BEYOND THE "SOCIAL" IN SOCIAL MEDIA: FACEBOOK AS COMMUNICATION LIFELINE

Teresa S. Congjuico
Department of Journalism, College of Mass Communication
University of the Philippines Diliman
tscongjuico@up.edu.ph

ABSTRACT

The Philippines' geographic location combined with poor infrastructure and widespread incidence of poverty make its people highly vulnerable to risks. In the 2014 World Risk Report of the United Nations, the Philippines is ranked as the world's second most at risk to disaster. It is also the third most exposed to natural calamities in the world. But the Philippines is also the "world's most social nation", with 21 percent and 20 percent of its 44.2 million Internet users actively and regularly using Facebook and Facebook Messenger, respectively. Collectively, Filipinos spend an average of nearly four hours of their time using social media daily for various "social reasons" which include personal networking, surveillance, entertainment, and simply filling up spare time. Of the 40 million active social media users, 36 million are mobile users. Growing at a rate of 50 percent per annum, these mobile users could reach 54 million by the end of year 2015, making it a key driving factor for social media penetration in the country. In recent months, local telecommunication giants have also made Facebook even more accessible by offering them to customers either absolutely free or very cheap. Wanting to be where the citizens are, local government officials have begun to tap the social medium to create their own online communities. Some have even integrated the social medium into their own risk communication network. Thus, Facebook is no longer just a social medium; it is now a communication lifeline. This paper explored the role of Facebook as a communication lifeline for the people of Cainta, Rizal during the onslaught of typhoon Mario on September 19, 2014. Specifically, this paper explored the role of Facebook as a crowdsourcing tool as well as looked into its affordances and limitations as a tool for risk management. For its framework, this study used Katz' uses and gratification theory as updated by Thomas Ruggiero to incorporate the Internet and its technological affordances. The theory is a key communication theory which explains why people become involved in one type of mediated communication or another, and views audiences as active media users.

INTRODUCTION

The Philippines' geographic location combined with poor infrastructure and widespread incidence of poverty make its people highly vulnerable to risks.

In the 2014 World Risk Report of the United Nations, the Philippines is ranked as the world's second most at risk to disaster. It is also the third most exposed to natural calamities in the world. (UN World Risk Report 2014, p. 44)

Constantly at risk to destructive typhoons, monsoon causing landslides, flashfloods, flooding, earthquakes, severe droughts and even volcanic eruptions, Filipinos have found a new communication lifeline -- via the social media.

The Philippines, dubbed as the "world's most social nation", is a society of "Facebook addicts" who spend an average of nearly four hours a day using social media (Global Web Index 2014). Of the 44.2 million Filipino Internet users, 21 percent and 20 percent actively and regularly use Facebook and Facebook Messenger, respectively. (we are social 2014)

Of these 40 million active social media users, a great majority or 36 million are mobile users. Growing at a rate of 50 percent per annum, these mobile users could reach 54 million by the end of year 2015, making it a key driving factor for social media penetration in the country. (we are social 2014)

Wanting to be where the citizens are, local government officials have begun to tap the social medium to create their own online communities. Some have even integrated the social medium into their own risk communication network. Thus, Facebook has ceased to be just a fun and leisurely social medium; it has become a communication lifeline.

This paper explored the role of Facebook as a communication lifeline for the people of Cainta, Rizal during the onslaught of typhoon Mario on September 19, 2014. Specifically, this paper explored the role of Facebook as a crowdsourcing tool as well as looked into its affordances and limitations as a tool for disaster risk reduction and management.

STUDY FRAMEWOK

Social media are forms of electronic communication through which users create online communities to share information, ideas, personal messages and other content. (White 2012) Facebook is asocial medium that allows for both real-time and asynchronous interactivity among users in a demassified environment.

Asynchroneity allows senders and receivers to interact at their own convenience through messages they can read or view and respond to at different times; interactivity refers to the degree to which participants in the communication process have control over, and can exchange roles in their mutual discourse; and demassification is a result of the increasing control users have over the medium enabling them to experience mediated interpersonal communication. (Williams et al, 1988 as cited in Ruggiero, 2000).

For its framework, this study used Uses and Gratification (U&G) theory, a key communication theory that explains why people become involved in one type of mediated communication or another. (Ruggiero, 2000) It views audiences not as passive media users but as active media users (AMU).

An important assumption of U&G theory on audience behavior is that media use is selective and motivated by rational self-awareness of the individual's own needs and an expectation that those needs will be satisfied by particular types of media and content (Katz et. al., 1974 as cited in Ruggiero, 2000).

In today's as well as this paper's context, U&G theory views audiences as AMUs who understand the technological affordances of Internet as a medium of their choice as well as the kinds of gratifications they could obtain from it. Such technological affordances that include interactivity, asynchroneity and demassification make the Internet different from traditional forms of mediated communication.

Demassification enabled the creation of networks of small communities whose members share the same personal and surveillance needs. Interactivity on the other hand afforded individuals a multi-way communication line linked to each online community member.

