# Social Media in Disaster Response:
# Queensland Police Service - Public Engagement During the 2011 Floods

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## Abstract

*Social Media, particularly Microblogging services, are now being adopted as an additional tool for emergency service agencies to be able to interact with the community at all stages of a disaster. Unfortunately, no standard framework for Social Media adoption for disaster management exists and emergency service agencies are adopting Social Media in an ad-hoc fashion. This paper seeks to provide a general understanding of how Social Media is being used by emergency service agencies during disasters, to better understand how we might develop a standardised framework of adoption. In this study of the 2010/11 Queensland Flood event, Facebook broadcast messages from the Queensland Police Service to the general public, were analysed by genre. Findings show that these Microblogging activities were mostly about information distribution and warning broadcasts and that the strength of Social Media for two-way communication and collaboration with the general public, was under-utilised during this event.*

## Keywords

Social Media, Disaster Management, Microblogging, Facebook.

## INTRODUCTION

Although some Social Media services have had an impact on people's everyday lives, most are still relatively new and have not yet been fully explored by emergency services agencies for their specific use (Queensland Police Service - Media and Public Affairs Branch 2011). Recently, government agencies have shown a significant interest in the use of Social Media services for interaction with the general public, especially during emergency and disaster situations (ACELG 2011; Queensland Police Service - Media and Public Affairs Branch 2011). Unfortunately, no standard framework exists for adoption of Social Media in this context, so agencies have adopted Social Media according to their own individual requirements (Alam and Walker 2011). It is still unknown if government Social Media presence is effective, or if their attempts to adopt Social Media only consume resources which could be better used elsewhere. During a disaster, there is usually a lack of resources to support the effective collaboration of all stakeholders, and this highlights an enormous risk factor, as there are many unstructured tasks and a lack of skilled personnel to complete them.

Some research is currently underway regarding how Social Media works during disaster incidents and how it can be effectively used to prepare and inform the community about disasters. (Bruns et al. 2012; Underwood 2010; Yates and Paquette 2011). This study is different, however, in that it examines the use of Social Media technologies and applications (Microblogging use of Facebook) specifically by an emergency management agency (QPS). For the purposes of this study, messages broadcast by the QPS during the January 2010/11 Queensland Flood disaster underwent a genre analysis (Westman and Freund 2010).

This analysis represents the first phase of the development of a conceptual framework for disaster response using Social Media. Such a framework could assist emergency service agencies to improve their processes for the management of, and response to crises and disasters by encouraging more effective communication and collaboration with the general public.

This paper is structured as follows. Firstly, an overview about Social Media in disaster management is given. Secondly, the Queensland Flood disaster of 2010/11 is discussed and the Social Media background of the case agency, the QPS is given. Thirdly, the research method and dataset is introduced and discussed. Fourthly, the

results of the genre analysis are presented. Finally, after a short discussion of the results, the paper concludes with recommendations for further research.

## SOCIAL MEDIA AND DISASTER MANAGEMENT

Social Media platforms are Internet-based applications that focus on the creation and exchange of User Generated Content (Kaplan and Haenlein 2010). These applications which can be Social Networking Sites, Microblogging services, Wikis, Collaborative Web Maps, Media Content Sharing platforms or others, have the potential to contribute enormously in disaster management to the process of finding collaborative solutions to complex problems (Underwood 2010).

In disaster management Social Media interaction can be seen in three dimensions. The first dimension is the interaction between emergency service agencies. The second dimension is the interaction between an emergency service agency and the community. The third dimension is the interaction between the community amongst themselves (Ahmed 2011). The focus of this study is narrowed to the communication between an emergency service agency and the community, enabled through the Microblogging functionality of the Social Networking site Facebook.

Microblogging allows users to send and retrieve a short message, which appears on a web portal or on a third party client. In contrast to weblogs, the messages are mostly restricted in length to alphanumeric characters. This enables a quick and easy way to send short messages from a computer or a mobile device. Because of this, people use Microblogging services to update their friends, families or complete strangers about their whereabouts, activities or interesting thoughts (Zhang et al. 2010).

Social Networking sites are web-based platforms, which support the user in networking over the Internet (Koch and Richter 2007, p. 54). A Social Networking Site gives an individual or a group, which can be, for example, a company or an agency, the opportunity to create a public or semi-public profile.  This profile is a representation of the user of the site. The user can communicate and form relationships with other users of that site. These relationship linkages are in most cases non-directional, but can also be directional (Boyd and Ellison 2008). Some Social Networking sites are for specific interests, some for the business sector and some have a general focus. Most Social Networking sites also support Microblogging in the form of status updates. The size of the messages at these Social Media sites, in most cases, is not as restricted as it is in pure Microblogging Services. The Social Networking site Facebook has a general focus and is, with over 900 million active users, the biggest Social Networking site globally (Facebook 2012).

