

UNIVERSITY OF NAIROBI
DEPARTMENT OF SOCIOLOGY AND SOCIAL WORK

**EFFECTIVENESS OF SOCIAL MEDIA IN CRISIS COMMUNICATION: THE
CASE OF WESTGATE MALL ATTACK**

BY:

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DECLARATION

This research project is my original work and has never been presented before for the award of any degree in this or any other University or Institution.

Signature..... Date.....

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C50/77771/2015

This research project has been submitted for examination with my approval as the University supervisor.

Signature.....Date.....

Prof. Edward K. Mburugu

DEDICATION

This study is dedicated to my family for the moral support and encouragement accorded to me during my entire research. May God's blessings be upon you all.

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The realization of this research project is as a result of the collective efforts and assistance of a number of people without whom it would have been impossible to complete. Indeed I am intellectually indebted to all those mentioned below not necessarily in order of importance but as a token of appreciation.

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ABSTRACT

This study set out to explore the effectiveness of social media in crisis communication, with a special focus on the Westgate Mall attack in Nairobi.

To achieve this, the study was guided by three objectives; it sought to establish the social media platforms used during emergency and disaster relief efforts, to determine the benefits of social media use during emergency and disaster relief efforts, and, to assess the effectiveness of social media relative to other forms of crisis communication.

Samples of fifty respondents from seven organizations that engage in disaster relief service were interviewed. The target population of the study was less than 200 hence the study conducted a census where every unit was included in the study. A questionnaire was designed for the staff from the target disaster relief organization as well as unit committee members.

The study adopted a descriptive study design, in order to understand the what, and the how social media can be effective in disaster relief efforts. The unit of observation in this study was communication staff of disaster relief agencies in Nairobi. Data was analyzed using descriptive statistical tools and the resultant information was presented in tables.

The findings revealed that majority of disaster relief agencies in Nairobi use Facebook and Twitter during disaster efforts. The study also found that use of social media is beneficial to disaster relief organisations. Further, the study revealed that social media is effective during disaster relief effort with majority indicating that social media was more incredible than traditional media in relief efforts. It is concluded that whereas agencies used social media, the use was not widely spread due to varied reasons. Only Facebook and Twitter were extensively used during the Westgate disaster. The study further concludes that use of social media is beneficial to disaster relief agencies and through it they are able to give timely information.

The study also concludes that the use of social media is effective in disaster relief efforts as people are able to learn about a prevailing disaster and take precautionary measures, it can also help in averting potential disasters. The study recommends that government should have a social media policy that guides the nature of information organisations can share on social media to reduce mistakes in communication and at the same time promote accountability.

CHAPTER ONE: INTRODUCTION

1.1 Background to the study

Crisis communication is a subject of empirical discussion especially with the recent of social media which has been utilized in managing crisis plans. Social media is deemed as tool for detecting matters which have turned out to be a crisis and as a means of communicating in cases of crisis and to continual communication even after crisis period (Borremans, 2010; and Semple, 2009). Other discussions on linking social media into management of crisis plans entails application of social media during calamity (Baron & Philbin, 2009). While most studies have explored the adoption and use of social media before, during and after crisis, limited evidence has been documented as to why these approaches are essential.

In exploring crisis communication including use of social media in cases of disaster or emergencies are critical areas of managing disaster considering the prevalence of worldwide disasters (Seeger, 2007). In cases of a disaster, all the necessary information must be relayed and disseminated efficiently to individual who are affected by these kinds of disasters and those who seek to respond to disasters (Dougherty, 1992).

Communication in times of disaster calls for the adoption of several communication approaches. However, to comprehend the link amidst crisis and disaster, it is vital to understand how these variables affect each other (Ulmer et al., 2007). Calamities as opposed to crises mainly entail external crises that are caused by mother nature events which cannot be controlled by the organisation (Adkins, 2010). Social media platforms offer new avenues for flow of information and a meant of helping those who need information in case a disaster takes place such as survivors, volunteers and the public in general.

Social media serves as an effective message tool for governments in reaching out to people and the society and alerting responders in order to respond to areas where relief is highly needed (Huang, Chan, & Hyder, 2010).