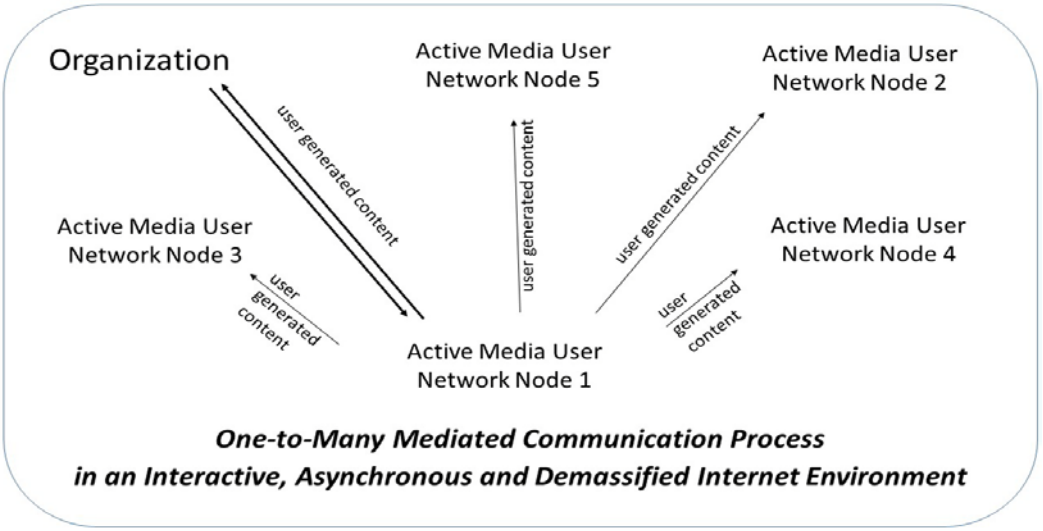
By enabling one-to-many mediated communication, user generated content produced by each member of the online community is received by all members. Acting as network nodes, each member could also help amplify a content through sharing. They may also choose to share the same content specifically to a member of the network whom they think should get the message.

The U&G theory offers a functionalist approach to studying mediated communication by providing a "means-end orientation" (Lin, 1996 as cited by Ruggiero, 2000) which is makes it a suitable theoretical framework for this study.

In the theoretical level, active media user 1 could serve as one information hub to his/her online community which includes an organization. When s/he shares content to the organization, all active media users in his/her community also get the same content if his/her privacy setting is public. (See Figure 1)

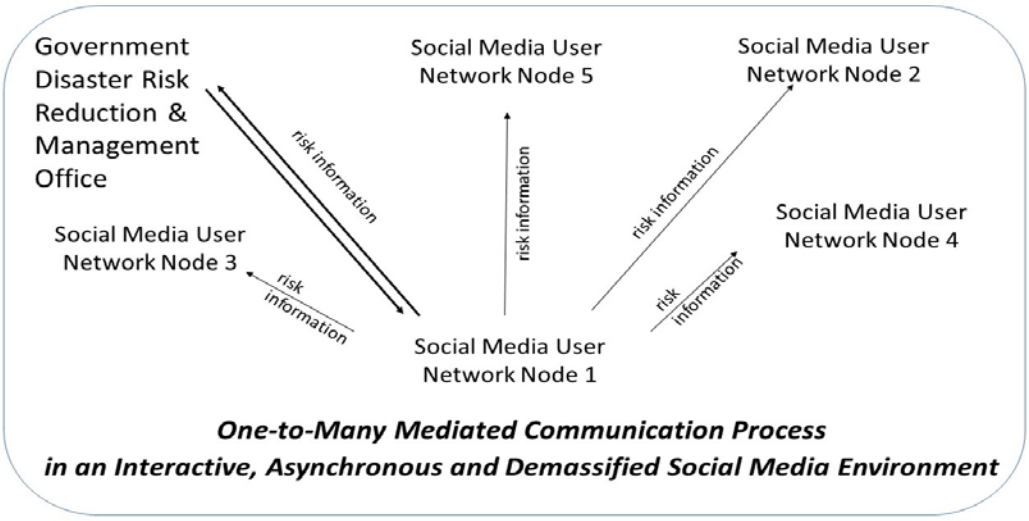
If the privacy setting of the organization is one that automatically allows friends to post, same content is automatically seen by everyone in the organization's network. In this process, content travels at the speed of light from active media user/network node 1 to everyone subscribed to his/her online community as well as to the organization's online community.

Figure 1: Theoretical Framework



In the conceptual level, social media user/network node 1 could serve as one information hub to his/her social media community which includes a government disaster risk reduction and management office. When s/he shares risk information to the social media community of the government disaster risk reduction and management office, all network nodes in his/her online community also get the same risk information if his/her setting is public. (See Figure 2)

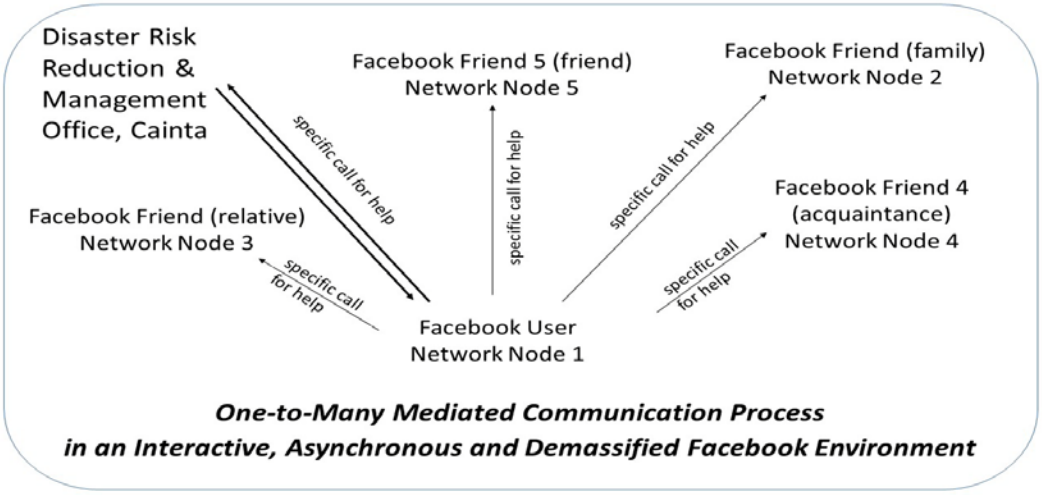
Figure 2: Conceptual Framework



If the privacy setting of the government disaster risk reduction and management office' social media account is one that automatically allows friends to post, same information is automatically seen by everyone in the network. In this process, risk information travels at the speed of light from social media user /network node 1 to his/her own social media community as well as to the government disaster risk reduction and management office' social media community.