For effective disaster management, this is very important, because a wide range of people can be reached with the use of Facebook. The QPS uses Facebook and Twitter as the basis of their Social Media platform to interact with the community. The use of Social Media to support dynamic processes in times of disasters is not completely new. After the 9/11 Terror Attacks in 2001, individuals created wikis in order to find missing persons (Palen and Liu 2007). The case study of the 2007 Southern California Wildfire, highlighted the kind of Social Media channels the community used (Sutton et al. 2008) and illustrated that when classical media coverage was not sufficient for the community, Social Media services, especially Twitter, closed this coverage gap (Sutton 2010). A problem with using Social Media is that rumours can spread much more quickly, however it has been shown that developing Social Networks tend to favour trustworthy and valid information over rumours (Castillo et al. 2011).

Emergency service agencies have slowly started to adopt Social Media in the last few years (Queensland Police Service - Media and Public Affairs Branch 2011). Yates and Paquette (2011) highlight that no studies currently exist that examine the role of Social Media technologies and applications used by emergency service agencies. In their study, they examined the role of wikis and collaborative technologies such as Microsoft's Share Point to manage knowledge during the Haiti 2010 earthquake (Yates and Paquette 2011). The Social Media channel Twitter is a current area of research focus and Bruns et al. (2012) have examined the developing networks on this platform during the 2010/2011 Queensland Flood disaster. Their study included a small case study about the use of Twitter by the QPS, but the main focus of this study highlighted the behaviour of the community, not the adoption of the platform. In order to overcome this gap in our knowledge this study investigates the QPS Facebook adoption during the Queensland Flood disaster of 2010/11.

## QUEENSLAND FLOODS 2010/11 CASE STUDY

Long lasting and intensive rainfalls over large areas of north eastern Australia during the wet season of 2010 led to large flooding in Queensland, which occurred in December 2010 and also in January 2011 (Queensland Floods Commission of Inquiry 2011). During this time of flooding, nearly seventy-eight per cent of the state of Queensland had been declared a disaster zone (Queensland Reconstruction Authority 2011). This is an area bigger than the area of Germany and parts of France combined. Fifty-nine rivers flooded in Queensland, twelve of

them broke earlier flood records. 19,000 kilometres of state and local roads were at least at one time flooded and twenty-nine per cent of Queensland's rail network was damaged. (Queensland Reconstruction Authority 2011) All in all, over 2.5 million people were affected through flooding and thirty-five people died in the floods, three of which are still declared as missing (Queensland Reconstruction Authority 2011). Over 29,000 homes and businesses had some form of inundation or damage caused by the floods. The Queensland Reconstruction Authority has estimated that the flooding events will cost more than 5 billion Australian dollars for restoration and reconstruction (Queensland Reconstruction Authority 2011).
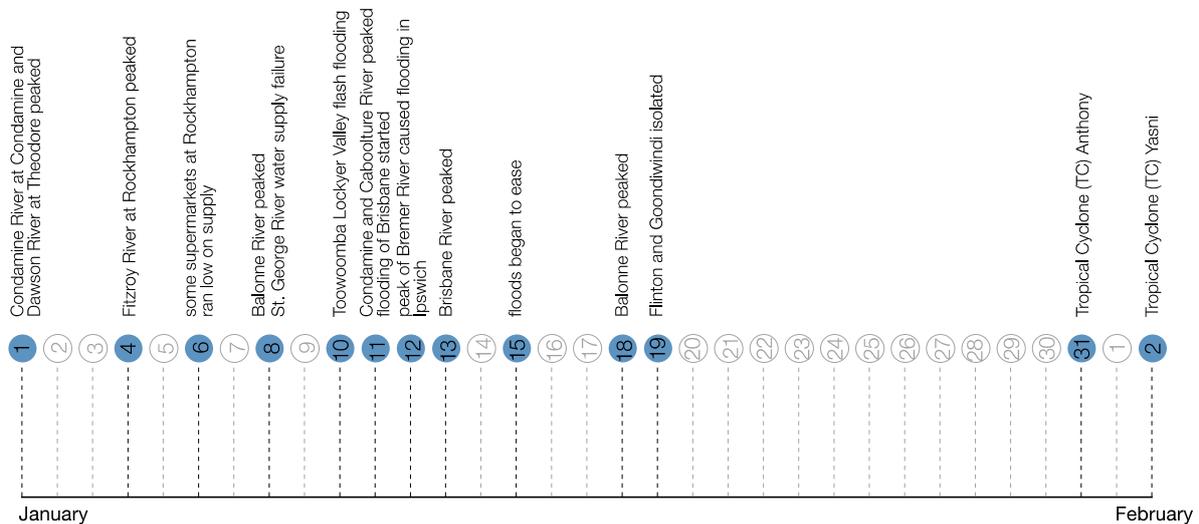


