

Reflections on UK Local Government Challenges in the use of Twitter as a Communications Channel

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Abstract — Over the previous five years local government agencies have begun to use social media networks (such as Twitter) as mechanisms to promote engagement with local citizens. However, as identified in previous research there can be substantial challenges in relation to the use of these spaces to encourage bi-directional conversation and engagement. 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 and a one month period in August 2013. 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. It is clear that as service provision develops, a growing maturity of usage is enabling councils to further develop their understanding of what is good practice in communicating through social media channels.

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

I. INTRODUCTION

This paper provides an extension of work presented at the Second International Conference on Social Eco-Informatics in Venice in October 2012 [1]. The work centres on an analysis of local government communication using the social media platform of Twitter. This extended work uses further analysis of communication over the month of August in 2013 to reflect on the initial findings and posit further challenges to social media communication for local government organisations.

In March 2012, Facebook reported a worldwide audience of almost 836 million users [2]. In the same month, Twitter reported 140 million active users with 340 million tweets per day [3]. 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 Facebook, Twitter, Pinterest, YouTube, Google+ etc. 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. In addition, such platforms provide opportunities for individuals to discover new mechanisms to engage with existing organisations or to discuss organisations in a public setting.

One such organisation that individuals around the world are using social media platforms to engage in discussing is their national and local government. This paper focuses specifically on engagement by the public with local government services. 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.

Over the past three years 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 and reductions in service provision.

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. UK government recognises how multi-channel solutions can be developed, however, more recently there is concentration on matching the most effective channel with the most appropriate service. It is also recognized that this service may not necessarily be the lowest cost of contact, as this may not necessarily translate through to the lowest cost of transaction, e.g., because of error percentages or the need for multiple contacts.

Local government agencies in the UK consist of county, district, borough, city, and unitary authorities. These agencies provide a mixture of local management functions including those focused on education, transport, the environment, recycling and waste. Such councils are present across a range of social media spaces with many individual councils engaging across multiple spaces. Structures of staff engagement vary with some councils creating cross departmental structures to facilitate wider council engagement, whilst others limiting engagement to singular

teams. 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 [1][4]. The initial paper of this study presented the findings from research focused on the engagement of ten local UK councils within the Twitter network. It also outlined a range of quantitative statistics regarding the study and indicated a number of issues discovered within the textual analysis of the tweets. This was followed by a paper [1] exploring the deeper challenges presented from the data, determined from detailed textual analysis of the tweets collected for the study. This study extends [1] and [4] providing updated quantitative results for 2013 and a reflection of the meaning of these results on the deeper challenges. In addition, a further couple of challenges are presented coming out of the 2013 data.

Whilst the study has focused on Twitter throughout each of the delivered papers, 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 [5] 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 [6], 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’ [7] 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 [8] and create a greater sense of the citizen voice [9].

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 [8]. Other researchers have focused on an analysis of the use of social media networks in relation to encouraging political dialogue [10], the use of social media for political public relations [11] and analysis of social media channels as political communication channels [12]. 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 [10]. From a national perspective it is useful to note [12], 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 [13][14][7] 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, [14] 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. Reference [15] suggests 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 [16]. 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 periods October – December 2011 and August 2013 tweets related to ten local councils in the UK were analysed. The results of this analysis for 2011 have been provided in [4]. The research presented below updates the earlier analysis looking at how councils have changed their practice over the past two years and focuses on a critical analysis of the challenges presented.

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 in 2011, and were already engaging in some way, with their local populace in the ‘Twitterverse’. It is notable that all the analysed who were using Twitter in 2011 have continued to use Twitter and continued to grow their communities in the updated research in 2013.