In the operational level, Facebook user /network node 1 could serve as one information hub to his/her own Facebook friends which include immediate family members, relatives, friends, classmates, officemates, acquaintances as well as the disaster risk reduction and management office of Cainta, Rizal. (See Figure 3)

Figure 3: Operational Framework



When s/he shares specific call for help to the disaster risk reduction and management office of Cainta, all of his/her Facebook friends will get the same distress call if her privacy setting is public. This mean that even before a disaster or rescue team could respond, his/her own online community is already informed.

If the privacy setting of the disaster risk reduction and management office of Cainta's Facebook account is one that automatically allows friends to post, same distress call will automatically be seen by everyone in the network.

In the process above, the call for specific help by Facebook user / network node 1 travels at the speed of light to his/her own Facebook friends as well as to the Facebook friends of disaster risk reduction and management office of Cainta**.**

METHODOLOGY

This paper explored the role of Facebook as a communication lifeline for the people of Cainta, Rizal during the onslaught of typhoon Mario on September 19, 2014. Specifically, this paper studied the role of Facebook as a crowdsourcing tool as well as looked into its affordances and limitations as a tool for disaster risk reduction and management.

A review of related literatures including academic journals, surveys and gray literatures was conducted. A textual analysis using qualitative and quantitative analysis was also conducted on all recorded messages posted in Cainta's Facebook account dedicated to risk reduction and management.

This research used both qualitative and quantitative approaches, and used grounded theory method by Glaser and Strauss which views both data and analysis as social construction and takes into account the conditions of their production. In this method, data collection and analysis occur simultaneously, with each informing the other. (Thornberg and Charmaz 2012)

Grounded theory method is an inductive, iterative, interactive, and comparative process. It is particularly helpful for studying individual, social, and organizational processes as well as research participants' actions and meanings. (Charmaz 2006 as cited in Thornberg and Charmaz 2012)

Textual analysis is a communication research method used to describe and interpret the characteristics of recorded or visual messages. The purpose of textual analysis is to describe the content, the structure and functions of the messages contained in texts. Content analysis, is used to identify, enumerate, and analyze occurrences of specific messages and message characteristics embedded in texts. (Frey & Kreps 1999)

RESULTS AND DISCUSSION

In the years 2012 to 2013, the Philippines battled a series of destructive hydrological hazards which caused massive flooding and storm-surges. These affected over four million Filipinos and killed more than 10,000. (National Disaster Response Plan for Hydro-Meteorological Hazards 2014)

The following year, on September 19, 2014, another destructive typhoon flooded most of urban Metro Manila and nearby municipalities, including the small and highly urbanized municipality of Cainta, Rizal. Typhoon Mario not only damaged properties but displaced some 5,300 families in Cainta, Rizal alone. (Nieto 2014)

During the town-wide flood, the affected citizens of Cainta found a way to connect with the local government's disaster risk reduction and management team– thru Facebook.

The town mayor, Johnielle Keith "Kit" Nieto, who leads the town's disaster team, maintains four accounts: the Mayor Kit Nieto account with 4,993 friends and 23,860 followers, the Mayor Kit Nieto II account with 4,935 friends and 6,964 followers, the Mayor Kit Nieto III account with 3,605 friends and 3,644 followers, and the Kit Nieto account with 88 friends and no following, as of Nov. 21, 2014.

All four accounts carry the same messages, which makes it unlikely for friends and followers to hook up to more than one account as this would be duplicitous. (Nieto 2014) In all four accounts, the local chief executive has a total of 13,621 friends and 34,468 followers.

Why the mayor has four accounts instead of a single big account can be traced mainly to the mayor's limited understanding of the features of Facebook when he first used it. Wanting to separate his personal account from a public account, he ended up creating one account after the other. He said: "It never occurred to me that you can just become a follower. I am not a techie guy. I am just on a need to know basis." A follower need not be friend of the account owner but would still be receiving all information posted.

As of November last year, the mayor had already opened two Facebook support pages titled "Mayor Kit Nieto Political Organization" with 4,534 likes and "Mayor Kit Nieto Public Services" with 7,609 likes, where people cannot make posts and comments but could only do likes and shares.

Judging on the nature of concerns and on the command of the English language of those who participated in the Facebook conversations, both in the form of posts and comments, many members of the town's online community on Facebook are well educated. The mayor himself believes most of them are middle class, specifically the working class.

Of the 311,845 people of Cainta (Philippine Statistics Authority 2013), only 4.4 percent are his friends and 11.10 percent are his followers. However if only the total number of registered voters is to be considered, out of the 120,000 registered voters (Nieto 2014), 11.40 percent and 28 percent of the voters of Cainta are his friends and followers, respectively -- assuming everyone was honest in declaring their age on Facebook and that all of them are residents of the Municipality of Cainta.

Majority or 60 percent of Cainta's people live in suburban villages, 10 percent live in the barrios and 30 percent are informal settlers (Nieto 2014). With this demographics, the local chief executive is confident he is able to reach a good majority of his people through Facebook.

The local chief executive's account reached this level of estimated Facebook penetration despite the absence of a formal communication program or campaign aimed at attracting more residents to be part of his online community. As people learned about his account, they sent friend requests and he would just accept them. "They (the residents) just opted to follow," the mayor said. It is possible, however, that not all his friends and followers are registered voters or residents of Cainta.

Aside from informal settlers in danger zones, Caintenos living in suburban villages with more properties such as motor vehicles and appliances at stake are often the hardest hit during town-wide floods. Cainta's waterways and drainage systems traverse through villages exposing houses to floods after heavy rains. (Nieto 2014).