Figure 1 Flood events overview January 2011

The Queensland Floods started at the beginning of December in 2010 and increased in intensity until the most destructive floods occurred in the second week of January 2011 in the southeast corner of Queensland (Queensland Floods Commission of Inquiry 2011). Figure 1 gives an overview of some important flood incidents during the month of January.

At the beginning of January, Rockhampton was strongly affected by the flood inundations. On the 4th of January, the Fitzroy River peaked. This event left Yaambo and Rockhampton isolated for several days. On the 6th of January some supermarkets in the region of Rockhampton started to run low on supplies, because of this, the Australian Defence Force dropped food supplies in the isolated areas (Queensland Floods Commission of Inquiry 2011, p. 26). As the flood peaked in Balonne River on the 8th of January, the river water supply at St. George failed. This river water supply was necessary for sanitary water, but not for drinking water supply, nevertheless, this caused a lot of rumours about the water supply of St. George and surroundings (Queensland Floods Commission of Inquiry 2011).

On the 10th of January, heavy rainfall in the Toowoomba area caused enormous flash flooding events in Toowoomba and the Lockyer Valley. There was no sufficient community warning in both events and the floods caught people by surprise with the authorities being informed about these disaster events mostly by emergency calls to the police (Queensland Floods Commission of Inquiry 2011, p. 237).

On the 12th of January, the Bremer River at Ipswich experienced its major flood peak since 1974. A lot of Ipswich infrastructure was damaged. The peak of flooding eased fast, so on the 13th of January, the clean up crews could start their work in Ipswich (Queensland Floods Commission of Inquiry 2011, p. 27).

On the 11th January the major flooding of Brisbane commenced. The flood level on the 12th of January affected 14,100 Brisbane properties. On the 13th of January, the Brisbane River had its major peak of about 4.46 meters. On the weekend after the Brisbane flood, more than 20,000 volunteers helped clean up and recover the city (Queensland Floods Commission of Inquiry 2011, p. 27). After the 15th of January, the floods began to slowly ease. Queensland went into the recovery stage of the disaster until the end of January. On the 31st of January, Tropical Cyclone Anthony crossed the coastal strip between Townsville and Mackay and caused a significant amount of rainfall. On the second of February, Tropical Cyclone Yasni hit Queensland (Queensland Reconstruction Authority 2011).

**QPS and Social Media**

Former disaster events, for example, the Mumbai terrorist attacks, (Oh et al. 2010) have shown that the mainstream media coverage was dominated by Social Media but the government authorities were not able to

contribute to, or manage the Social Media streams with their own Social Media presence in any effective way. To work against this effect, the QPS wanted to get some experience with this communication medium to create an online community of followers before any disaster occurred (Queensland Police Service - Media and Public Affairs Branch 2011, p. 2). In May 2010, the QPS Media and Public Affairs Branch began an extensive trial use of the Social Media platforms Facebook[1], Twitter[2] and YouTube[3] (Queensland Police Service - Media and Public Affairs Branch 2011, p. 2). With this trial, they wanted to enable a new channel for two-way communication and collaboration between the QPS and the general public (Queensland Police Service - Media and Public Affairs Branch 2011, p. 2).

The QPS used Social Media streams during the 2011 flood disaster mostly to get information and warnings out to their following community and the public. They wanted to act as a "centralised clearing house for disaster-related information" (Queensland Police Service - Media and Public Affairs Branch 2011, p. 5) so they published information from the QPS as well as trusted information from other departments and government authorities on their Facebook page as well as tweeting the information on Twitter.

Before the Queensland Floods of 2010/11 occurred, interest in the QPS by the community was minor but it still existed.  In the first few months between May 2010 and the beginning of December 2010, the growth of "Likes" of the QPS Facebook page was steady and constant. The page had about 7000 "Likes" at the beginning of December. These seven months of steady growth gave the QPS time to get comfortable with this medium and time to educate their Social Media team. At the beginning of the trial use in May, only a few selected staff managed the QPS Social Media accounts. Over that time, all members in the team were responsible for uploading information and moderating Social Media channels (Queensland Police Service - Media and Public Affairs Branch 2011, p. 2).

