

# Strategic use of Twitter in Local Government

## *A Northern Ireland Study*

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**Abstract:** This paper presents the results of a survey of Twitter usage in Northern Ireland's twenty-six councils. The data was gathered in Summer 2012. The research questions were developed from a review of the literature on use of social media by government and focused on the role of social media as a communication channel to local government, examining the dialogue between government and citizen and the sentiment of such dialogue. The results show significant heterogeneity in Twitter use amongst the councils; with many not engaging at all, while a small number were highly engaged with their citizens. Regardless of the perspectives of the councils, there was evidence that there was a demand from the citizens for conversations that was not being met by the councils. The paper recommends that councils need to define a social media strategy in order to maximise the use of social media, but reflects that the councils should find it easy to engage with citizens by simply asking them via Twitter.

## 1 INTRODUCTION

The social web provides governments with the opportunity to achieve greater citizen engagement and deliberative exchange (Rishel, 2011). Microblogging sites such as Twitter, which allow for the instant sharing of updates, opinions and information, can help governments transform how they relate to citizens (Aharony, 2012). However social media adoption alone does not automatically lead to improved government-citizen relationships (Hand and Ching, 2011). Despite increasing pressure on governments for greater transparency and accountability, there is limited evidence to suggest that they are capitalising on the interactive properties of social network sites such as Twitter when communicating with citizens (Hand and Ching, 2011); (Bonsón et al., 2011). Consequently, recent studies have highlighted the need for research which examines government use of social media and the extent to which it is supporting a collaborative, decentralised approach to governance (Dixon, 2010).

## 2 LITERATURE REVIEW

The transformative potential of social media to help public, private and third sector organisations enhance communication and ultimately democratise relationships with their publics is well documented (Kelleher, 2009); (Brainard and McNutt, 2010); (Rishel, 2011). Supported by Web 2.0 technologies, which inherently 'facilitate creativity, information sharing, and collaboration amongst users' (O'Reilly, 2005), social media can be defined as a group of Internet applications enabling the creation, sharing and exchange of comments and content in virtual communities or networks (Ahlqvist et al., 2010); (Kaplan and Haenlein, 2010). The most popular social media by number of users globally, include the social network sites Facebook, Twitter and Pinterest (Viraj, 2012).

Social media's 'interactive and communal' capabilities mean that individuals no longer simply consume content but also produce and share content of their own (Kaplan and Haelein, 2010). From an organisational perspective, social media therefore provides the opportunity to evolve from a 'one to many' broadcast communicative approach to a 'many to many' model of communication, in which

collaborative and participatory interactions with stakeholders are proactively encouraged (Bruning et al., 2007); (Chen, 2009); (Hearn et al., 2009). Social media applications therefore enable organisations to shift their communication style from a 'one-way flow of information' to 'dialogic engagement' whereby views and opinions are openly exchanged and negotiated to achieve mutually beneficial outcomes (Kent et al., 2003).

'Dialogue' and 'engagement' are core tenets of the UK Government's overall communication policy. The policy aims to encourage more citizen engagement in the democratic process by redefining how Government and constituents interact (UK Government, 2011). Bruning et al. (2007) suggest that cities and citizens engaging in dialogic communication have an increased propensity for mutual understanding of each other and the issues at hand. Hand & Ching (2011, p.364) describe social networks as providing an ideal forum for citizen engagement at a local level by supporting interaction between residents and government as well as between resident and resident. Such resident-to-resident interactions can lead to personal recommendations or electronic word-of-mouth (Ho and Dempsey, 2010). They caution however that a council's presence on social networks does not automatically result in increased citizen engagement. Their findings suggest that in order for meaningful interaction to occur, careful consideration must be given to the tone and content of posts. Cities that specifically elicited comments by asking questions and posting positive, relevant content in a conversational style tended to have a higher number of comments. Citizens also responded well to timely posts and comments, suggesting the need for city councils to actively monitor and manage their social media presence.

Bonsón et al. (2012, p.123) state that social media are ideally placed to 'enhance interactivity, transparency and openness of public sector entities and to promote new forms of accountability.' They suggest that through social media use the public sector can not only increase access to agendas, policies and news, but also improve both policy making and public services by encouraging the exchange of views and information. Importantly, the use of social media for interaction and collaboration is more likely to lead to increased trust and empowerment amongst citizens, and social capital within communities (Bertot et al., 2010).