Tweets were collected from within defined council spaces and from outside of defined council spaces in 2011. For the updated research in 2013, the focus stayed within defined council spaces. This effectively translates through to collection of tweets that each council had made (2011, 2013), collection of citizen tweets to the council (2011,

2013), and tweets made, which made reference to the council or the local community (2011). It should also 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;
- understanding the direction of the communication (e.g., whether it was just broadcast or a response to another Twitter user);
- 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 from 2011 and 2013 tweet samples. This paper provides an updated critical analysis of these broader issues from earlier papers [1], 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 for 2011 and 1,264 tweets for 2013, were analysed from within council defined spaces in Twitter. As an addition to this a total number of 593 re-tweets from other organisations included in the council communication channels were also analysed. Finally, a substantial number of tweets were also reviewed in spaces outside of council control.

IV. ANALYSIS OF RESULTS

Table I provides detail about council activity in Twitter (measured by the number of Tweets) and the number of individuals who have signed up to follow each channel within Twitter (measured by the number of followers). This detail is provided for October – December 2011 and September 2013. The data demonstrates that over the past two years all the analysed government organisations have continued to Tweet and expanded the number of individuals following their service, with all councils registering greater than 50% increases in their network followers.

The number of followers as a percentage of the population was also calculated in 2011 based on census data.

Whilst the percentage has substantially grown it still represents across all councils a small proportion of the total population. Over this time whilst the community has grown in number of followers it is likely that the number of followers from outside of council areas has also continued to grow.

TABLE I. GENERAL DATA ABOUT SELECTED COUNCIL SPACES

Council	No of Followers (Jan 12)	Total No of Tweets (Jan 12)	No of Followers (Sep 13)	Total No of Tweets (Sep 13)
Newcastle Upon Tyne City Council	8637	4533	19875	8021
City Of Lincoln Council	3215	2740	6617	4181
Tameside Metropolitan Borough Council	3357	2242	8131	7492
Salford City Council	4797	3585	10857	7237
Leeds City Council	6803	1631	14798	6407
Oxford City Council	4541	546	8970	1721
Southend-On-Sea Borough Council	2115	1241	6280	5213
Camden London Borough Council	4034	2665	8516	5984
Kirklees Council	4089	3685	9672	6903
Wakefield Council	3024	2090	8450	6593

TABLE II. INFORMATION ABOUT TWITTER DATA SET

Council	Total No of Sampled Tweets (Jan 12)	Total No of Re-Tweets (Jan 12)	Total No of Sampled Tweets (Sep 13)	Total No of Re-Tweets (Sep 13)
Newcastle Upon Tyne City Council	170	48	48	19
City Of Lincoln Council	151	29	89	2
Tameside Metropolitan Borough Council	71	12	382	98
Salford City Council	317	48	129	18
Leeds City Council	112	21	84	81
Oxford City Council	49	23	38	11
Southend-On-Sea Borough Council	83	0	25	9
Camden London Borough Council	162	0	185	35
Kirklees Council	266	7	102	17
Wakefield Council	184	3	182	112

Table II includes information about the sample set of tweets collected in 2011 in relation to the initial study and the set of tweets collected in 2013 expanding the study and capturing changes in use. For 2011, the table states the number of tweets captured for analysis between October and December 2011. For 2013, the table states the number of tweets captured over August 2013. This number is in essence the number of tweets made by the council over the specific periods of time. In addition, the number of re-tweets by the council is also captured. Re-tweets are those tweets that are the tweets of other users that the council has chosen to re-broadcast within their network.

Over the initial period of analysis, Salford City Council was the most active tweeting council with 317 tweets, whilst Oxford City Council was the least active. In the updated 2013 analysis Tameside Council was the most active tweeting council, with Southend-on-Sea Borough Council being the least active. From a re-tweet perspective Newcastle upon Tyne City Council and Salford City Council were most prolific in re-tweeting community messages in 2011, whilst Southend on Sea Borough Council and Camden London

Borough Council made no re-tweets. For the updated analysis Wakefield Council were most prolific in re-tweeting community messages, with Lincoln City Council being the least prolific. In the 2013 analysis all councils were engaged in re-tweeting content. Significant increases in the amount of re-tweeted content have occurred in Tameside Metropolitan Borough Council, Leeds City Council and Wakefield Council. This suggests that these councils have adapted their practice over time and are now gaining a better understanding of how re-tweeted content can improve their service.