Modern technology use particularly in cases of disasters has attracted a lot of attention and is currently being widely employed. In 2001, during the 9/11 attacks that took place in the United States, most communication and coordination of these activities was executed with the help of phones which is part of technological advances that is currently being embraced to relay information in cases of emergencies. These kind of technologies are efficient and cheaper (Nelson, Sigal, & Zambrano, 2010). A report by Nelson et al., (2010) demonstrated that when the Indian Ocean Tsunami took place, many people utilized SMS as well as text messages when this disaster took place, this was later used even in cases when the use of cell phones went down (Nelson et al., 2010).

In the time of Hurricane Katrina, social media gain popularity as a platform to communicate and relay and share information efficiently. This was considered as an effective tool in enabling organisations to effectively respond to disasters (Nelson et al., 2010). With the help of social media , information was highly shared and responses were efficiently delivered in a more improved fashion and this aided to coordination and cooperation between individuals especially when a disaster stroke (Nelson et al., 2010). Such similar cases of social media occurred during and after the shootings that took place in Virginia Tech Campus in 2007.

Social media has been found to be an effective tool in communicating and coordinating activities in cases of disasters (Perkins, 2010). Responders to emergency case prefer to use social media platforms in tracking volunteers, assisting to bring families together and sharing of important data. Also, in cases of calamity, social media can be utilized as opposed to using cell phones in coordinating emergency situation (Armour, 2010).

Social media offers people a means through which they can easily share information in a disaster this could impact positively towards improving their understanding of how technology can be utilized in dealing with a situation with the help of computer-integrated communication approaches.

Social media could be utilized as a platform to create awareness and alter other people about the safety of the people who are affected by such crisis. Social media serves as platforms for gathering information resources.

In a crisis, social media seeks to understand the kind of emergency, impacts and implications of such event. Social media is still being utilized in crisis, people receive information regarding the calamity irrespective of their level of understanding about the disaster (Palen et al., 2009). Social media continues being a popular the most preferable communication tool during emergencies (Tinker, Dumlao & McLaughlin, 2009, p. 1).

Initial manifestation of how tragedy response was transitioning, now that people have capacity to share, access, create and apply information. The application of social media in that tragedy led to a united online effort to find the missing people, coordinate housing and emergency housing (Nelson et al, 2010). “The future age of collaborative media” was marked by Hurricane Katrina that was one of the prime natural tragedies (Haddow & Haddow, 2009). According to PR Newswire, 2011, Hurricane Katrina led to the establishment of social media as a source of information in times of crises in the US. This tragedy happened when social media was trending amongst the general public and it being understood and utilized enough to strike the exchange of information through its platform effectively and suitably. In addition to the past tragedy responders, support groups formed online also provide help to victims of disasters. Random groups have come up responding to tragedies such as floods, wildfires, and tornadoes (Viel et al., 2011)

1.2 Statement of the problem

Growth in social media is a constituent of quick information spread for purposes of sharing educating each other, sharing knowledge and as a way of warning (Semple, 2009). Organisations that are mandated to respond to disasters ought to have a plan to manage crisis and social is part of it. Such organisations act as key pillars in managing disasters and crisis communication. They are quick to respond to situations where disaster arises through facilitating Medicare and setting displaced population. The government is also involved in providing relief to disaster stricken areas through volunteering in responding to disasters and giving financial support and resources to the affected communities. Social media provides a platform for communication. Similar to corporation crises, government institutions and emergency relief require a centralized and sufficient crises communication strategy in times of tragedy, for their social network tactics.

Wilson 2008, examined the role of social media response towards natural catastrophes, focusing on the Japan Tsunami and Earthquake. According to research, social media creates a platform for interaction of local and international groups and individuals (Hjorth & Kim, Veil et al., 2011) to participate on online relief measures. However, no study has been found in Kenya and Africa in general on the role of public media on catastrophe communication. The study therefore endeavours to fill this gap by focusing on the role of social media in crisis communication during Westgate attack in Nairobi County.

1.3 Research Questions

- i. What social media platform is being used during emergency and disaster relief efforts?
- ii. What benefits accrue from social media use during emergency and disaster relief efforts?

- iii. What is the effectiveness of social media relative to other forms of crisis communication?

