PLEASE NOTE! THIS IS SELF-ARCHIVED VERSION OF THE ORIGINAL ARTICLE

**To cite this Article:** Anssi Numminen, Jyri Rajamäki. (2017) Twitter as a Tool in Crisis Communication in the European Union Area. International Journal of Internet of Things and Web Services, 2, 1-6.

Twitter as a Tool in Crisis Communication in the European Union Area

ANSSI NUMMINEN AND JYRI RAJAMÄKI
Research, Development and Innovations
Laurea University of Applied Sciences
Vanha maantie 9, FI-02650 Espoo
FINLAND
anssi.numminen@student.laurea.fi, jyri.rajamaki@laurea.fi
http://www.laurea.fi

Abstract: - In this study we built understanding on how the social media and especially Twitter can be used in crisis communication in the EU. We conducted a case analysis about how the Munich Police Department did their crisis communication via Twitter during the Munich shooting crisis. The use of social media in crisis communication is increasing as well as the available mobile phone environment for the people in the EU area. EU projects have increased knowledge about the possible crises situations in the EU by analyzing the crises events which happened in the EU. Moving people are more often connected to social media and the services in that environment give new possibilities to the authorities. EU projects are delivering directions to the EU authorities for social media. The EU authorities have a lack of common guidelines for the social media environment which could unify their actions. The analyzed Twitter case concluded in the understanding that Twitter can be used as one tool in crisis communication. It is impossible to manage all the portals on Twitter during a crisis – the effective way to tackle threats in crisis communication with that tool is to concentrate mainly on own portal and on common ones. The Twitter service could be developed for crisis communication by adding a couple of information windows for authorities to the main window.

Key-word: - European Union; EU; Citizen; Crisis Communication; Social Media; Twitter

1 Introduction
This research is a desk-top study. In this study we built understanding on how social media and especially Twitter can be used in crisis communication in the EU. We did a case analysis about how the Munich Police Department did their crisis communication via Twitter during the crisis. “In the majority of cases, literature reviews serve as the means to reveal open research gaps and are part of a larger research endeavour. Planning and accomplishing the literature search process in a rigorous manner will help to discover similar research endeavours early and prevent the researcher from doing redundant work [1]. After the introduction at the second part of this study we form a picture of how the development work in the EU is improving the possibility to use social media and what needs there are for crisis communication in social media. In the third chapter we use SWOT analysis as a method to assess the example case. The last chapter contains our conclusions. Social media (SOME) is “internet-based tools, technologies and applications which enable interactive communications and content exchange between users who move back and forth easily between roles as content creators and consumers are all components of social media”. Compared to traditional media such as newspapers and television, SOME is a two-way, real-time platform whereas traditional media is one-way. In the case of the Boston Marathon Bombings Twitter was the first channel where users shared information about what happened [2].

Twitter defines itself as “a social broadcast network that enables people and organizations to publicly share brief messages instantly around the world [3].” From a political point of view, during the Arab Spring Twitter was widely used to share news and help protestors to organize. According to Twitter, during the earthquake and tsunami in Japan, Twitter saw a 500 percent increase in tweets because people were looking for each other [2]. SOME has potential in the future to gain importance in crisis communication. In SOME there are many communication levels for example videos, photos, blogs, news and comments [4].

At the moment there are no specific guidelines for maritime crisis communication in social media.
in the European Union and the situation is the same in the continental area. The authorities have been using SOME to share information concerning preventive and informative content but it has been lacking situational awareness in crises. The European Union have funded the project Contribution of Social Media in Crisis management (COSMIC), which has offered Guidelines for the use of new media during a crisis. COSMIC has been planned for public and private organizations and it has not focused on cooperation between authorities [4]. Overall there are no common guidelines for the SOME environment which all EU authorities could use during their crisis communication.

When the European directive 2014/61/EU is fully ratified, it will affect the future of using mobile technology while travelling around the European area due to lower mobile device using costs in the EU area. The digital economy is changing the internal markets and citizens are moving more across the EU borders. The EU has a vision of a digital economy that delivers sustainable economic and social benefits which rely on modern online services and fast internet connections. This can be seen as a strategic importance to the social and territorial cohesion. EU citizens and the public and private sectors must have a chance to be part of the digital economy and high-speed electronic communications networks. It is going to be easier for EU citizens to move from one EU country to another when the cost of roaming will be the same in each EU country and there will be fewer surprises of data use because of the mobile operator’s costs and user limits [5]. In 2017 the roaming costs in all EU countries are going to be the same as in the EU citizen’s home country [6].