Table III contains information about the categorisation of the tweets sampled in relation to whether they are simple announcements from the council to the community, or whether the tweets are responses to community members. A response in Twitter generally (but not always) begins with the username of the Twitter user that one is responding to. This table demonstrates the level of engagement between council and citizen through Twitter. In the main this shows that the majority of councils are now clearly engaging in citizen conversation through Twitter. Leeds City Council

have moved their citizen communication into a different Twitter feed, so the numbers shown in this particular table do not show the full picture. The sample set in 2011 showed a number of councils were not really using Twitter in the way it was designed as a social communication channel which

encourages two-way conversation. This is clearly not the case in 2013.

Tables IV, V and VI contain information about the textual content of each tweet categorised in relation to a range of council services.

TABLE III. DIRECTION OF COMMUNICATION

Council	Announcement 2011	Response 2011	Announcement 2013	Response 2013
Newcastle Upon Tyne City Council	115	10	47	1
City Of Lincoln Council	42	77	58	29
Tameside Metropolitan Borough Council	49	10	193	189
Salford City Council	184	85	53	76
Leeds City Council	56	35	76	8
Oxford City Council	16	10	33	5
Southend-On-Sea Borough Council	83	0	18	7
Camden London Borough Council	63	99	85	100
Kirklees Council	235	24	71	31
Wakefield Council	164	17	137	45

TABLE IV. FIVE MOST POPULAR CATEGORIES FOR ANNOUNCEMENT TWEETS

Council	Sport, Leisure & Entertainment	Business	Housing	Jobs & Careers	Parking, Roads, Travel & Transportation
Newcastle Upon Tyne City Council	13	3	1	1	5
City Of Lincoln Council	13	1	7	7	8
Tameside Metropolitan Borough Council	98	11	17	2	18
Salford City Council	15	4	2	13	3
Leeds City Council	28	8	5	6	1
Oxford City Council	8	3	11	3	2
Southend-On-Sea Borough Council	5	0	3	0	1
Camden London Borough Council	26	10	3	13	0
Kirklees Council	40	6	0	1	2
Wakefield Council	97	4	0	1	2

TABLE V. FIVE MOST POPULAR CATEGORIES FOR RE-TWEETS

Council	Sport, Leisure & Entertainment	Business	Jobs & Careers	Bins & Recycling	Education
Newcastle Upon Tyne City Council	5	4	0	0	0
City Of Lincoln Council	1	0	0	0	0
Tameside Metropolitan Borough Council	38	3	6	11	3
Salford City Council	10	0	1	2	1
Leeds City Council	33	3	6	6	10
Oxford City Council	5	0	0	0	0
Southend-On-Sea Borough Council	6	0	0	2	0
Camden London Borough Council	7	17	6	1	1
Kirklees Council	9	2	1	0	2
Wakefield Council	88	6	2	0	0

TABLE VI. FIVE MOST POPULAR CATEGORIES FOR RESPONSIVE TWEETS

Council	Bins & Recycling	Reporting	Parking, Roads, Travel & Transportation	Sport, Leisure & Entertainment	Business
Newcastle Upon Tyne City Council	1	0	0	0	0
City Of Lincoln Council	3	7	5	1	0
Tameside Metropolitan Borough Council	78	27	23	17	10
Salford City Council	26	19	10	7	2
Leeds City Council	2	0	1	1	2
Oxford City Council	0	3	0	0	0
Southend-On-Sea Borough Council	0	2	0	2	0
Camden London Borough Council	20	29	24	1	10
Kirklees Council	5	6	4	5	3
Wakefield Council	1	7	5	17	4

In 2011, in terms of announcements via Twitter the most popular reason for tweeting was to publicise entertainment, sport or leisure activities occurring in the local area. There was no change to this in the 2013 sample set. The only event which all councils engaged in tweeting content about during the August 2013 period was the release of educational results, with all councils commenting on the performance of their local students. The rest of the announcements varied by council, with for example, City of Lincoln council advertising conversations with their local council leader, Camden London Borough Council announcing government results of the development of a high speed rail network (HS2), and Tameside Metropolitan Borough Council making a range of announcements relating to temporary recycling arrangements (because of a fire in the local neighbourhood).

