privacy issues. This follow on paper focuses on a deeper critical analysis of the challenges presented within qualitative Twitter content analysed in the earlier study.

IV. LOCAL AUTHORITY CHALLENGES

The next few sections will take an in-depth look at challenges identified in the analysis of the tweets, contained within the study.

A. *Transforming Broadcast Communication*

As noted by Rooksby and Sommerville [14], there are significant challenges in transforming different elements of local government services, away from broadcast only models of communication. Social media communication platforms provide direct public channels of communication between citizens and local government. This can lead to citizens directly criticising decisions made in local communities, and the transparency of local government [3]. It can also lead to citizens raising issues about local service provision or issues related to local areas. The problem is how to construct these social media channels such that appropriate individuals receive the messages related to their particular services, and how to manage this communication within these channels. In other circumstances, often the conversation is less public and more easily controlled – this leads to local government organisations (similar to other commercial organisations) approaching two way conversation in social media spaces, with some trepidation. However, where local government is engaging directly in this form of practice, there is ample evidence that citizens are appreciating this service, with some commenting that social media platforms are the most

effective ways in which they have communicated with government services.

B. Frontend to Backend Integration

Local government must take clear steps to manage the social media channels they are using from the perspective of understanding information flow. Tweets show evidence that for some councils citizens see their twitter spaces as the most effective way to gain answers to questions posed. However, there were a number of cases of citizens not obtaining the information they required. One solution may see customer service staff taking responsibility for the engagement in answering citizen questions, within social spaces, and other specific staff (e.g., marketing) taking responsibility for highlighting council achievements. In addition, customer requests coming in through social media spaces, must be tracked to help to facilitate knowledge of return on investment, as highlighted in Section III.C.

C. Leveraging Return on Investment

With government austerity measures in force, and a reduction in funding to local government in the UK, local councils are busy reducing inefficiencies. Therefore, for social media channels to be embraced they must make clear demonstrable impacts on local citizen engagement. One way in which this can occur, is by moving transactions from more expensive channels (e.g., face to face services) to online information provision. This is where it is important to ensure that the social network spaces are joined up to local government services; otherwise, the cost of a transaction and speed of reply may be similar to other channels particularly if answers are not clear or incorrect. The most effective councils using these platforms make use of the private messaging spaces within social media platforms to provide targeted complete answers to citizen questions.

D. Engaging the Citizen

Engaging the citizen will be helped by a transformation of broadcast communication, but this is not the only challenge to providing an engaging service. Social media platforms are often at their best when the channel providers are utilising the channel effectively by posting new interesting content. Often, individuals will post content that is delivered across multiple social media channels this can cause problems when users are signed up for multiple services, each service needs to be distinctive, and different to engender different user communities. Whilst platforms can be transformative in providing a greater relationship between citizen, and government, they can also be transformative in a negative way, if the use of the channel does not meet with citizen expectations; for example, if the channel is used to broadcast less meaningful information.

E. Privacy Challenges

Social media platforms are not private and often citizens within these spaces are not completely anonymous. This presents a clear challenge in ensuring details of customer cases, are kept out of the public domain. In one particular poor example of this, a council engaged across multiple

tweets in detailing reasons for action, in a specific individual's case. This could be deemed to infringe on data protection when specific details are discussed.

The counter concern is where customers are willing to discuss their individual personal circumstances across public spaces. Councils must learn when to move conversation into more private spaces, and to find ways of educating local citizens about problems related to providing too much personal information within public social media spaces.

F. Engaging with the Conventions

Social media spaces are not the same, all have particular nuances, and the community within different spaces behaves often in particular ways. Understanding the nuances of the platform will lead to greater success in platform use. For example, Twitter encourages users to follow other users and build networks through interconnections of individuals, the community also has established conventions like #FF, which is short for #FollowFriday (Twitter users use this at the end of a week to suggest other individuals to follow). Recognising, understanding and using the structures available can help councils to fit into the community and be seen as an interesting component part.

G. Small Numbers

At present, council social media spaces have relatively small numbers, in terms of percentages of citizens within local communities engaging with the service offered by and through them. However, as councils gain a better understanding of how to use and market their presence on social media networks effectively then these numbers should grow. It may well be for certain community groups engagement through social media spaces is the only way to engage these groups in conversations about local council spaces, and services.

More mature use of social media within council spaces is looking directly at how networks are forming in social media spaces, around the council. Understanding the community in terms of the different types of user present, and engaging in the space, is extremely important. Equally, using the community as a network to advertise the strength of the service should be one thing councils look to do.

H. Endorsement or Community Building

It is evident from the research that the practices that councils are using in building communities within social media spaces differ. Decisions such as whether the council should 'follow' other users or 'join' other groups are not always that simple. However, social media networks are often formed from practices of engaging in community building. For example, presence as a friend may highlight your presence to other users who are interested in you. Similarly engaging in the process of #FF, or re-tweeting content, also provides a sense of social media community engagement, and may influence others in passing on your content. Another example is the highlighting of other videos for consumption within your YouTube channel. However, these community ideals come at a risk, the risk that the content you highlight, are associated with, or pass on is

inappropriate or legally problematic. There is a question over whether associating local councils with other information or users provides a form of endorsement of them or their services, and therefore, whether such endorsement is appropriate given the linkage to public services.