For the emergency management system it is necessary to understand that the focus must be on customers and customer service. Customer service approach contains the understanding of needs and interests of individuals and communities. Good communication needs the commitment of leadership and the information shared has to be considered internally and externally. The commitment to crisis communication needs planning and operations which have be taken into account during decision-making processes [7].

The Mass Crisis Communication with the Public Project (MASSCRISCOM) was an EU founded project. Experiences in the EU area were analyzed, for example crisis communication in pandemic diseases, storms, flooding and the volcanic eruption in Iceland. The financial crisis has made enormous human suffering in the EU area as well. In the MASSCRISCOM project, communication between people and authorities was examined and the globalization aspect was present. Technological development, a new media landscape, new communication needs and demands and increased transparency leads to rethinking how to offer communication. The results in MASSCRISCOM present a coherent, generic crisis communication model based on an all-hazards approach and existing conditions [8].

Crisis management needs real-time information from many sources. The European commission framework programme 6 project CHORIST has produced for example a module which contains a tool to warn people. A huge number of users are carrying mobile devices which are connected to SOME and this fact gives good possibilities for emergency communications. Authorities in Europe use variant information systems while they produce services to the citizens. The warning systems in the EU area vary, for example the Norwegian police can send SMS messages to the population in particular areas. Usage of SOME in crisis communication has its challenges. Reliability in mobile systems is one matter that has to be developed. In the future different features in mobile technology such as positioning offer new opportunities [9].

During a crisis it is important to deliver information which contains the best available content as quickly as possible to as many people as possible. Delivering information on SOME is very fast and this gives the opportunity to disseminate crisis information speedily and efficiently for example between people and authorities [8].

Twitter, Facebook, Crownvoice and similar SOME platforms can reach people who otherwise

2 The Growing Role of Social Media in Crisis Communication

Disaster communication needs a strategy which contains the basic principles to ensure that the emergency managers can effectively communicate with their customers and partners. The basic principles provide guidance to emergency managers and other officials. In emergency management there has to be a view of mitigation, preparedness, response and recovery. It is important to understand how to talk to the customers, how to assure them and also what to say and not. The content of the messages has to be accurate and timely, and the connections have to be solid. There is no room for lies [2].
SOME gives people the chance to have their voices heard, hear what other people’s opinions are and enable better decision making in a crisis situation. Building a relationship with customers in SOME is important – it gives people the opportunity to have insight of a service, take responsibility for receiving information and opinions and creating credibility. This kind of relationship building will increase opportunities for having a far greater impact from important messages in a crisis situation. “A Society, in which many people have a personal relationship with the authorities, have a greater credibility for these, are able to put reasonable requirements and understand their own responsibility, is a society with a greater power of resilience and ability to recover” [8].

SOME has many platforms in which to share information and the tools on SOME have led to barriers and challenges for citizens and public organizations. The COSMIC project has resulted in principles which offer the chance for a better use of SOME during crises in a responsible and effective manner. These principles are called AID (Fig. 1). The Tips & tricks contains three phases of a crisis: 1. Pre-Crisis, developing a social media policy and strategy, 2. Crisis, monitoring and adapting to emergent initiatives on SOME and 3. Post-Crisis, directing people to aftercare initiatives and seeking feedback. Public authorities in this context means governmental organizations which carry a prime responsibility for crisis management but also those private organizations which take part in crisis management in their own domain. The Tips & tricks starts from the idea that authorities should adapt to existing SOME use in civil society for citizens and from the point of view of citizens they should have the chance to trust in civil society during crises [10].

Fig. 1, The COSMIC principles

There are some simple, basic principles that have to be taken into account in crisis communication. One of these is to understand the needs of the customers. When doing crisis communication through a medium the messages should be easily understandable without jargon and acronyms – this requires easily accessible language and you have to tell them what you want them to do. It is also necessary to view what kind of people exist in the area which the crisis communication is connected to – this requires for example aspects of the disabilities of people and cultural and language existence [2].

When disaster occurs people have to get fast information of the situation. Twitter has become a place where people can gather information about crises. The mass of shared information, tweets, makes it challenging because people have difficulties in finding the most important information they need at the time – those who share information on Twitter should have a comprehension of what the receiver wants to have [11]. It is important to note that in crisis communication there is not only one tool that you can rely on. When choosing a tool for crisis communication there has to be valuation of the advantages and disadvantages – there has to be a purpose behind using a specific tool. SOME cannot be the only tool, it still needs old media alongside it. The type of a crisis and with whom the wish is to connect and interact in crises situations demands a great deal of what the crisis communication tool should be like. In the SOME environment a platform that exists today may not exist tomorrow [10].