In relation to responsive tweets from the council to local citizens these primarily centred around transportation, entertainment, waste and housing services in 2011. In 2013, the primary areas of interest focused on waste management, reporting and transportation services. In general very few conversations within Twitter in 2013 lasted for any significant length of time. In general conversations resolved issues, or in the case of a number of councils moved more significant issues out into direct messages or email. Outside of the most popular categories of conversation, responsive tweets in other categories related to a single or couple of conversational instances about particular issues.

Finally, councils in 2011 were fairly inconsistent with regards to re-tweeting content across categories, with re-tweeted content seeming to centre primarily on local council priorities. This inconsistency also translated into the 2013 sample, however, all councils continued to provide some re-tweeted content related to sports, entertainment and leisure activities. Local priorities changed between 2011 and 2013 primarily relating to specific concerns of the period of time sampled. One example of this is Tameside Metropolitan Borough Council who during the course of August 2013 re-tweeted content (categorised as 'other') from the local fire service related to a substantial fire at a recycling plant in the local area.

V. LOCAL AUTHORITY CHALLENGES

The next few sections will take an in-depth look at challenges identified from the analysis of the tweets sampled in 2011. This material is extended and updated to reflect on the meaning of the 2013 research in relation to what has changed and whether the challenge continues to be valid. Sections J and K deal with recently identified challenges taking into account analysis of the 2011 and 2013 datasets.

A. Transforming Broadcast Communication

As noted by Rooksby and Sommerville [15] 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 [4]. It can also lead to citizens raising issues about local service provision or issues related to local areas. This is certainly apparent across the datasets from 2011 and 2013.

The challenge therefore 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.

It is clear between 2011 and 2013 local government has significantly matured in relation to how this communication process is handled. In 2011, there was a feeling from the dataset that often the channel was used as the direct mechanism to achieving resolution, foregoing existing channels for resolution. In 2013, there are two specific mechanisms highlighted to demonstrate how councils are gaining an understanding of how to handle the channel. The first is the direction of individuals to recognised mechanisms

for reporting, e.g., email addresses for waste services or web based report forms. The second is the establishment of specific Twitter feeds for issue resolution, e.g., feeds for particular services recycling and or feeds for direct help, for example Leeds_Help.

Over both sample sets there was an indication that where local government is engaging directly in conversation with the local citizen base and helping to resolve issues, there is ample evidence that citizens are appreciating this service. In 2011, there was evidence of individuals commenting that social media platforms were the most effective ways in which they have communicated with government services. In 2013, there was no indication of this. Indeed, where the approach had matured into a direction of issue to either a web form or email service there was an indication that some individuals were resenting a multi-channel approach, e.g., asking questions as to why issues could not be raised and resolved directly through Twitter.

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, in 2011 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 C.

As noted in Section A as services have matured since 2011, the way in which the service is provided via Twitter is changing. Councils are adopting different approaches in realising good practice through this communication mechanism. Approaches such as encouragement of services, councilors and other council operatives to develop their own Twitter presence, demonstrate mechanisms for encouraging community communication. This also enables community members to sign up to information purely about the singular or groups of elements of service most interesting to them, enabling better information management from a citizen perspective. In addition, it is clear that councils are understanding the need to control integration between front and backend services with messages passed quickly to other services, either directly by the Twitter feed operators or through re-direction of the client.

For the most part the problems experienced of issues raised in relation to a lack of reply through the Twitter channel have disappeared between 2011 and 2013. However, it is clear that users are not slow in letting the feed know of a lack of response by the specific service providers, e.g., if bins continue not to be collected or if issues reported continue not to be resolved. It is positive to see that where issues are resolved in a multitude of different cases users are also using the Twitter channel to broadcast their thanks.