1.4 Objectives of the study

1.4.1 Main objective

The main goal of this research is establishing the role of social media in crisis communication that aim at providing emergence and disaster relief

1.4.2 Specific objectives

The specific objectives of this study are:

- i. To establish the social media platforms utilized in emergency cases and disaster relief efforts
- ii. To determine the benefits of social media use during emergency and disaster relief efforts
- iii. To assess the effectiveness of social media relative to other forms of crisis communication

1.5 Significance of the study

This research that is under investigation will serve a great purpose because in the first place, the findings obtained under this investigation gives an idea concerning tragedy communication linking it to disasters to provide information that is reliable and can be utilized for further exploration in this field. Similarly, this research will enrich the available knowledge and act as a key guiding tool for the policy makers. Findings obtained from this research will serve a critical function for planners and social scientists.

Moreover, the research will be utilized as a referent tool by practitioners in the field of disaster management, students and scholars in this field might opt to apply the findings as a basis for further research so as to widen the reader's understanding on how shared media can be applied as a communication tool to respond to disaster and ways of improving shared media using technology to integrate it with disaster responders. This can provide a solid base for responding to disasters and mitigating the effects that might be attributable to such calamities.

1.6 Scope and Limitation of the study

Scope of this research involved Nairobi residents who possess smart mobile handsets with ability to use social media. The study did not cover all roles of social media during disaster but will only focused on the use of social media during the relief efforts in the Westgate attack. The study further restricted itself to organisations that are involved in disaster relief services in Nairobi County. The study did not focus on all facets of social media use. Instead it only address the social media platforms used and the Westgate terrorist attack, effectiveness of shared media relative to other forms of crisis communication, the benefits that accrue from social media use and the effectiveness of use of social media relative to other platforms. The research study encountered a number of limitations: the interviews were conducted to key departmental heads in firms that respond to disasters in Nairobi County. Some of the departmental heads had formed their own opinions on crisis communication.

CHAPTER TWO: LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.0 Introduction

A detailed literature involving social media as a component applied in responding to disaster has been described under this chapter with the goal of enhancing the reader's understanding of crisis communication and its foundation, and establishing how social media impacts on it, the challenges and opportunities available and the significance of aligning social media to crisis management plan.

2.1 Empirical literature review

2.1.1 Crisis Communication

Communicating in times of crisis is part of corporate form of communication which is unavoidable (Coombs, 2010). Crisis is regarded as something which organisations ought to be ready to respond (Coombs, 2010). Crisis has been described using many definitions and criteria (Heath, 2010). Using simple terms, a tragedy is regarded as something which causes harm to something else, an individual or corporation (Heath, 2010). A crisis calls for faster and efficient response accompanied by actions. Important to note is that any event the calls for attention and resource commitment to those who are involved (Coombs, 2010). Crisis might take place externally and internally within an organisation and this might need the organisation to act outside its core activity (Adkins, 2010). These crisis elements give a description of a natural disaster and organisational crisis.

Managing crisis is the umbrella which shields various aspects of crisis communication (Coombs, 2010). With crisis management, an organisation can easily protect, prepare, reply and analyse a tragedy, prior, in and after such a crisis has taken place. Crisis communication

involves collecting information, processing it and disseminating it during crisis (Coombs, 2010, p. 25). Communication during crisis is practical and its aimed at improving management of crisis and communication.

2.1.2 Crisis management and communication

Depending on the type of disaster, disaster management and communication plans can be well organized and utilized. It is important to evaluate the specific phases of a crisis before employing disaster management and communication. The five stages of a disaster are identification, preparation, control, restoration and learning (Fearn-Banks, 2011).

The main goal of disaster management is to ‘curb or reduce the impacts of a crisis’ (Coombs 2010). The basic component of disaster management is disaster communication; the conversation an institution has with its partners during, before and after the disaster (Fearn-Banks, 2007). The main aim of disaster communication is providing information to its partners, to guard and uphold the reputation and image of the institution (Coombs 1995; Fearn-Banks 2007).

2.1.3 The crisis management process

Many writers take a cycle of life to crises and object that effective crisis management as not the sole action amidst crisis, but part of life process (Coombs 2011). Establishing ways to handle crisis is a 3-step approach to manage it as Coombs (2012) classifies three interlinked stages comprising of several sub-stages namely before crisis, crisis and after crisis stage. The stage before crisis involves monitoring media and the environment is essential for detecting crisis signals. Many of the crises contain warning signs such that if an organisation identifies such signs earlier they can be detected and corrected before they get to advanced stages (e.g. González-Herrero & Smith 2008). One of the key preparations measures to take into account

is developing a plan for crisis communication. It entails portfolio development of likely crises that might face an organisation, train crisis teams and spokespeople in designing communication approaches (Coombs 2012). Such a plan could be flexible and easy to cope with such changes as put forward by Coombs (2012), a living document; he explains further that it is critical to test the plan and rehearse regularly to identify weaknesses and any form of inconsistencies during planning.