The Queensland Floods caused two significant boosts of "Likes" on Facebook. The first boost occurred in December 2010 and doubled in number. About 14,000 people followed the QPS Facebook account by the end of December 2010. The second more powerful boost occurred after the flash flooding events of Toowoomba and the Lockyer Valley on the 10th of January 2011, and at the beginning of the flooding of Brisbane on the 11th January. "Likes" of the QPS Facebook page increased from 14,000 to over 160,000 (Queensland Police Service - Media and Public Affairs Branch 2011, p. 2). This disaster caused the public to have a very high need for verified information, and the public tried to satisfy this need by accessing perceived trusted sources of information like that provided by the QPS. In fact, 160,000 people could be reached with the messages from the QPS with the help of this account.

## DATA ANALYSIS

Genre analysis has long been used in fields like arts and literature. In Information Systems research, genre analysis was adapted mostly for two purposes. The first was to examine the relationship between the communication practices and technologies inside organisations (Firth and Lawrence 2003). The second purpose was to detect and analyse technology adoption patterns which emerge in context (Westman and Freund 2010). With genre analysis it is possible to detect and analyse communication patterns within and between organisations and individuals, which can give researchers better insights into communication practices and channel use in a given context (Riemer et al. 2011). In this study, genre analysis was used to understand the communication practices between an emergency service agency (QPS) and the general public via a Social Media channel (Facebook), during a disaster (Queensland Floods, January 2010/11).

**Data Set and Analysis Techniques**

The dataset consists of Facebook Notes broadcasted by the QPS on their Facebook Page. The dataset was manually collected and prepared for analysis. The focus of this study was on Facebook Notes, so the normal Facebook Wall posts were not gathered. Furthermore, only the Facebook Notes for the month January 2011 and the first day of February were collected, since the most destructive flood events occurred in this timeframe. The QPS Media and Public Affairs Branch posted 765 Facebook Notes, in this time. These Facebook Notes were the start topic of single conversation lines with the community. Therefore, within this paper, these single conversation lines are called threads.

In the process of the genre analysis, each thread of the collected Facebook data was based on the purpose and content of the message, and clustered into different genres. Genres are in this context seen as "recognizable categories of information objects, based on conventions of form, purpose and content." (Westman and Freund 2010) Some threads had more than one purpose, so each thread could be affiliated with up to two different

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[1] http://www.facebook.com/QueenslandPolice
[2] http://twitter.com/#!/QPSmedia
[3] http://www.youtube.com/user/QueenslandPolice

categories. In Step 1 of the analysis, a genre category was allocated in an attempt to explain what the QPS was trying to achieve with a specific thread. In Step 2 of the analysis, the different genre categories were analysed with a bottom-up procedure condensed into top-level genres.

The proportions of the top-level genres (to each other) and the proportions of the genres themselves (to each other) were also analysed in Step 3. The performance of the top-level genre over the time (of the data set) was analysed and additionally, the result was mapped against the chronology of the flood events in Step 4. In Step 5, the community reaction per top-level genre was analysed to see which genre had the most impact on the community, and which genre did not have such high influence.

Three different disasters could be isolated in the dataset. These three disasters were: the Queensland flood events of 2010/2011; tropical cyclone Anthony; and the warning and threat phase of tropical cyclone Yasni. Dataset statistics are summarized in Table 1.

Table 1 General statistical overview

|  | Threads | Comments | Likes |
|---|---|---|---|
| Total: | 765 | 29194 | 24409 |
| Average per day: | 23.9 | 756 | 762.8 |
| Maximum: | 68 at 11th January | 4501 at 11th January | 3924 at 13th January |
| Minimum: | 2 at 22nd January | 57 at 4th January | 37 at 4th January |
| Genre appearances: | 1071 | Genres per thread: | 1.4 average |

**Genre Compositions**

The result of the 5 step genre analysis is a set of 15 genres, identified by communication purpose. These genres could be condensed into 5 top-level genres. Table 2 shows the five top-level genres, with their distribution within the data set and a short description of each.

Table 2 Top-level Genre overview

| Top-Level Genre Name | Proportional Distribution | Description |
|---|---|---|
| Broadcast Information | 59% | Main purpose of informing the community about actual occurrences and situations. |
| Broadcast Warning | 18% | Intention to warn the community about different threats. |
| Encourage Behaviour | 13% | Purpose to urge action from the community. |
| Appeal for Information | 8% | Possibility of two-way communication in Social Media. It is with the intention of getting information from the community (has no further sub-genre). |
| Fighting Rumours | 2% | Refers to threads that have the intention to clarify false or misleading information circulating throughout the community or traditional print media (has no further sub-genre). |

Table 3 introduces the single sub genre with their distribution within their top-level genre and a short description. The Fighting rumours and the Appeal for Information genre are not shown in Table 3 since these genres are the only genre in their top-level genre and were therefore already introduced in Table 2.