The increase in the Facebook following of the mayor was a direct result of the need of the residents of Cainta for hyper local and high value information such as

on class suspensions and updates on calamities. A rapid appraisal conducted by this author showed that prior to the floods in previous years, many became aware of the social media accounts of the local government only when they were already at the height of the flood calamity because they received shares of posts from Facebook friends who are hooked up to the mayor's accounts.

Today, Facebook is the office of the Mayor's official and personal communication tool. It is the main communication tool he uses to move his people or getting them to participate in official activities. On Facebook, he said he is able to tell his people exactly what he wants them to know, "subtly, directly and indirectly." Subtly and indirectly, especially when the person on the other end is clearly displeased or upset.

Crowdsourcing for Risk Managers

Users of social media provide information from the ground, the very critical information emergency managers or response teams need for situational awareness that help them establish clear operational picture. Lack of which not only slows down the deployment of effective resources into the disaster area, but delays the overall recovery as well. Information from social media when juxtaposed with reports from trained first responders provides a much improved operating picture. (Westbrook in White 2012)

As a communication platform, Facebook became helpful for Cainta's disaster team when it came to a point when cellular sites and their radios were down due to infrastructure damage. At the height of the disaster, the mayor said he "got the pulse of the people in need at any particular point in time."

The mayor regularly posts on Facebook flood-risk related information such as those on drainage clean-up and river and creek dredging as part of the town's preparedness program. This resulted to more requests coming from the people: He narrated:

> They got to realize, this creek at the back has many informal settlers. This creek here needs to be dredged. Our street drainage is now overflowing. So let's tell the mayor about it so he can send a team to clean it. That's how I dispatch my team every day. On top of the "thank yous" for yesterday's work, there's a request for tomorrow's work.

How he was alerted of the flood disaster early in the morning of September 19, 2014, however, was not with the help of Facebook but through short messaging system (SMS) or texting. On that particular morning, he said he woke up to non-stop SMS flood alerts from some of the 3,000 employees of Cainta.

At 5:23 in the morning, he put out his first post on Facebook convening his disaster team. A few minutes after, flood reports started coming in from all parts of Cainta. At 5:42 a citizen reported of widespread flood at St. Francis Village; a

minute later a report came from the Floodway area; followed by reports from Balanti, San Isidro, Bayanihan, St. Joseph Subdivision, Karangalan, Don Mariano Ave., Midtown, and Felix Ave.

These prompted the mayor to declare on Facebook a town-wide flood disaster at exactly 6:12 in the morning.

Citizens' Post

Of the total 27 posts citizens made, 12 (44.44%) were reports on floods and eight were calls for rescue. These immediately gave the disaster management team a clear picture of the floods in each area. (See Table 1)

Aside from posting images of floods in their areas, citizens described the depth of the flood in their areas using either their body parts or the structures around them, i.e. *hanggang tuhod* (knee level), *hanggang baiwang* (waste-level), *lubog na ang tao* (the height of an average person), *abot na sa* second floor (up to the second floor) or *lubog na ang bubong ng mga bahay* (roofs are already submerged).

Table 1. Categories of citizens' posts

Road Inquiry	Office/Class Suspension Inquiry	Citizens' Message to Community	Citizens' Flood Risk Report	Citizens' Emergency Calls	Total
4	1	2	12	8	27
14.81%	0	7.4%%	44.44%	29.63%	100 %

Some of the emergencies specified were rescues at Parola at Dulo Buli and Gruar for water had already reached the second floor of houses; a call for evacuation from DM6 of an elderly with cancer; rescue from fast-rising water at Gongora, Rodfer 2 and Nursery-Corinthian in San Roque; and the need for food at Tanglaw and Felix for people could no longer cook due to the flood.

This study also checked for messages written in all capital letters (all caps) which is not a standard sentence structure and mostly associated with the writers' state of mind and emotion. On the Internet, this means the writer is shouting and is generally regarded as unacceptable behavior on the Internet except when the message is a positive one.

Of the 109 posts with text, only four were in all capital letters which included captions of photo albums the disaster risk reduction and management office of Cainta posted for information dissemination.

Facebook not only provided the citizens of Cainta a direct communication lifeline to the rescue team but also directly linked them up with no less than the local chief executive, their very own local hero, who wasted no time in acknowledging their calls for help and on immediately posting emergency response updates.

Citizens' Comments

Of the total 2,763 comments, 2,216 (80%) are flood risk related. At least 11 are comments with no messages while 29 comments are tags – a Facebook feedback mechanism that allows users to share a thread to another user by simply inputting the other's user accounts name into a comment in the same thread. An empty comment appears when a user opens the comment button then presses the enter button without writing in the comment box.

A great majority of the 2,723 comments are in text format (95%), followed by image with text (4%), image only (1%), and video. In many of the reports from citizens on flooding in their areas, they sent images accompanied by texts. In some instances, they failed to give descriptions of the images they sent. The video comment is not a video of the disaster but a shared YouTube link of local TV program where the Mayor was a guest.

On the day of the disaster, the top post in terms of number of comments from the residents is post #47 (Robinson's and Sta. Lucia malls tapped for emergency parking) with 121 comments. This is an indication that a significant number of the online community of the mayor own motor vehicles. This should not be surprising considering that 60 percent of the town's population live in suburban subdivisions. (See Table 2)