In the event of a crisis, the firm ought to acknowledge that a crisis is in existence in the first place in order to secure important information that is helpful in making decision which are well thought through. During this stage, effective external and internal kind of communication is critical and thus the organisation ought to decide the manner in which it should respond, and by whom. When faced by crisis, the four widely acceptable rules that one needs to consider include efficient response strategy, accuracy and consistency (Coombs 2010). The objective of such kind of a response is mainly to give instructions, make relevant adjustments and work towards restoring any form of reputation and confidence to the stakeholders (Coombs, 2012).

After crisis, this time when the crisis has gone, efforts towards managing crisis need to be assessed and places of learning need to be aligned in the plan for crisis communication with a view of improving ways to manage crisis in future. Communication should be executed through follow-ups to the stakeholders and keep them up to date on the process of crisis recovery in order to take correct actions to restore shareholders' confidence (Coombs 2012).

2.1.4 Social media

Social media constitutes a whole field that includes stakeholders and the organisations with great impacts for managing crisis. Use of technology results into spread of crises and

developing ways to counter crisis, Veil et al. 2011 and Birgfeld (2010) as provided for in the literature, changes in social media and importance of communicating in times of crisis and the aftermath.

Social media is a general term for web 2.0 technologies that includes participating, conversation, societies and connectedness (Coombs 2012). This form of technologies are meant for facilitating conversation and interactions amongst users, this enables them to develop, comment and share information between themselves (Scott 2010). Through social media, individuals can access information resource enabling users to share opinions and experiences as well as perspectives amongst themselves (Marken, 2007). Social media enable permits users to generate information, distribute and share it across people in distant localities (Qualman, 2009).

2.1.5 Social Media in Disasters

The social platforms evaluated in this study use social media in sharing and collecting information. In this section the use of social media during and after natural crisis is introduced and also gives some history of its transition over time. It was first used by crisis responders as a means of communication to spread information and to facilitate sharing of information among online members. It is advantageous to tragedy response due to its fast dissemination of information.

In times of and after a natural tragedy, communication is important in the least time. Nevertheless, communication can be limited by lack of available information or the inaccessibility of information by the necessary organizations or individuals in a disaster location (Day et al., 2012). Communication lines would often collapse or were to slow in the past, thus they were ineffective in a disaster situation necessitating to an alternative

communication means such as alter systems that include; e-mails, televisions and text messaging that are quicker and effective for sharing information (Ferguson, 2011).

The use of social media to influence tragedy response increased globally. despite the fact that internet access is not universal, the Pew Research Center, 2010 showed that people have a chance to be online and be part of social networks. The increased use of social media influenced tragedy responders to utilize social media too. Initially, the crisis responders employed online platforms in their organizations to purely present information to their stakeholders. This one-directional manner of sharing information is out-dated and instead efforts towards an effective and efficient line of communication are being made. These are such as accepting assistance requests, gathering information from users of social media for events awareness and to handle questions (Lindsay, 2011; the economist, 2011).

The movement towards an integrated online society started in 1999 (Jay Rosen), during the change of factors of production to individuals previously referred to as the audience (The Economist, 2011). This change came with a wide accessibility of blogging tools, making communication means common to citizens. Later, horizontal media emerged, that provides for exchange of information excluding the original media platforms, leading to a quick sharing of hyperlinks and information to many people through social media platforms (The Economist, 2011). The famous social media platforms that emerged include Facebook (2004), Twitter (2006) and YouTube (2005) that are used by millions of registered users.

The new media wizards have argued that Hurricane Katrina of 2005 manifested the first current tragedy response by individuals on the ‘unprecedented power to share, access, apply and create information’ (Nachison, 2005). Collaborative online measures have been facilitated by use of social media to find missing individuals, calamity housing and to harmonize volunteers (Nelson et al., 2010). Hurricane Katrina led to the focus of social media

as a source of information in times of disasters as stated by PR Newswire, 2011. The tragedy occurred when social media was becoming popular to the general public who were conversant with it, making it a means of sharing information efficiently and effectively.