Table 3 Sub-Genre overview

| Top-Level Genre | Sub-Genre | Distribution | Description |
|---|---|---|---|
| Broadcast Information | Road Information | 18% | Threads with the intention of informing the community about flooded, closed or reopened roads and intense traffic volume. |
| | Flood Information | 18% | Threads discussing revoked flood warnings and flood levels of rivers or specific areas. |
| | Weather Information | 8% | Information about future rainfall, regular weather events or cancelled weather warnings. |
| | Information about Supply | 2% | Inform the community about imminent re-supply of resources such as food, water, good or gas. |
| | Information about Energy Supply | 4% | Threads that announce the cutting off, re-supply or availability of electrical power in specific areas. |
| | General Information | 50% | Threads with a general information focus and also all threads referring to normal police-work. |
| Broadcast Warning | Flood Warning | 45% | Warnings about raise of river flood levels or supposed flood flashing events. |
| | Weather Warning | 49% | Intention to warn the community about intense future weather events like thunderstorms or tropical cyclones. |
| | General Warning | 6% | These warnings are those, which do not fall into the other genres but still warn the community about threats. |
| Encourage Behaviour | Navigate Behaviour | 8% | Attempt to navigate the community to a specific behaviour, like preparing for inundation and not to enter flood water. |
| | Appeal for Volunteers | 74% | This genre provides information where volunteers are needed and discussions of individuals offering themselves. |
| | Appeal for Donations | 5% | Threads refer to individuals who are interested in donating and are looking for trustworthy institutions. It also provides information from different institutions as to where to donate goods or money. |
| | Evacuation | 16% | Advice of which areas to evacuate and provides information about evacuation shelters. |

**Communication Patterns**

The threads broadcast by the police, in the dataset can be roughly divided into 5 stages. The first stage lasted from the 1st January to the 8th of January where the flooding of Rockhampton was present. Therefore, it is not surprising that this was also an important topic in the broadcasted threads. The second stage started at the 9th of January and ended approximately on the 14th of January. In this stage, the flash flooding event of Toowoomba and the Lockyer Valley occurred. In addition to this, the floods reached Brisbane. It was also not surprising that in this time the most broadcasted threads are present. The third stage lasted approximately from the 15th to the 22nd of January. The number of threads slowly went down again. The floods were still ongoing locally but the intention of the threads went slowly from a remedy phase into a recovery phase. Between the 23rd and 29th January, which can be seen as the fourth stage, we see mostly threads about normal police work being broadcast. In this stage, disaster relevant topics were in the minority of threads. The 5th and last stage included the warning and impact phase of tropical cyclone Anthony as well as the warning phase of Tropical Cyclone Yasni.