Table 2: Posts with most comments on disaster day

Rank	Post #	Date	Time	Source	Comments	Category	Topic
1	47	19-Sep	9:29am	Nieto	121	Risk	Robinson's & Sta. Lucia Malls tapped for emergency parking
2	36	19-Sep	6:25am	Nieto	78	Risk	Residents told to post emergency requests in the same, opened thread
3	29	19-Sep	5:23am	Nieto	76	Risk	All disaster units alerted to convene in the municipal hall in 15 minutes
4	30	19-Sep	6:09am	Nieto	70	Risk	Residents told to stay home. Ortigas & Don Mariano Marcos flooded
5	81	19-Sep	9:42pm	Nieto	70	Risk	Update on evacuation areas already been served with food
6	80	19-Sep	8:41pm	Nieto	66	Risk	Food delivery in Karangalan hampered; rescue trucks cannot penetrate
7	68	19-Sep	3:29pm	Nieto	63	Risk	Update: Rescue team in Youngstown now
8	59	19-Sep	12:38am	Nieto	57	Risk	Flood advisory: Strong current; backhoe to be replaced by pump boats
9	56	19-Sep	12:20pm	Nieto	57	Risk	Areas where power was cut announced, residents asked to post request
10	61	19-Sep	1:25pm	Nieto	55	Risk	Update: Just dispatched rescue help from military, red cross announced

Emergency Calls

A total of 111 emergency calls were received by the town executive via his Facebook account. A great majority of these, 103 (93%), were comments in posts and only eight were posts on his Facebook wall.

A great majority or 96 of the 103 emergency messages were calls for rescue from the rising flood waters. Other kinds of help specified by the residents were the need for food, ambulance to evacuate the sick and elderly, the urgent need to cut electricity supply to keep residents from getting electrocuted as the flood was rising so quickly, the need for a higher ground for parking such as the Robinsons and Sta. Lucia mall, and the need to urgently de-clog waterways to keep water from inundating houses. (See Table 3)

Table 3: Types of citizens' emergency calls

Rescue	Food	Ambulance	Cut Power	Parking	De-clogging	Total
96	5	4	3	2	1	111
86.49%	4.50%	**3.60%**	2.70%	1.80%	0.90%	100.00%

Sorting of emergencies on Facebook and dispatch decisions are made by the Mayor. As soon as an emergency call pops up on his screen, he writes this on the white board. The call is quickly verified by a team outside his office. If the call is valid, he then quickly dispatches a team. And then the emergency caller is informed via Facebook that a dispatch had been made.

Some 13,000 residents were rescued by the town's 26 rescue teams.

Aside from rescue, the government delivered food rations to areas affected, particularly at Karangalan area, which, as announced on Facebook at past 9:00 in the morning, had also become impenetrable by trucks.

The mayor acknowledged that Facebook played an important role in gathering emergency calls but admitted that at the height of the floods, there came a time when they had stopped giving hope of immediate rescue to the people as flood waters especially had become too deep even for their rescue trucks to get through.

In his report to the people of Cainta on Facebook, the mayor said:

> I communicated with all texters, Facebook posters, and landline callers. As we were able to respond to five calls, 10 more would come, virtually making it impossible to cover all at the same time. Just the same, I made sure they knew that the government was listening and will do what it can to address their needs. We did for the most; we attempted for the rest.

Lessons learned

Drawing lessons from his experience with typhoon Mario, the local executive has realized the importance of getting more residents to get hooked up to his Facebook account including his disaster teams. He said:

> I will have to make sure that most of my people, on top of the residents, will be able to hook up to my account at every point in time during the calamity while doing work. The task will become easier because, if all disaster workers are hooked up to me, they will know exactly where to stand.

The Facebook flood reports also helped the mayor create a flood map of the whole town of Cainta which his government needed in designing a P180 million proposed major underground waterways project. The said project has already been presented with the Department of Public Works and Highways (DWH) and is awaiting approval and budget allocation or funding from the national government.

The local executive also plans to set up two satellite disaster centers, one in Floodway and another in Balante so that equipment no longer have to be trapped in the municipal hall whenever Don Mariano and Ortigas become impassable. The said centers will also have Facebook access. He explained:

> Because even if we have 40 radios and we are able to exchange information, what about the people? What about the 120,000 registered voters to whom we are accountable? We cannot provide 120,000 radio equipment for them. And if our antennas fail, then we lost communication.

Technological and Social Affordances

Facebook affords users a high degree of social presence, making it a perfect tool for creating and nurturing small online communities of communication empowered individuals.

Being a multi-way communication platform, Facebook enabled the citizens of Cainta to listen to one another and to support and encourage each other.

On the day of the disaster, the hotline number of the town which one citizen requested became the most shared post. Some 238 jumped at the opportunity to be of help by spreading the hotline number to their own community. (See table 4)

Table 4: Top 10 post with most shares

Rank	Post #	Time	Source	Shares	Topic / Message
1	52	10:53	Mayor	238	Cainta's mobile hotline number posted
2	47	9:29	Mayor	216	Robinson's & Sta. Lucia malls tapped for emergency parking
3	30	6:09	Mayor	174	Residents told to stay home; Ortigas & Don Mariano Marcos flooded
4	59	12:38	Mayor	165	Flood advisory: Strong flood current; rescue backhoe replaced by pump boats
5	56	12:20	Mayor	88	Areas where power was cut announced; residents asked to post request
6	61	13:25	Mayor	57	Update: Just dispatched rescue help from military, Red Cross
7	34	6:20	Mayor	56	Update: Rescue truck now in Caprice Village East; all major streets knee deep

8	37	6:46	Mayor	46	Update: Rescue truck now in Dulong Parola; Caprice; Imelda Ave not passable
9	40	7:39	Mayor	39	Dispatch Update: Gruar boat; Camden, fire truck; M. Javier, cargo truck
10	54	11:21	Mayor	32	Advisory: Already sought help from NDRRMC for more boats, trucks

With the help of Facebook, meals which were normally served in evacuation areas were brought in a banca to groups of people trapped by the floods in their localities.

Requests from citizens caught in floodwaters on the road also prompted the local executive to use his calamity emergency power to open the parking spaces of two big shopping malls in Cainta. This update from the mayor gained the highest approval from citizens with 1,690 likes. (See table 5) It also became the second most shared by the citizens to their own respective online communities.