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. Austerity measures have continued over the 2011-2013 period with many councils experiencing substantial reductions in funding and asking members of the public to respond in terms of which local services require protection through public consultation. In some cases over 2011 and 2013 this public consultation extends to or is advertised through the local governments Twitter channel.

In the light of the above, 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.

Over the previous two years this particular challenge seems to be becoming more problematic. One of the reasons for this is Twitter itself, which encourages short message communication. This means that often members of the public need to engage in multiple tweets to inform the council regarding a particular issue. It also involves the council in the first instance trying to diagnose the issue, in order to be able to respond. In addition, as an asynchronous communication channel there can be delays between tweet responses from the citizen to the council and vice versa – this creates challenges in itself. With the above this all leads to questions over the cost of service, especially in comparison to other channels, it could be determined that the cost of a phone call would be less than the cost of multiple tweet communications, demonstrated by some councils pushing citizens directly through their Twitter channel to the phone service to engage the council with their issue.

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.

Over the past two years across Twitter channels this particular challenge has continued to become of real interest with councils finding creative ways to positively engage with the local populace. Some of the more interesting and engaging content has come in the use of different media types and different social media channels, with Twitter being used as a navigation tool to other items. For example, viral videos about particular challenges in the local area (e.g., a dog waste production by Wakefield Council) creating positive citizen response and the way in which they engage in re-tweeting positive local citizen messages.

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 in 2011, a council engaged across multiple tweets in detailing reasons for action, in a specific individual's case related to their housing situation. 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.

In the 2013 dataset there was certainly substantially more maturity demonstrated in the use of service with Councils channeling personal information through the direct messaging tool or through email communication. In addition, the growing use of privacy functions in Twitter limiting and providing protected services for individual tweets is helping to improve this particular issue.

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. It is evident that now with mature services council are gaining a much better understanding of the platforms they are using and are understanding how to generate and promote community building. Re-tweets, modified tweets (MT), #FF and other conventions are now regularly forming part of council communications.

G. Small Numbers

In 2011 and 2013, council social media spaces can be deemed to be attracting 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 continue to 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.

Whilst over the past two years numbers have grown, this challenge is still of direct relevance. If numbers of followers continue to grow then this will demonstrate community growth, but the question is how many active members of community are obtaining information about the service, and how many accounts linked as followers are not actively viewed on a regular basis? The number of followers is not a strong enough performance indicator of community size.

More mature use of social media within council spaces will continue to look 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 continue to look to do.

H. Endorsement or Community Building

It is evident from the research that the practice that councils are using in building communities within social media spaces, differs. 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.

The data set in 2013 demonstrates changes in relation to council behavior regarding re-tweets, with differences in the number of re-tweets by councils, and in the types of organizational content re-tweeted. There are some good examples of re-tweet engagement by councils in engaging in re-tweeting positive local community communications. Twitter also requires users to follow one another to engage in direct messaging and other services, this means that community growth occurs through necessity in some circumstances.

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.

More recently some councils are using the creation of multiple Twitter channels to direct individuals to the most appropriate information. For example, providing information particularly focused on tourism services, to navigate individuals away from issues related to local fly tipping, or graffiti, and or issues in local neighbourhoods. It is however particularly evident that issues raised in relation to local areas have continued over the past two years with concerns raised that councils may wish to remain out of public channels. There is a fair amount of evidence in the 2013 sample set of citizens visually capturing their concerns using photographs further emphasizing issues in local areas.

J. Social Media Policy and Channel Closure

In 2011 it was noted that there was a limited amount of information regarding specific policy for how councils were going to use Twitter and other platforms as a service, generally categorised by a lack of clear social media policy. In 2013 whilst a social media policy could not be found for all councils, the more prolific councils with a range of social media services had developed clear policy to control this.