Figure 2 shows the number of threads mapped against the timeline of January 2011 and also shows some of the important disaster relevant events. Figure 3 shows the appropriation per top-level genre and in Figure 4; the relative appropriation per top-level genre through the time of the dataset can also be seen.
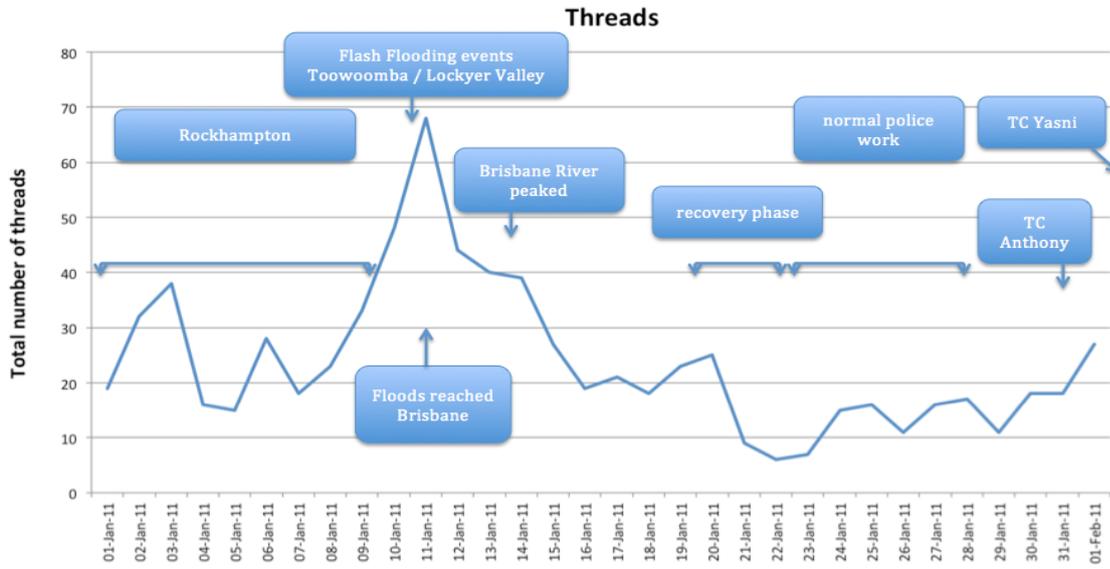
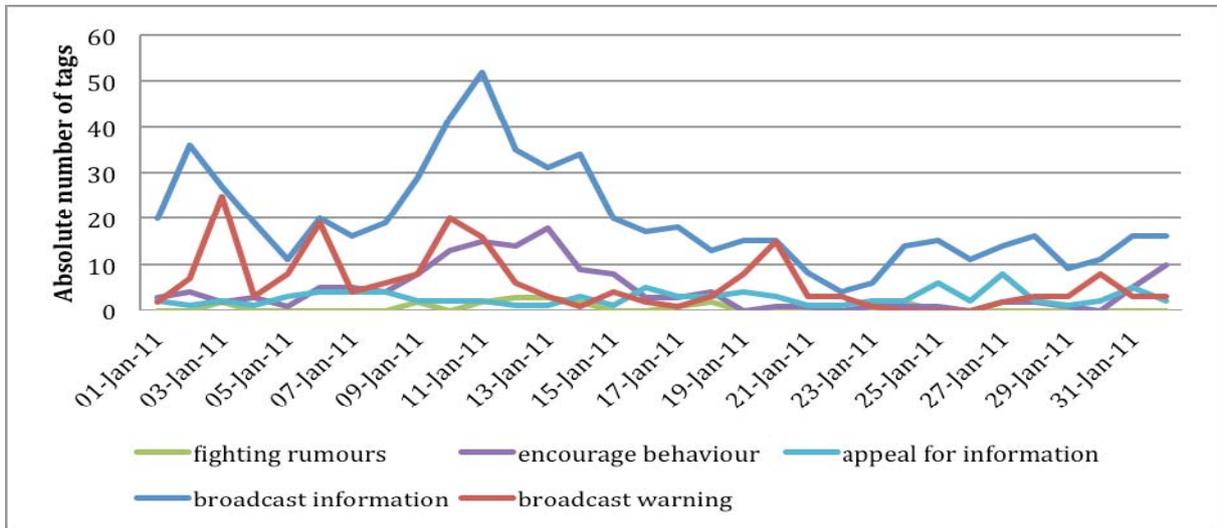Figure 2 Number of threads mapped against the timeline of January
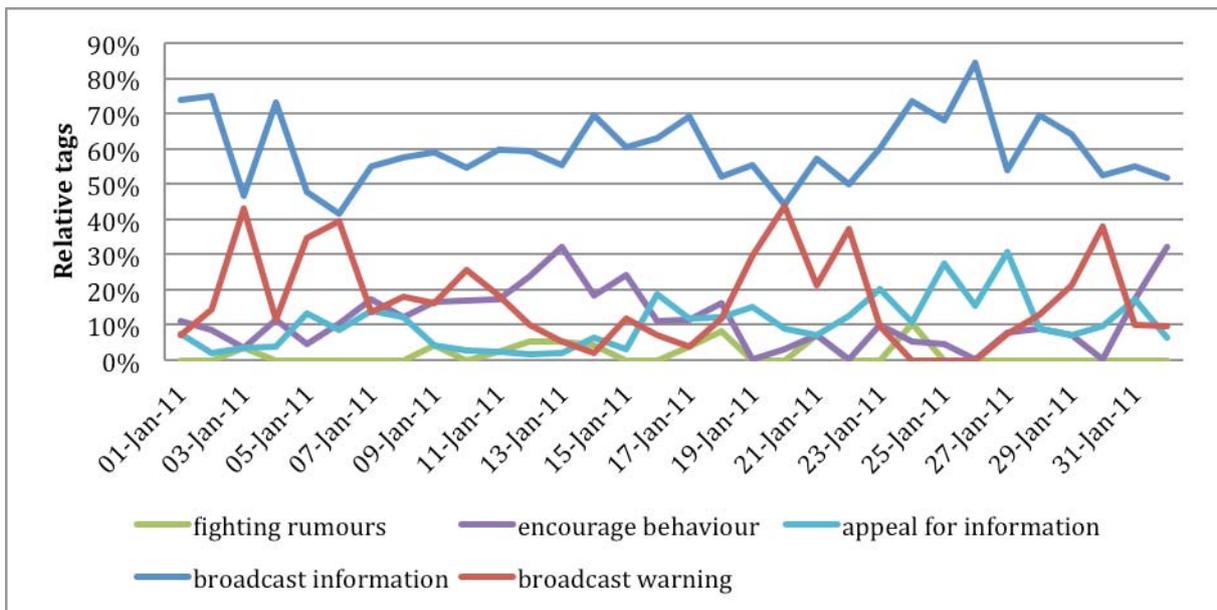