UK Government departments recognise the importance of technology to empower citizens to become more actively involved in local governance

issues (Williams, 2009). Yet there is limited evidence to suggest that technology use by local government extends beyond the automation of administrative processes to facilitate public access to information and services (Dixon, 2010). The extent to which local councils are adopting social media and capitalising on its interactive capabilities remains unclear (Welch et al., 2005); (Bertot et al., 2010); (Dixon, 2010); (Hand and Ching, 2011). The purpose of this study is to investigate the uptake and use of the social network and micro-blogging site Twitter by local councils in Northern Ireland.

Twitter is the one of the fastest growing social network site globally, and is second most popular (Viraj, 2012). It has multiple functionalities providing different levels of interactivity (Bonsón et al., 2012); (Burton and Soboleva, 2011). It allows for instant messages ('tweets') of a maximum of 140 characters, which followers can then read, respond to or share via 'retweets'. Tweets generated can either retweet content from others or can contain and link to original content. The use of hashtags # and mentions @ within tweets makes them more likely to be found by people for whom the content is relevant and interesting. Twitter can also be used to respond to comments and questions publicly through mentions, or engage in private, one to one communication with followers via direct messaging.

This study is designed to ascertain if and how councils in Northern Ireland are using Twitter. It investigates whether councils use Twitter primarily as an additional broadcast channel, or to support a decentralised approach to government by encouraging dialogic, many to many communication with citizens. Finally it will examine whether individuals are exchanging comments and content relevant to local councils outside of official Twitter channels.

### 3 RESEARCH FOCUS AND METHODOLOGY

Previous studies have tended to discuss use of social media in the public sector in broad terms with little empirical data (Chun and Reyes, 2012). As mentioned already, the purpose of this study is to empirically investigate the uptake and use of Twitter by local councils in Northern Ireland. Twitter was identified as the main focus for this study since this social media and micro-blogging platform has been identified as the most commonly used by local governments across Europe (Bonsón et al., 2012).

The research focuses on fundamental questions regarding Twitter usage by the councils. These research questions include:

- Are councils using Twitter? And if so, how?
- Do councils use Twitter primarily as an additional broadcast channel, or to support a decentralised approach to government by encouraging dialogue?
- Do individual citizens exchange comments and content relevant to local councils outside of official Twitter channels?
- What topics are discussed by councils and citizens?
- What kind of sentiment is evident in the dialogue between councils and citizens?

Supported by the conclusions from the literature review, we advanced our first hypothesis: "Councils use Twitter as a broadcast channel of information and events". For our second hypothesis, we assumed that information and events are useful and/or popular subjects, as well as generally neutral and thus that "Citizens follow and comment their Council's tweets with a positive or neutral sentiment".

There are currently twenty-six councils in Northern Ireland, ranging in type from city, borough (BC), city & district (CDC), and district council (DC) (See Figure 1). Over the Summer of 2012, data pertaining to the twitter usage of these councils were collected and then analysed. Twitter was used to identify councils by name and if no council could be easily identified, Twitter was searched using the name of the geographic area. If this process revealed no official Twitter account for the council and their web site had no linkages to an official council Twitter account, then that council was classed as having no official Twitter account.

The research was carried out in two main stages; an initial exploratory stage gathering basic statistics for the Twitter usage by council, and then a more detailed examination of content of what was being tweeted and what conversations were on-going between government and citizens. In the first stage, the browser-based Twitter platform was used to identify candidate council Twitter accounts. The tweets from this set of candidate accounts were browsed in order to determine that the account was an official council account. In the second stage, we used the Twitter platform and a sentiment-mining tool called Repknight<sup>1</sup> in order to understand the sentiment of the tweets. We also used the Repknight tool to search the tweets from individual councils for key words and phrases.

<sup>1</sup> www.repknight.com

## 4 RESULTS

The initial approach showed that, among the 26 councils on Northern Ireland, a high number of them (18) have registered a Twitter account, despite the fact that the majority do not advertise it on their webpage (Table 1). However, looking at both the recent and long-term activity of the accounts revealed a large discrepancy on Twitter usage. Five of the existing accounts may be classified as inactive (Antrim BC, Limavady BC, Magherafelt DC, Moyle DC and Strabane DC), since there hasn't been a tweet for more than one year and, while active, they registered a very low number of tweets. Curiously, some of these accounts have a higher number of followers than accounts that are more active. This might indicate that, despite an absence of commitment from these councils, there is demand for such a channel of communication.