I. Answering the Difficult Questions

Social media spaces provide direct lines of communication to the general public, which are open 24/7 and easily communicable. These spaces are used by individuals for a variety of purposes from communication about particular things happening within local communities, through to information discovery about other places before travel. This creates complications regarding the types of issues raised within these spaces. In many ways, they are the most transparent places for citizens to find out more about what is happening within local communities direct from other citizens. This obviously means that some of the positives will be highlighted, but it also means that many of the issues often kept outside of general knowledge may also be highlighted, and associated with the spaces. For example, conversations about local drug use, anti-social behavior, areas of violence, and other criminal activity.

J. What is the difference?

Many of the above points raised as challenges for local authorities in these spaces can also be linked directly to challenges for large organisations. However, the interesting question is whether there is anything that distinguishes the challenge for e-government. In this area, there are thought to be two major differences.

The first is the increased transparency and profile of the service, money to fund engagement of councils within social media spaces comes directly from the UK public purse. The service needs to have a clear demonstrable impact for citizens within the local community to deem this as successful. The UK press are quick to highlight customer service failings in online spaces; take, for example, Tameside Council's experimentation with a virtual customer helpdesk in Second Life described as "absolutely barmy" [16]. Although the value has to be demonstrated in large private organisations, they are not forced to be as transparent; for example, with detail regarding cost of service.

It is interesting to see citizens commenting on the state of local government transparency through social media spaces, e.g., "#organisation is in breach of international law, but wants the £4.7bn contract for N London waste. Tell #Camden council 'No' #Palestine #Gaza@" and "People getting turned away... doesn't feel like an 'open council' tonight. #newcastle" These suggest that UK citizens are willing to use the service directly to let councils know when they seem to be doing things thought not to be in the public interest.

The second perceived significant difference is that councils could be deemed to have a requirement to engage the citizen, whether this is in citizen democracy, or in conversation regarding quality of services. Other organisations may choose to engage customers but local

councils need to engage citizens. Therefore, understanding where particular customer groups are conversing, and using up to date mechanisms for engaging citizen groups should be a clear part of the strategic engagement for all local councils.

V. CONCLUSION AND FUTURE WORK

The challenges outlined above demonstrate that councils need to think carefully about the ways that they use social media channels to engage the citizen. Arising from the analysis, recommendations can be formed as to what councils should consider in having a presence, within these spaces. The recommendations themselves are not new but it is evident from the research that councils are not completely engaging in understanding, and applying, the recommendations in practice.

Understand the channel – Each channel has particular nuances, those councils who understand how these work seem from the data analysis to be perceived more preferably within the social media community. In addition, those demonstrating an understanding of the channel seem to obtain the greater amount of participation and the greater amount of two way communication.

Engage the citizen – From the research there was evidence that some councils are still not engaging in any form of two way dialogue, within social media spaces. Those councils who were engaging in a conversational manner with constituents, seem to have been generating a positive response to their social media engagement.

Develop policy – It was evident within the research that few councils had developed a charter for their and their citizens engagement within social media spaces. Developing clarity over what is and what is not acceptable in the spaces, may form a barrier to conversation but would provide a clearer sense of the general rules of engagement within the space. One argument may be that the spaces themselves often have guidance over what should and should not occur within the social media channel, however, in some cases, this may not be restrictive enough.

Advertise the channel – The best form of advertising in social media spaces, is the citizen. However, many organisations are finding innovative ways to highlight their involvement within the spaces. For example, Marseille FC offered their fans the opportunity to design a shirt if they gained a set number of Facebook followers. The best advert for any social media channel is the value added to customer experiences. If the channel is perceived as useful then it is likely that individual users will pass on that information, whilst if the channel provides in the main useless information, then it is likely to be ignored.

Integration – As outlined as a channel above, integration is extremely important for local councils. Managing the ways in which information flows into (in the form of physical posts), and out of the social media space is crucial (in the form of citizen driven requests or data). Social media use should not be in the hands of a singular person tagged with the responsibility of a social media producer, or equivalent. However, the ways in which councils, are represented within the space, is extremely important. There is a clear balancing act between bring overly prescriptive and transparent (e.g.,

tagging each post with a service representatives name) through to allowing for total freedom of employee engagement within the space. In addition, there are significant questions, which arise linked to whether engagement within social media spaces should be part of the role of senior figures such as chief executives of local councils.

Withdrawal – It is evident over the past ten years that developed spaces will fall in, and out of popularity. Early providers of social media platforms are finding reduced network engagement over time whilst newer platforms have come in, and filled their spaces. Therefore, councils need to manage their portfolio understanding how decisions are made to engage within particular spaces and when decisions should be made to withdraw from engagement within the space. This is a particularly complicated problem if there are constituent groups who maintain loyalty to particular social media spaces. In this space, councils should also consider audit and control mechanisms. If particular networks were to be forced to close it would be problematic if materials stored within those spaces were not stored in one form, or another. In addition, ensuring that any information that would generally be stored for legal purposes in the physical space, can be retrieved when engaging in virtual spaces.

The analysis, which led to the indication of challenges for local councils in engagement in social media spaces, did in itself, demonstrate a lack of lack of true engagement at present in these spaces. A particular problem for councils is moving away from the broadcast model given the often fragmented nature of services, and the traditional customer service mechanisms used. The analysis highlighted that councils need to do more to understand the types of data customers want to see within these spaces, and a need to understand more appropriate strategies for managing public:private communication through the different channels. These findings should be of use and relevant to national and international managers of e-Government web services, government legal teams and senior managers in eGovernment.

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