Figure 3 Appropriation per top-level genre



Figure 4 Relative appropriation per top-level genre

During the observed period of this study, the proportion of Broadcast Information (top-level genre) was consistently the largest. The proportion of the top-level genre oscillated, up to a few exceptions between 50 and 75%. Due to the Broadcast Warning peaks, the percentage dropped on the 3rd, 5th, 6th and the 21st slightly under 50%. The Fighting Rumours top-level genre from the frequency of broadcasts over the observed timeframe was also of minor importance. Nevertheless it should be noted that most of the rumours were apparently already fought where they occurred in the comment section of a post, and only a few of them were assigned their own thread in which they were handled. In the observed time period, five warning peaks were monitored: at the 3rd, 6th, 10th, and 20th of January with a minor peak at the 30th of January. Followed by these peaks, a significant rise of the Encourage Behaviour top-level genre is registered. When the remedy phase of the disaster was moving to the recovery phase in Brisbane, the Encourage Behaviour top-level genre stayed quite high and slowly declined back to a stage of normal police work. A rise of the Appeal for Information top-level genre can be observed after the impact phase of this disaster incident (in the remedy and recover phase). In the fourth stage, of normal police work, the Appeal for Information top-level was the second most frequently broadcast top-level genre.

**Community Reaction per Top-Level Genre**

It was anticipated that different top-level genres create, on average, a different amount of reaction from the listening community. This can be seen in the data, but is not as pronounced as we anticipated. Figure 5 shows the average community reaction per top-level genre thread. All threads considered the average reaction from the community in comments and "Likes" and it was shown that there were 38 comments and 32 "Likes" per thread. Because some threads are counted twice (since threads can have up to two genre appearances) the average per genre appearance is 27 comments and 22 "Likes".
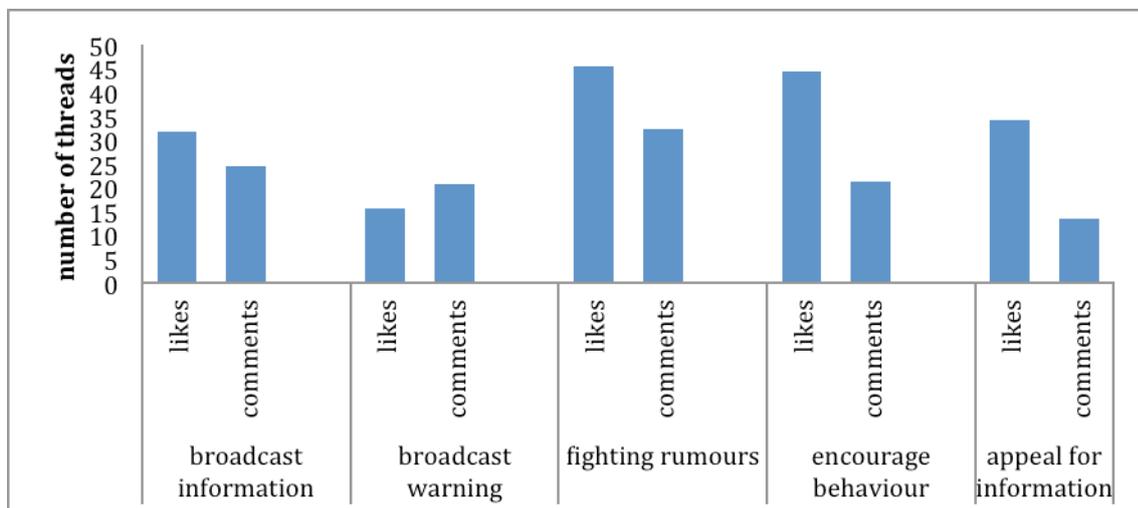


Figure 5 Average community reaction per top-level genre thread

Although the Fighting Rumours top-level genre was broadcast rarely, this top-level genre generated the most "Likes" which supports the conclusion that the community appreciated trustworthy information. Also the Encourage Behaviour top-level genre was highly appreciated by the community with "Likes" being over average and comments average.