Nevertheless, compared to the population of Northern Ireland and their respective councils, the number of followers is very low, less than 1% in most cases.

The only exceptions are Belfast CC (4.7%) and Cookstown DC (1.2%). However, given that Belfast is the capital city of NI, we should not rule out the possibility of outsiders following it. Other cases worth mentioning are the Armagh CDC and Newtownabbey BC, which are followed by more than 0.8% of the council's population.

The remaining accounts show some activity judging by the month of the last tweet, but with different intensities. Belfast City Council is the champion here with 6,589 tweets and the only one with a history of more than 1,000 tweets. Newtownabbey Borough Council comes close with 726 tweets, but the rest do not even reach 500. Belfast City Council also manages to have both more followers and tweets than the Northern Ireland Assembly's account.

All Twitter accounts are mostly used to broadcast news and publicize events, but some accounts are also used for other purposes. Ards BC and Armagh CDC use twitter for tourism, with information about places to visit and a quiz for visitors. Ballymoney BC, Banbridge CC and Down DC broadcast safety advice. Banbridge CC, Belfast CC and Newtownabbey BC use their accounts for matters concerning governance, like information on public consultation, strategies or plans and calls for grants.

The Northern Ireland Assembly tweets, included here for comparative purposes, announce committee meetings, resolutions and statements. Table 2 shows

Table 1: General data about Council Twitter Accounts – 08-2012.

Council	No of followers	Percentage of Council/Assembly Population (2010 Est.)	Total number of Tweets	Month of last tweet	Twitter link on webpage
Northern Ireland Assembly	8,107	0.4505	3,255	08-2012	Y
Antrim Borough Council	25	0,0462	0	N/A	N
Ards Borough Council	199	0,2545	164	08-2012	N
Armagh City and District Council	493	0,8300	234	08-2012	N
Ballymena Borough Council	N/A	N/A	N/A	N/A	N/A
Ballymoney Borough Council	48	0,1569	190	07-2012	N
Banbridge District Council	121	0,2521	140	08-2012	N
Belfast City Council	12,579	4,6814	6,589	08-2012	Y
Carrickfergus Borough Council	91	0,2264	85	08-2012	Y
Castlereagh Borough Council	N/A	N/A	N/A	N/A	N/A
Coleraine Borough Council	73	0,1285	101	08-2012	Y
Cookstown District Council	468	1,2752	386	08-2012	Y
Craigavon Borough Council	238	0,2543	348	08-2012	N
Derry City Council	844	0,7687	141	07-2012	N
Down District Council	98	0,1384	144	07-2012	N
Dungannon & South Tyrone Borough Council	N/A	N/A	N/A	N/A	N/A
Fermanagh District Council	N/A	N/A	N/A	N/A	N/A
Larne Borough Council	N/A	N/A	N/A	N/A	N/A
Limavady Borough Council	254	0,7560	11	11-2010	N
Lisburn City Council	N/A	N/A	N/A	N/A	N/A
Magherafelt District Council	65	0,1454	1	11-2010	N
Moyle District Council	4	0,0235	2	08-2010	N
Newry and Mourne District Council	133	0,1331	73	08-2012	N
Newtownabbey Borough Council	741	0,8864	726	08-2012	Y
North Down Borough Council	N/A	N/A	N/A	N/A	N/A
Omagh District Council	N/A	N/A	N/A	N/A	N/A
Strabane District Council	167	0,4165	6	01-2010	N

the relative number of tweets, re-tweets and conversations over a two-month period in the Summer of 2012.

The retweet rate or amplification rate (Kaushik, 2011) which is the rate at which citizens who follow council's Twitter accounts pass their content on to others, varies from around 6% for the Northern Ireland Assembly to 10% for Belfast City Council. The other councils' Twitter volume is too low for the amplification rate to be meaningful statistically.

Another interesting observation is that the majority (10) of the active accounts are following other Twitter users, which could be suggestive of an effort to use Twitter as social network rather than only as a broadcast system. The analysis of 2012's June and July tweets reveals a mixed bag; while it cannot be said that those which follow other users are strongly engaging with them, the bulk of them do re-tweet.

The exceptions are the Councils of Ballymoney, Carrickfergus, Down and Newry and Mourne. On the other hand, Belfast City Council stands out again, as the one with a stronger engagement with the community, not only by means of re-tweeting, but also through conversation: amid 400 tweets there were 53 conversations.