Table 5: Top 10 post with most likes

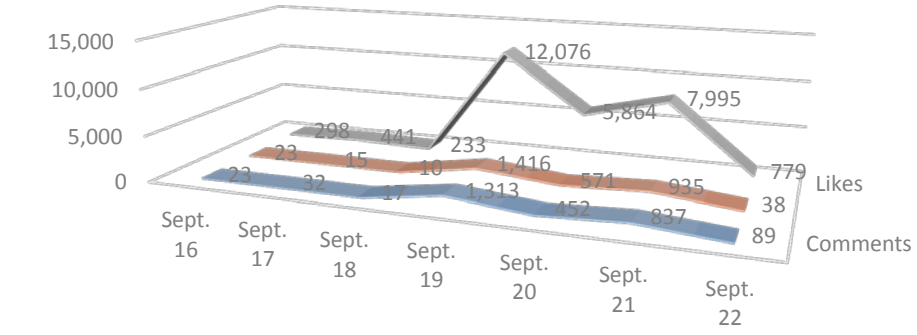
Rank	Post #	Time	Source	Likes	Topic / Message
1	47	9:29	Mayor	1690	Robinson's & Sta. Lucia malls tapped for emergency parking
2	61	13:25	Mayor	849	Update: Just dispatched rescue help from military, Red Cross
3	81	9:42	Mayor	685	List of evacuation areas already served with food
4	29	5:23	Mayor	621	All disaster units convene in the municipal hall in 15 minutes
5	30	6:09	Mayor	543	Residents told to stay home; Ortigas & Don Mariano Marcos flooded
6	52	10:53	Mayor	513	Cainta's mobile hotline number posted
7	59	12:38	Mayor	509	Flood advisory: Strong flood current; rescue backhoe replaced by pump boats
8	54	11:21	Mayor	487	Advisory: Already sought help from NDRRMC for more boats, trucks
9	80	8:41	Mayor	468	Food delivery in Karangalan hampered; rescue trucks cannot penetrate
10	36	6:25	Mayor	461	Residents asked to post emergency requests in the same just opened thread

The citizens of Cainta used Facebook to report on flood situations in their area. This helped the risk reduction office come up with real time and clear picture of the disaster. It also helped the local town executive to declare a town-wide flood in just a matter of minutes without even having to conduct ocular inspection of the town. It was also able release flood updates and road safety advice based on citizens' reports on Facebook.

Social Media Feedback

Social media traffic started low on Sept. 16 to Sept. 17 and suddenly peaked on the day of the town-wide flood on September 19, with total likes reaching 12,076; shares reaching 1,416 and comments reaching 1,313 in a day. (See Figure 4)

Figure 4: Social Media Feedback



	Sept. 16	Sept. 17	Sept. 18	Sept. 19	Sept. 20	Sept. 21	Sept. 22
Comments	23	32	17	1,313	452	837	89
Shares	23	15	10	1,416	571	935	38
Likes	298	441	233	12,076	5,864	7,995	779

On the day of the town-wide flood, the top post in terms of number of comments from the residents was post #47 (Robinson's and Sta. Lucia malls tapped for emergency parking) with 121 comments. (See Tables 6) Most of the comments in this thread were either words of commendation for and gratitude to the local chief executive.

Table 6: Top 10 post with most comments

Rank	Post #	Time	Source	Comments	Topic / Message
1	47	9:29	Mayor	121	Robinson's & Sta. Lucia malls tapped for emergency parking
2	36	6:25	Mayor	78	Residents asked to post emergency requests in the same just opened thread
3	29	5:23	Mayor	76	All disaster units convene in the municipal hall in 15 minutes
4	30	6:09	Mayor	70	Residents told to stay home; Ortigas & Don Mariano Marcos flooded
5	81	9:42	Mayor	70	All evacuation areas already served with food
6	80	8:41	Mayor	66	Food delivery in Karangalan hampered; rescue trucks cannot penetrate
7	68	3:29	Mayor	63	Update: Rescue team in Youngtown now
8	59	12:38	Mayor	57	Flood advisory: Strong flood current; rescue backhoe replaced by pump boats
9	56	12:20	Mayor	57	Areas where power was cut announced; residents asked to post request
10	61	13:25	Mayor	55	Update: Just dispatched rescue help from military, Red Cross

A day after the floods, on Sept. 20, 2014, social media feedback traffic dropped by more than half of likes, by almost a third for shares and roughly by a third for comments only to pick up the following day after the posting of the town Mayor's reflection which had the highest number of likes, shares and comments among all posts made during the week of the disaster.

The above is a clear indication that Facebook is a powerful tool for citizen engagement and participation in online community conversations.

Amplified conversation platform

For the town executive, Facebook is his medium of choice because it allowed him to engage in conversations with his people, his friends on Facebook in particular, while making these conversations also visible to all of his other

followers. He said: You only need to write once and you're already talking to some 30,000 people.

Social media, Facebook in particular, enabled the government risk managers of Cainta, Rizal to create a "network of networks" of Caintenos, which are all "refined node of information" (Grieb in White 2012) from which and through which risk information either emanated or disseminated.

The mayor likened his Facebook disaster response formula to a telenovela, a drama series aired on television. He said:

> There's a particular cry for help, there is a particular promise that government makes, there's a particular dispatch that the government makes, and there's a particular solution or resolution that government is able to effect. And the ending there is the token of gratitude coming from the recipient or a third party telling us that we were able to solve a problem.

Drama is a key element in the success of the mayor's Facebook accounts in terms of generating interest which translated into a huge following, thereby expanding its reach for information dissemination. He said:

> When they are reading into the threads, they get entertained, they gent informed, they get angry because of lack of response, and they empathize with victims.

Today, the local chief executive even gives Facebook credit for his success as a public servant. He said: "*Kung hindi dahil sa* Facebook, *patay na ang career ko ngayon* (If not for Facebook, my career would have ended by now).