3 The Munich Shooting Case
Valuating by SWOT Analysis
SWOT analysis is a direct risk analysis designed to identify risks and opportunities within the greater organizational context – to find out what are the strengths, opportunities, weaknesses and threats in an organization. These four factors are the main sources for analysis and these sources also enable cross-references. SWOT analysis is a big-picture tool and it is a subjective tool where practices on completing the grid may vary with the facilitator. In SWOT analysis there are four questions which have to be answered (Table 2) [12].

SWOT analysis contains both inner and external environments of an organization. Internally, the
framework addresses the organization’s strengths and weaknesses on key dimensions as production facilities and capacity, customer perceptions of product quality, price and availability, etc. The assessment of the external environment includes information on the market such as social trends, technology, government regulation, etc. SWOT analysis is powerful in discovering strategic advantages. “SWOT analysis allows the planner to integrate and synthesize diverse information, both of a quantitative and qualitative nature” [13].

There was a shooting incident in the city of Munich in Germany on the evening of 22 July, 2016 and the events lasted till the night. Many people were killed and wounded in the gunfire which was committed by a man who eventually shot himself. This shooting case spread widely in the media. For example television channels such as France 24 and the internet service Youtube shared live broadcast from the scene. In the SWOT analysis, we used our observation of the Munich Police District’s (MPD) Twitter communication during the crisis. Mainly we focused on how the Munich Police District managed in their crisis communication during the crisis and how Twitter could be more informative in the crisis communication to serve authorities.

3.1 Strengths

The first tweet from MPD (#PolizeiMuenchen) contained information in German that there is a big police operation in OEZ (the hashtag of Munich Olympia Shopping-Centre) and MPD asked to avoid the shopping center. The next tweet was “+++ACHTUNG+++ Meiden Sie die Umgebung um das #OEZ – Bleiben Sie in Ihren Wohnungen. Verlassen Sie die Strasse!+++”, which contains the information to avoid the environment of OEZ, people should stay in their homes and people should get away from the streets. The ninth tweet was in English where MPD told people to “Please avoid public areas in #Munich right now.

#gunfire”. The 17th tweet was a warning message in French and later they also used in Spanish. In total, MPD used four languages in their communication. The MPD portal works only one way and people can only like or share from that portal.

As in the first tweet, MPD used references to other Twitter hashtags such as #OEZ, #Munchen (the hashtag of the official city portal), #Schieberei and #gunfire several times on their Twitter site – the last two ones are portals were people can share their tweets of safety & security issues all over the world. In the tweets, MPD gave an authority telephone number where people were able to ask about relatives or missing persons. The Facebook service Safe Check was mentioned in a tweet – this is a service where people can seek missing persons. MPD was able to communicate in many Twitter portals (hashtags) at the same time and they took into account another incident in the Munich centrum that could be linked to OEZ events and later they confirmed it did not. MPD tweets included information of MVD (Munich Transport Corporation) public transportation, which was shut down. At the end of the events MPD gave information of the death of the suspect and finally the time and place of the press conference.

During the crisis situation media all over the world shared live content from the scene for example on television channels, internet channels, SOME. A significant amount of the shared information came from people who had been near OEZ and many people took part in speculations of shooting events on SOME. People shared actual photos and videos of the shooter, the shooting and the victims. During the event MPD posted several tweets where they asked people to stop posting photos and content of the happening.

3.2 Opportunities

This unfortunate Munich Shooting case opens opportunities for MPD to analyze, evaluate and develop the success of the crisis communication in the SOME environment. The crisis communication policies, strategies and procedures have to be checked from the perspective of how did we do and how can we do better.

The first tweet when the crisis started included information in German and it took a while before the same information was posted in English and later the information was given in two other languages. This delay gives less of a chance to reach a bigger mass faster. It would more informative to post the actual time in the first tweet.

<table>
<thead>
<tr>
<th>Inner environments</th>
<th>External environments</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are our organization’s strengths?</td>
<td>What opportunities does this project present in that context?</td>
</tr>
<tr>
<td>What are our organization’s weaknesses?</td>
<td>What threats does this project present in that context?</td>
</tr>
</tbody>
</table>

Table 2. SWOT analysis
because after hours have past, Twitter only tells the hour the tweet was posted on the main window. Posting the actual time in a tweet helps for example tourists who might have difficulties to adapt the right time. The first tweet from MPD was shared 2600 times and the second 6700 times. The first warning message in English about the happening was shared 3500 times. People should be encouraged to share the most important information.

During the crisis situation MPD posted about 50 messages on their portal (#PolizeiMunchen) so there lies a chance that the most important messages might disappear in the mass. It could be possible to make the most important messages more visual and those could be repeated. When given enough precise information it will cut the wings of rumors. The public shared most the tweets (the best 16 000 times) which included the MPD’s wish not to share photos or videos of operating police in order to avoid any helpful information for the suspects.