Newtownabbey Borough Council, while not re-tweeting much, follows Belfast once more, with 8 conversations in the midst of 90 tweets.

The Northern Ireland Assembly only registered 4 conversations amidst 101 tweets. If we examine who initiated these conversations (Table 3), it is easy to conclude that citizens start the overwhelming majority. Ards, Armagh and Cookstown Councils do show a balance between initiators, but the total number is too low to consider them a real exception.

The initial approach showed quite clearly that most of the existing accounts have very low levels of

activity and engagement with followers and/or other twitter users.

The major exception is Belfast City Council, while Newtownabbey Borough Council also produces relevant activity, especially if compared with the rest of the councils. The Northern Ireland Assembly’s account follows both as the third most active account, which justified, alongside its different power level, its inclusion, together with Belfast and Newtownabbey, in a second, more in-depth, approach.

This second approach introduced new levels of analysis, namely the content of other accounts’ tweets which mention the councils’ accounts, and the sentiment associated with them. However, the period of time analysed was different from the first approach, encompassing only the month of August 2012. The reason for this was the impact of a single event that occurred in Belfast in the previous month, and originated a large amount of commotion on social networks, thus skewing the results that could have been obtained in a more “neutral” period. Even then, the event, which consisted on the put down of a dog (named Lennox), whose type is forbidden by law, still sent ripples throughout the month, as can be seen in Table 4. Of all the 5 most used keywords, only the word “want” was used on a context not necessarily related to the dog issue.

Table 4: Most used keywords for @BelfastCC and their sentiment in August 2012.

Keywords for @BelfastCC				
Keyword	Pos.	Neut.	Neg.	Total
Lennox	2,327	668	1,918	4,913
LennoxArmy	1,321	188	416	1,925
collar	432	141	612	1,185
ashes	232	175	623	1,030
want	748	0	232	980

It is interesting to note the polarisation of sentiment relating to the dog; in particular the significant negative sentiment detected in relation to ‘Lennox’, effectively flooding the @BelfastCC Twitter account with significantly increased negative sentiment. Despite all the commotion, there were no answers given on the Council twitter account, which triggered some users to “invade” conversations that the Council maintained with other users, on other topics. This “invasion” was also ignored by the Council.

If we filter the content of tweets of other accounts which mention the Belfast City Council account, in such a way that we eliminate tweets

related to the dog issue, the remaining most used keywords are all connected to events and/or activities promoted by Belfast City Council (Table 5).

The fifth most used keyword, “Big” is actually referring to a panoramic screen on the City Hall Square, where the Olympic Games, Movies and other audio-visual content was displayed. So, other than in the case of the dog issue, followers of the Belfast City Council twitter do not seem to use it as way to communicate with their Council.

Table 5: Most used keywords for @BelfastCC, excluding “Lennox”, and their sentiment in August 2012.

Keywords for @BelfastCC, excluding “Lennox”				
Keyword	Pos.	Neut.	Neg.	Total
Belfast	199	139	96	434
City	189	41	59	289
today	142	42	30	214
Hall	140	35	28	203
Big	96	24	5	125

The analysis of the content of other account’s tweets which mention the Newtownabbey Borough Council account also revealed that the five most used keywords are related to events promoted by the council (Table 6). And here it was even more strikingly evident than on the Belfast case, with the first two being the name of the event, or “Shoreline Festival”.

Table 6: Most used keywords for @ Newtownabbeybc and their sentiment in August 2012.

Keywords for @ Newtownabbeybc				
Keyword	Pos.	Neut.	Neg.	Total
Shoreline	4	2	1	7
Festival	3	2	1	6
Fun	5	0	0	5
Newtownabbey	3	2	0	5
weather	2	0	2	4

## 5 DISCUSSION

It is clear from the analysed data that councils in Northern Ireland are still in the infancy in their use of Twitter, despite the majority of them (73%) having set up an account. Some Councils look to have created an account without a strong commitment to it, as can be seen by the low levels of

activity and, more strikingly, by the absence of a link for it on their Internet homepage. Furthermore, the generally low number of accounts being followed by a council and equally low amount of re-tweets also point to a lack of understanding of what Twitter, as a social network, is for. Thus, it is not surprising that our first hypothesis was validated, since tweets are mainly broadcasts about local news and events, and, when conversations happen, they are most often than not triggered by citizens.