The Broadcast Information top-level genre i.e. the community reaction from the "Likes" as well from the comments, were average. The Broadcast Warning top-genre was average with comments and with "Likes" below average. This effect may be explained by the assumption that people do not want to "Like" bad news.

The Appeal for Information created "Likes" that were over the average, but surprisingly the comments were below average. It is questionable if the two-way communication potential of Social Media was really used during this flood incident, since the appeal was sent through Social Media platforms, but the response from the general public was expected to be given through traditional communication channels such as telephone.

## DISCUSSION & IMPLICATIONS

The analysis of this data showed that Microblogging and Social Networking had an important role to play in supporting communication and collaboration between the QPS and the general public during this flood event. With these tools, it was possible to deliver information and warnings to a wide range of people and also an attempt was made to direct the listening community to act in a specific way.

Information flows quickly inside a Social Media stream. This effect is even more pronounced during a time of a disaster. Incorrect information, however, can spread like a wildfire under these circumstances. Nevertheless, other researchers, for example Castillo, et al. (2011), show that social networks tend to favour valid information over rumours.  In addition to this, the work of Bruns et al. (2012) points out that although the QPS made relatively few posts on Twitter during this flood event, their tweets had a high impact on the community. This could be seen by the high amount of re-tweets and comments coming from the original QPS tweets (Bruns et al. 2012).

The response to the broadcasted threads in comments and "Likes" has shown that reliable information is sought in times of a disaster. The QPS satisfied the needs of the community by posting detailed and extensive information from a trusted source i.e. the police. A problem is that this method can lead to an overload of information for the individual. Due to this information overload issue, important or necessary information can get lost. The QPS attempted to overcome information overload, by summarizing the most important information in a daily round-up during the disaster period. These round-ups were posts with the most important information posted during the day being summarised. Round-ups such as these can make it a lot easier to receive necessary information out of a high number of posts, but it is still possible that for many individuals important information can still get overlooked. A means of preventing this might be by pre-tagging all the broadcasted threads in Facebook. For example, a post which deals with road information could be specifically marked at the beginning of the message with something like "Road information:…". This could help an individual to decide if the message will be relevant for them or not.

Our data analysis also highlights that the use of Social Media channels such as Facebook and Twitter cannot be seen as totally distinct channels, since these channels have high interaction during disasters. In this flood incident data set, it was observed that a significant amount of Twitter tweets had a redirection link to the QPS Facebook page. Our analysis highlights that the QPS used Twitter as a range amplifier and Facebook as a more detailed information platform.

Although two-way-communication and collaboration with the general public was in general, desired by the QPS during the disaster, it seems that the opportunity to use Social Media in this way was not fully utilised by them. This effect was probably increased through the high amount of user comments, which were often off topic, in the comment section in the single threads. The QPS used Facebook in the Queensland 2010/2011 Flood disaster mostly as an information and warning broadcasting platform, which allowed them to better disseminate information to the Social Media connected public. Our overall analysis would support the notion that QPS used Social Media more as a "megaphone", and less to facilitate 2-way communication and collaboration, with the general public.

## CONCLUSION

The target of this study was to create a better understanding of how Social Media can be, and is used by emergency services agencies. Our analysis of the use of Facebook by the QPS during the 2010/2011 Queensland flood event demonstrates that Social Media supported the management of five disaster communication objectives. These objectives were highlighted in our analysis by top-level genre categories. The QPS broadcast information and warnings which tried to encourage the community to behave in a specific manner; they also fought rumours and tried to generate an information flow in response, from the community. These are all activities that are necessary for the effectiveness of the police objective to preserve human life in a disaster scenario (State Emergency Management Committee NSW 2010).

Through the fast rising number of "Likes" of the QPS Facebook page, it was possible to see that the community has a high interest in trusted information from government agencies during the time of a disaster. With the "Likes" and comments on the single threads it is possible to assume that the community does not only want to read about information, it also seems to seek interaction with the relevant agency with offers of help and assistance.

The question remains, however, should emergency services agencies use the usual broadcast information approaches of old, slightly transferred to fit in a Social Media world, or is it possible to design a more effective approach, that can tap into the potential of Social Media two-way and collaborative communication channels? In order to answer this question, examination and development of much deeper insights into the use of Social Media channels in events and disasters, are necessary. We must better understand the impact that these genre categories have on the community during the management of specific disaster types as well as when they are applied to different geographical locations and jurisdictions. The interaction and effect of different Social Media streams, for example Twitter and Facebook, must also be analysed.

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