### 3.3 Weakness

In the SOME environment Twitter is only one tool when thinking of crisis communication and management. The one weakness is that it cannot offer wide possibilities alone – mostly it is used in short messages or for sharing photos and videos. In a crisis communication situation authorities have to handle many other similar tools at the same time. This leads to the question of what are the main tools to use together in crisis management.

In the Munich shooting case MPD linked other services to their Twitter portal, such as a traditional telephone service and SOME Facebook service Safe Check. This leads to thinking that important information is going in different locations, it is less unified and handling it requires more resources.

The mass of information which travels on Twitter is huge and it is impossible to control all portals at the same time. There have to be decisions which portals are the most essential for crisis communication each time. MPD linked to those Twitter portals that were connected to the local target area and common ones for the public.

Twitter has great potential to become a more informative platform in crisis communication. Twitter could simply develop the portal page for authorities so they could, for example, place a permanent map of the crisis area in the portal’s main window and a permanent information field about main information of a crisis situation and of course the normal, rolling tweeting area.

### 3.4 Threats

During the crisis situation in Munich the world media spread the rumor that there was more than one shooter. For example MPD said in their tweet “The suspects are still on the run. Please avoid public places.” This rumor was one reason for starting discussion in the traditional media of a possible terror attack and the same happened on SOME – the snowball effect was ready. From the point of view of authorities it is essential to deliver information that people can rely on. The past terror attacks in Europe have their effects in people’s memories and disinformation for example from terrorist organizations cannot but have an effect on people’s opinions and decision making. One of the worst scenarios is mass panic or people taking the law into their own hands during crises.

MPD had a great load on their shoulders of how to manage people on SOME during the crisis. As mentioned earlier, people were sharing content on Twitter that included visual material of the victims and the actual shooting. At the same time MPD was concerned the tweets might endanger the whole operation of the authorities by leaking information to the shooter(s). It seems that the right kind of tweets from the MPD encouraged people to share the important messages. The human and individual rights have to be secured in the SOME environment – unfortunately this task is very hard during a crisis as the case has shown. The presence of the authorities on SOME and on Twitter has to be well planned and executed to tackle existing threats.

### 4 Conclusions

The use of social media in crisis communication is increasing. At the same time the possibilities to use mobile technology widely are opening opportunities to develop new services for EU citizens. EU legislation work is also pushing the mobile operations by the directive to ensure more equal services in the EU area and this for example eventually leads to cheaper mobile phone expenses for consumers. More and more people are using smartphones, which are frequently connected to internet services. Those services include for example positioning applications and SOME platforms such as Twitter and Facebook. From the point of view of authorities these progresses have to be seen as a great opportunity for developing crisis communication in the EU area.
The EU area has faced many kinds of crises and some of those have been examined in the EU projects. These projects have offered new ways to build better communication environment systems and principles to guide management in different situations. The COSMIC project has opened new ways of thinking about how to make crisis communication in the SOME environment and it has brought principles for how to build better communication between the public and the authorities. The evident problem is that there are no common crisis communication guidelines for the SOME environment which could build guidance between authorities in the EU area. This leads to the situation where all authorities have different ways to build polities and strategies for crisis communication on SOME. The problem can be that the quality and available efficiency on SOME varies between authorities – from the point of view of the customer’s needs, individuals do not know what to expect from the authorities during crisis communication on SOME.

We learnt from the case analysis that managing people during the crisis is very challenging on Twitter. Information in the beginning about the crisis type affects the authorities’ decision of how to place the content in the first tweet. The first tweet should contain information of what authorities want from the people, what happened, where and when. The presentation of the first warning tweet should be visually clear and awake the interest of people, it should be repeated when a mass of tweets arises. In the multicultural EU the first tweets should show for whom the messages are meant, for example using different languages gives a better chance to reach a bigger mass of people.

The case gave us an indication that repeating important messages makes people share them again on Twitter. During the crisis, protecting individual’s rights and privacy and securing operating authorities is challenging in portals which work two-ways. During the Munich shooting events the police worked in many portals at the same time and tried to convince people not to send critical material of the events. When the crisis situation is over people need information about it and also post crisis information which helps them to adapt and continue normal life. Twitter is a working tool in crisis communication but it needs other tools beside it on SOME, and the traditional media still has its own success. Twitter could be more informative for crisis communication and this could be done by simply adding a couple of elements to the portal window for authorities.

References:
[8] European Comission, the Mass Crisis Communication with the Public Project, MASSCRISCOM, 2011.