Another reflex from this lack of understanding, is what we call *displacement*, a phenomenon where the Twitter account was set up to promote specific areas of interest, like Tourism, rather than it being a channel for communication with citizens. On the other extreme, the majority of the accounts are a mixed bag, where everything can go, from announcing events to giving advice on safety issues. At the end of the day, the image given is one of a chaotic use of Twitter by Councils, which does not look to be supported by any well-designed strategy with clear objectives.

On the other side of the fence, as our second hypothesis suggested, citizens look to be ready and available to engage in dialog with their Councils. There is a general trend for accounts to have more followers than total tweets, which is an encouraging signal of some pent-up demand by the citizenry that councils seem to be ignoring. It has already been mentioned earlier that conversations are rare, and that citizen almost always triggers them. However, this does not mean that councils are not responsible for triggering involvement. If we look at the inclusion of a council Twitter account name on tweets from other users, in the cases of Belfast City Council and Newtownabbey Borough Council, we will see that the most used keywords are related to tweets sent by those authorities. Moreover, these keywords were used mostly with a neutral or positive stance, as our hypothesis advanced.

Again, this shows that citizens are paying attention to what the councils are outputting on Twitter, and that it is the task of the councils to put that attention to good use.

## 6 CONCLUSIONS AND RECOMMENDATIONS

Bonsón et al. (2012, p.123) state that social media including Twitter are ideally placed to 'enhance interactivity, transparency and openness of public sector entities and to promote new forms of

accountability.' The analysis presented on this paper began with the observation that the majority of the councils in Northern Ireland have set up a Twitter account. However, there appears to be little clear recognition of the potential benefits for councils in encouraging more citizen engagement in the democratic process, and in building greater understanding and trust (Bruning et al., 2007). As we dived deeper, we found a reality that was far from such benefits. Many accounts are not active. The use of Twitter by councils is, in most cases, random at best, with tweets covering "what's on" in the moment. On other cases, the account was set up with a specific end, such as tourism or economic development.

However, it is remarkable that, despite the perception of a general lack of objectives, not to mention activity, they are being actively followed by citizens and, in some cases, those numbers of followers significantly exceed the number of tweets output by the councils. The fact that the inclusion of the councils' Twitter account name on other accounts' tweets, happened mostly along words connected to the former's tweets, only strengthens this observation. Thus, it seems to us that the responsibility is on the councils' side to make the best of the attention their citizens are awarding them, and perhaps it justifies something more than a social media policy, but rather a *social media strategy*.

We would recommend that such a strategy starts by identifying clear objectives, in articulation with other strategies and plans in development and/or implementation by the Council. As Hand & Ching (2011, p.364) state for meaningful interaction to occur, careful consideration must be given to content of communication. This could also lead to the definition of specific subjects or content areas (for example, as tourism seems to be prioritised by some councils) which might justify independent Twitter or other social media accounts (or even different social media for different subjects!), thus avoiding the "mixed bag account" that characterises the current reality. This decentralization of social media use by councils could, in effect, trigger a more dialogistic stance, as different teams and/or departments inside the Council took the opportunity to converse with their citizens about choices available to them.

As research has also highlighted, citizens also responded well to timely posts and comments, suggesting the need for city councils to actively monitor and manage their social media presence (Hand and Ching, 2011). Therefore another issue to be addressed by such a strategy would be the "path" or methodology adopted to answer citizen's

inquiries, which arguably would not be that much different from what the councils already do in the case of telephone and e-mail contacts. The development of such pathways can support individual staff and the organisation as a whole in avoiding crises and responding in a timely manner to issues as they arise (Owyang, 2011). And last but not least, the strategy should include an evaluation plan, to both evaluate the performance of the council use of social media and allow self-learning about the ways it can be used.

However, as a social media strategy is something that would probably only come into effect in the mid-to-long term, we leave another suggestion for councils, which could be implemented in a very short time: just ask followers on Twitter about what they would like to see the council tweeting about and start from there.