Technological and Social Limitations

The government of Cainta has a separate Facebook account for risk reduction and management, the "Ldrrmo Cainta" account managed by the Cainta Municipal Disaster Risk Reduction and Management Office (CDRRMO).

However, the account which regularly provides flood risk-related advisories and pronouncements sourced from the Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA) and the province of Rizal, has not generated much interest from the people of Cainta that as of November 21, 2014, it only had 253 friends and no following at all.

Big Facebook following is with the accounts of the mayor, also the overall head of the town's disaster management team.

Because the accounts are the mayor's personal accounts, the use of Facebook by the government of Cainta is not part of a carefully-planned institutional risk

communication program. The local government does not even have a team which carefully crafts and designs flood risk management-related content.

An intimate communication line

While he recognizes the value of eventually institutionalizing the use of Facebook in other local government contexts, the local chief executive is not ready to do the same in Cainta.

Drawing lessons from the reported failure of PAGASA to attract more following for its Facebook account because it is perceived to be too scientific, too technical and too impersonal, Nieto said:

> You cannot have a heart in there (Facebook conversations), if you use institutions. For me, being spontaneous is actually being sincere enough. You try to formalize things and your moves will become too politicized and calculated, inhibiting you from thinking outside the box.

Explaining why he uses his personal accounts and not an official government account, Nieto said:

> The culture of the Filipino is personality-oriented. They would rather appreciate getting information from you (their leader), from your personal account. So I follow that path.

The mayor feels a strong sense of ownership of the online community. He refers to his use of Facebook as his "love affair" with the residents of Cainta. He said: "It is something that I want very spontaneous. Whether I rise or fall, I am with my people."

Communication skills hurdles

While Facebook may be a very user-friendly medium, its use in communicating with people from all walks of life, trolls and real-world enemies included, requires a high level of communication skills. The mayor has this advice to share:

> If you are a Facebook user and you want it to be your medium, make sure you write well. Make sure you can psyche people up. How can a message be written in such a way that you don't irritate your audiences, that they don't feel slighted, that they understand your message? It is not that simple.

Many of the residents' cries for help or calls for emergency in the form of posts and comments on the wall of the mayor are not specific enough such that complete address of the person in need of help and the kind of help needed was not included.

Communicating on Facebook requires not only a good command of either the Filipino or English language but also the ability to recognize other people's sensitivities and limitations. In the case of politicians who seem to gravitate trolls, they also need to master the art of self-restraint and knowing when to disengage in the conversation.

Trolls are people who are not necessarily haters but are there to provoke or to pick a fight with the account owner or with anyone in his/her online community. Trolls become dangerous when they get in the minds of gullible individuals who allow themselves to be controlled and driven to harm themselves or others.

Netlingo.com classifies trolls into four types:

1. Playtime Trolls - an individual plays a simple, short game.

2. Tactical Trolls - a more serious troller who creates a credible persona to gain confidence of others, and provokes strife in a subtle and invidious way.

3. Strategic Trolls - a very serious form of game, involving the production of an overall strategy that can take months or years to develop and can also involve a number of people acting together in order to invade a list.

4. Domination Trolls -- where the trollers' strategy extends to the creation and running of apparently bona-fide mailing lists.

Trolls observed in the wall of the mayor are playtime trolls who appear sporadically and do not stay long in the conversation. Commenters who made unreasonable requests, i.e. requesting for banca to get to work, or asking the same question again and again to annoy others might also be trolls.

A very high social presence

Because Facebook is a social medium, its very nature is also its limitation.

In an attempt to organize and simplify sorting of messages from the ground, the mayor started a thread and requested everyone to post only emergencies. Many of his friends and followers still posted non-risk comments including messages of encouragement and compliments for the mayor despite admonishment from other commenters.

Facebook afforded the local chief executive a very high degree of social presence to his online community. Social presence refers to an individuals' awareness of the presence of other individuals with whom he could interact. (Short et. al. 1976)

With Facebook, the residents of Cainta had become empowered to interact not only with everyone in the online community but also with no less than the highest leader in town, regardless of their economic and educational background.

This also resulted to very long comment threads which inevitably would digress from the topic of the original post or sometimes would branch out into other unrelated topics.

And because belated comers do not read through the long thread, they often make inquiries or seek clarifications on matters already been answered and clarified. Often, the same question from different individuals appears several times in the same thread which eventually irritated others engaged in the conversation thread.

Some posts with long comment trends even tended to show a pattern consistent with Godwin's Law, a theory brought forth in 1990 by American lawyer and author Mike Godwin. He theorized that as an online discussion progresses, it becomes inevitable that someone or something will eventually be compared to Adolf Hitler or the Nazis, regardless of the original topic. (Oxford Dictionary 2012)

In today's broader application of the theory, Godwin's Law is observed when the conversation level starts to degrade and commenters start to verbally attack one another. When this happens, other commenters start to leave the thread and this signals the beginning of the end of the said thread.

In the wall of the mayor, it was observed that some commenters have low tolerance for repetitive inquiries and clarifications. Some also do not hesitate to come to the defense of the town mayor when they sense that a troll, a basher or hater is also in the loop.

Of politics and personal favors

According to the mayor, he encountered challenges not much on the volume of requests on Facebook that he had to make decisions on but on deciphering which among those requests truly deserved to be addressed by their already overwhelmed disaster rescue team.

The mayor is aware that for many residents of Cainta, he is not just their local government leader, he is also a friend, a political ally, and a family member responding to their calls for help.

He lamented that, "sometimes they just want to be fetched by a banca to get to work or just to be able to see situations in other places." In the Philippines, these people are called "uzis", short for "usisero" or kibitzers, the interfering onlookers.