Councils are also through their Twitter page adequately communicating a brief description of the channel itself and information such as when the service is monitored. This is a good demonstration of how councils are adapting to ensure that individuals are aware that whilst the web operates 24/7, council services cannot be delivered in the same way.

As identified in [4] councils need to plan for closure of social media channels as much as they need to specify how they are using these in relation to their local community. For those councils pushing conversation directly out of Twitter through other service mechanisms there is a clear question regarding Twitter service lifetime.

K. Sentiment about a place

With the increase in engagement demonstrated by some councils with issues raised by the local population comes a significant challenge for councils, that of demonstrations of community sentiment. Recent developments by Sykora et al. (2013) [17] targeted at developing systems to measure the level of positive and negative feelings for the nation highlight one of the issues with social media. It is clear from

reading through sample sets for the various councils involved that an appreciation for the feelings of the local population towards the council can be developed from such materials.

Twitter feeds for councils such as Salford City Council and Camden London Borough Council felt fairly negative in relation to the content exposed, whilst the Wakefield Council feed felt very positive. From a public relations perspective councils need to develop mechanisms for providing positive/negative balances within these community conversational spaces to ensure that the community engages in positive ways with the service, rather than in some circumstances fairly negative attitudes.

One of the concerns related to the above is how councils deal with community issues. One of the problems with moving individuals straight to direct messaging or straight to another mechanism of engagement is that the issue is not closed off within the Twitter space, generating a feeling of a number of community issues. Although Twitter only has a limited number of words, councils need to find a mechanism to positively close off issues, even when moved into other spaces. For example, closing text of “and your issue will be resolved”, or something similar, would provide a positive end.

L. 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, this was described as “absolutely barmy” [18]. 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... does not feel like an 'open council' tonight. #newcastle” These suggest that UK citizen’s 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.

VI. DISCUSSION

The challenges outlined above in response to 2011 and 2013 datasets 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 operate 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. It is clear that as service matures understanding of channel operation also matures. It would seem engaging other councils or organisations with maturity in using social media spaces can be a good first step to channel development. In addition, watching as other councils change practice can help to identify positive mechanisms for transforming conversation through Twitter channels.

Engage the citizen – From the research in 2011 there was evidence that some councils were not engaging in any form of two way dialogue within social media spaces. Those councils who were engaging in a conversational manner with constituents, seemed to have been generating a positive response to their social media engagement. In 2013 all councils were engaging in some way with their local populace through the channel. One reason for this will be local citizens gaining knowledge of channel existence, and another reason will be the growing maturity of service.

Develop policy – It was evident in 2011 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. In 2013 some councils still need to develop and clearly broadcast their policy regarding social media service usage.

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 twelve 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.

VII. CONCLUSION AND FUTURE WORK

Tweets analysed over the past two years within this study offer a snapshot of council engagement with the public through the social media network platform of Twitter. This snapshot provides information of a specific time for a specific subset of councils. It is clear from this sample that over the past two years an initial indication in 2011 of a lack of true citizen engagement through a social media platform such as Twitter has been transformed with all councils demonstrating clear engagement. Councils are understanding how these services fit within their customer service portfolio and developing mechanisms to help resolve local problems brought forward through conversation in these spaces. Over the next few years these communication channels will continue to mature, as councils continue to re-think the ways in which they encourage individuals to interact with their service provision and as councils continue to review how their services operate.

Future work will continue to focus on usage of social media services by local government organisations. In

particular it may be useful to analyse particular groups of users and their engagement with such services. This type of analysis would provide an understanding of how such services can be used to positively benefit citizen experience.

Utilising approaches for greater automated analysis of tweets may bring greater understanding of the types of tweets provided and the ways in which councils are engaging with the population. In addition, content analysis provided through opinion analysis algorithms being developed at the University of Hull and other institutions will also offer greater dimensions on engagement.

The findings presented within this paper should be of use and be relevant to national and international managers of e-Government web services, government legal teams and senior managers in eGovernment.

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