## REFERENCES

- Aharony, N. (2012), 'Twitter use by three political leaders: an exploratory analysis', *Online Information Review*, 36(4) pp.587-603.
- Ahlqvist, T. Bäck, Heinson, S. and Halonen, M. (2010), 'Road-mapping the societal transformation potential of social media' *Foresight*, 12 pp3-36.
- Bertot, J. C., Jaeger, P. T and Grimes, J. M. (2010), 'Using ICTs to create a culture of transparency: E-government and social media as opened and anti-corruption tools for societies', *Government Information Quarterly* 27 pp.264-271 .
- Bonsón, E., Torres, L., Royo, S. and Flores, F. (2012), 'Local e-government 2.0: Social media and corporate transparency in municipalities', *Government Information Quarterly* 29 pp.123-132.
- Brainard, L. A., & McNutt, J. G. (2010), 'Virtual government-citizen relations', *Administration & Society*; 42(7) pp.836-858 .
- Bruning, S. D., Dials, M. and Shirka, A. (2007), 'Using dialogue to build organization-public relationships, engage publics, and positively affect organizational outcomes', *Public Relations Review*, 34 pp.25-31.
- Burton, S. and Soboleva, A. (2011), 'Interactive or reactive? Marketing with Twitter', *Journal of Consumer Marketing*, 28/7 pp.491-499.
- Chen, H. (2009), 'AI, E-government and Politics 2.0', *IEEE Intelligent Systems*, September/October pp.64-67.
- Chun, S. and Reyes, L. (2012) 'Social media in Government'. *Government Information Quarterly*, 29, 4, 441-445
- Dixon, B. E. (2010), 'Towards eGovernment 2.0: An assessment of where eGovernment 2.0 is and where it is headed', *Public Administration & Management*, 15(2):418-454.
- Hand, L. C. and Ching, B. D.(2011), 'You have one friend request, an exploration of power and citizen engagement in local governments' use of social media' *Administrative Theory and Praxis*, September, 33(3):362-382.
- Hearn, G., Foth, M. and Gray, H. (2009), 'Applications and implementations of new media in corporate communications: An action research approach', *Corporate Communications*, 14(1), pp.49-61.
- Ho, J. W. C. and Dempsey, M. (2010) 'Viral marketing: Motivations to forward online content' *Journal of Business Research*, 63, (9-10), 1000-1006.
- Kaplan, A. M. and Haenlein, M. (2010), 'Users of the world, unite! The challenges and opportunities of Social Media' *Business Horizons*, 53 pp.59-68.
- Kaushik, A., (2011) Best Social Media Metrics: Conversation, Amplification, Applause, Economic Value, [kaushik.net/avinash/best-social-media-metrics-conversation-amplification-applause-economic-value/](http://kaushik.net/avinash/best-social-media-metrics-conversation-amplification-applause-economic-value/), last accessed, 10 September 2012.
- Kelleher, T. (2009), 'Conversational Voice, Communicated Commitment, and Public Relations Outcomes in Interactive Online Communication', *Journal of Communication* 59, pp.172-188.
- Kent, M. L., Taylor, M., & White, W. (2003), 'The relationship between Web site design and organizational responsiveness to stakeholders', *Public Relations Review* 29, pp. 66-77.
- O'Reilly, T. (2005), 'What Is Web 2.0? Design Patterns and Business Models for the Next Generation of Software', <http://oreilly.com/web2/archive/what-is-web-20.html?page=5>, last accessed 6 September 2012.
- Owyang, J (2011) 'Social Business Readiness: How Advanced Companies Prepare Internally' *Altimeter* August 31, 2011
- Rishel, N. (2011), 'Digitizing Deliberation: Normative Concerns for the Use of Social Media in Deliberative Democracy', *Administrative Theory & Praxis* 33 (3), pp. 411-432.
- UK Government (2011) Review of Government Direct Communication and COI, [cabinetoffice.gov.uk/news/review-government-direct-communication-and-coi](http://cabinetoffice.gov.uk/news/review-government-direct-communication-and-coi), last accessed 26 September 2012.
- Viraj (2012) Top 10 Most Popular Social Networking Sites In The World 2012, [itechwik.com/2012/07/top-10-most-popular-social-networking-sites-in-the-world-2012/](http://itechwik.com/2012/07/top-10-most-popular-social-networking-sites-in-the-world-2012/), last accessed 26 September 2012.
- Welch, E., Hinnant, C. and Moon, M. (2005), 'Linking citizen satisfaction with eGovernment and trust in government', *Journal of Public Administration Research and Theory*, pp.371-391.
- Williams, N. (2009) Template Twitter strategy for Government Departments, [slideshare.net/breaking-news/template-twitter-strategy-for-government-departments-1820431](http://slideshare.net/breaking-news/template-twitter-strategy-for-government-departments-1820431), last accessed 26 September 2012.