CONCLUSION

When disaster strikes, a strong sense of community is awakened among members and they turn to their respective online communities or "virtual gathering spaces" for information seeking and sharing. (Palen 2007)

On the day of the onslaught of typhoon Mario on Sept. 19, 2014, Facebook served both the citizens and the risk reduction office of Cainta, Rizal well. The citizens found a new communication lifeline and were able to provide the government wisdom from the ground.

The risk reduction office, on the other hand, was able to gather real time risk information from affected citizens and was able to provide quick and effective solutions as suggested by the citizens themselves. Real time feedback, approval or disapproval, on government actions were also received by the risk management team in the form of social media feedback which included shares, likes and comments.

Facebook gave ordinary people a voice and a direct line to no less than the leader of their town who is also the head of the town's risk management office. The social medium, a one-to-many communication platform, not only amplified risk information but also made it available to everyone on the network at the speed of light.

Facebook, being a very inclusive personal communication medium, also facilitated citizen engagement in public affairs as it enabled everyone to participate in the threads of conversations on the wall of the town mayor.

The very nature of Facebook can also be its limitation. Citizens flock to an online community only if the social presence of the one on the other end of the communication line is strong. In the case of Cainta, citizens chose the online community of the mayor and not the online community of its disaster risk reduction and management office because the mayor keeps a strong social presence.

Good communication and social skills are also required from risk managers to keep citizens hooked up to the online community and engage in conversations. On the part of the citizens of Cainta, Facebook's role as a crowdsourcing tool became effective because many were aware they were communicating with the mayor listening on the other end and that majority knew how to make good reports.

Since Facebook is both a personal space and communication medium, tapping it for emergency or as communication lifeline for citizens can be challenging especially for a politician. Despite the mayor's instruction for citizens to post only their emergencies in the thread he opened, there was a strong tendency for citizens to ignore this that they continued to post non-risk information, clogging the threads with more messages of commendation and gratitude to the mayor.

IMPLICATIONS AND RECOMMENDATION

Facebook, a multi-way online communication environment where hyper local and high value information such as risk information can be freely disseminated

and shared, could play a key role when tapped as communication lifeline for citizens.

The findings of this study could benefit government institutions planning to tap Facebook for their risk management programs.

This study was limited only to the use of Facebook in a single application and did not include other social media such as Instagram and Twitter.

To expand the scope of study, other studies could also focus on other local government units in the Philippines that are now using social media for their risk management programs.

REFERENCES

Charmaz, K. & Thornberg, R. (2012). Grounded Theory. In Lapan, S., Quartaroli, M. & Riemer, F. (Eds.). Qualitative Research: An Introduction to Methods and Designs. (pp. 41-67). San Francisco: Jossey-Bass.

Congjuico, T. (2014). Social Media for Flood Risk Management and Emergency Response for Philippine Local Government Units. *Journal of Management and Development Studies*. University of the Philippines Open University. 3, 20-38, Online ISSN 2350-8434.

Davis III, C.H.F., Deil-Amen, R., Rios-Aguilar, C., & González Canché, M.S. *(2013) Social media and higher education: A literature review and research directions*. Report printed by the University of Arizona and Claremont Graduate University. Retrieved from https://www.academia.edu.

Frey, L., Botan, C., & Kreps, G. (1999). *Investigating communication: An introduction to research methods*. (2nd ed.) Boston: Allyn & Bacon.

Global Web Index (2014). Time Spent Social Networking by Country. Retrieved May 15, 2015 at www.globalwebindex.net/

Grieb, H. (2012) Onsite with Hal Grieb. In White, Connie M. Social Media, Crisis Communication and Emergency Management: Leveraging Web 2.0 Technologies. pp 33-36. CRC Press.

McQuail, D. (1994). Mass Communication Theory: An Introduction. University of Michigan: Sage Publications.

National Disaster Response Plan for Hydro-Meteorological Hazards (June 2014). National Disaster Risk Reduction and Management Council. Retrieved November 2, 2015 at http://www.ndrrmc.gov.ph/index.php/13-disaster-risk-reduction-and-management-laws/1334-national-disaster-response-plan-hydro-meteorological-hazards

Nieto, K. (2014). Interview in Unang Hirit, GMA TV. Retrieved from http://www.gmanetwork.com/news/video/218792/unangbalita/baha-sa-maraming-lugar-sa-cainta-rizal-humupa-na

Oxford Dictionary (2012). Retrieved on November 17, 2015 from http://www.oxforddictionaries.com/definition/english/godwin's-law

Palen, L., Hiltz, S. & Liu, S.* (2007). Online Forums Supporting Grassroots Participation in Emergency Preparedness and Response. Communications

of the Association of Computing Machinery, 50 (3), pp. 54-58. Retrieved from www.researchgate.net.

Philippine Statistics Authority. (2013). Retrieved 28 Nov, 2014, from http://web.psa.gov.ph/content/population-rizal-had-increased-800-thousand-results-2010-census-population-and-housing

Ruggiero, T. (2000). Uses and Gratification Theory in the 21st Century. Mass Communication and Society, 2000, 3(1), 3-37. doi: https://umdrive.memphis.edu/cbrown14/public/Mass%20Comm%20Theory/Week%207%20Uses%20and%20Gratifications/Ruggiero.pdf

Short, J.A., Williams, E. & Christie, B. (1976). The Social Psychology of Telecommunications. New York: John Wiley & Sons.

Troll. Netlingo.com. Retrieved Nov. 2, 2015 at http://www.netlingo.com/word/troll.php

United Nations World Risk Report 2014. Retrieved November 2, 2015 from worldriskreport.org.

We Are Social Singapore. (March, 2015) Digital, Social and Mobile in APAC 2015. Retrieved 1 May 2015, from http://www.slideshare.net/wearesocialsg?utm_campaign=_profiletracking&utm_medium=sssite&utm_source=ssslideview.

White, C. (2012) Social Media, Crisis Communication and Emergency Management: Leveraging Web 2.0 Technologies. CRC Press.