Moreover, groups that are formed online also give support to the victims of a disaster similar to the traditional tragedy responders. Random groups have emerged responding to specific crises such as floods, wildfires, and tornadoes (Viel et al., 2011) while other groups faithfully follow up on events globally and willingly lend their expertise and voices in times of crises. Social media has increased the collaboration of individuals despite linguistic, geographical and temporal boundaries (Hjorth & Kim, 2011). Individuals are able to acquire norms such as accurately verifying information from anonymous sources (Kiss, 2011; Winerman 2009).

Inventors of most social media platforms did not know the power of their tools. Twitter for instance, was developed for sending group text messages; however it has transitioned far beyond this. The first use of a hashtag was in 2007 in Southern California. Messages like, ‘#sandiegofire’ became popular during and after the fire creating a record of the crisis (Clark, 2009). The residents took pictures of the fire and shared its location even before the news coverage that was later deemed an insufficient information source. Today, hashtags are commonly used in sharing of information even on events even on natural calamities.

2.1.6 Social media platforms as crisis response tools

The social media landscape constantly changes, however, the knowledge of how the present landscapes can be utilized is vital for systematic disaster communication. As social media plays an important role in disaster social construction, it can also be lead to disaster social deconstruction by an organization (Schultz et al 2011). According to Hanna 2011, most companies don't really understand the components of social media thus they don't manage it

efficiently. Social media platforms enable organizations reach their partners and to share their own stories. There are several adopted current social media platform, this includes:

2.1.6.1 Microblog twitter

The twitter micro-blogging platform can share tweets (messages) constituting a hundred and forty elements that are pointed out on and spread (retweeted) by the user (Schultz et al 2011). Twitter constitutes an open network and a user's message can reach many people. Schultz et al 2011 perceives twitter users as opinion leaders and social influencers. Twitter is considered the best social media times of a tragedy alert system because it is fast and its ability to reach many people (Birgfeld, 2010).

2.1.6.2 Social network: Facebook (google plus)

Facebook is the most popular social network globally (Mediefakta 2010). Facebook blends in several ways with other social media networks: it facilitates sharing of links and information of an organization while engaging stakeholders in a discussion in its 'wall' (Hanna 2011). Facebook is a closed network meaning that an organization can only reach Facebook members. It has the facilities similar to the new Google social platform 'Google +' that is referred by some as the bridge between twitter and Facebook news (Coddington 2011). It is vital for organizations to be familiar with the different social platforms even when Facebook is the main social platform

2.1.6.3 Content community: YouTube

Coombs 2011, advocates for use of this video channel to publish an apology in a disaster or a public statement by an organization representative or the CEO. A CEO is the most credible person to convey information in times of disaster according to the Edelman's 2011

confidence measure. A video on YouTube represents the physical face of the institution therefore being effective in filming a disaster for the institution to tell its story, and also has the advantage viewing the content without being a subscribed user (Coombs 2011).

2.1.6.4 Blog

An authenticated information of an organization can be shared if an organization has an employee, cooperate or a leader blog on its website. (Schultz et al 2011). According to Fearn-Banks 2007; Borrersman 2010, an organization with a leader blog reveals the human aspect of control of the management in an organization. A blog needs to have subscribers to earn trust of followers on the content unlike that of a new blogger whose content might not be as much trusted (Borrersmansm, 2010).

2.1.7 Benefits of social media during emergency

There are both merits and demerits of social media influence on crisis response that has sparked discussion in the evolved academic debates and development of strategies by the practitioners. The advantages of social media influence on disasters have been documented by several authors in different tragedy environments. Social media platforms are easy to use (Daniels 2012 & Gelernter and Mushegain 2011) and it only requires an e-mail to subscribe so as to search and share information. Moreover, it is a fast effective and an efficient source of information (Gao et al 2011). It is a landscape for expert interaction with the general public and communication platform for victims of a disaster and the tragedy responders. Hjorth& Kim 2011 and Veil et al.,2011, noted that it is possible to integrate local and individual groups to participate in online crisis response through social media. The norms developed on online platforms enable users to adapt to self-correction of inaccurate information increasing the tendency of sharing accurate information (winerman 2009). Social media maintains the communication lines during a crisis event even when phone lines are

damaged or overwhelmed (Gao et al 2011). It also provides for local coverage of a crisis as in the case of California wildfires (Clark 2009) making social media advantageous for crisis response.

Guidelines on how to use social media have been developed for the tragedy responders so as to maximize its merits. These guidelines have been recreated, merged and critiqued (Goldfine, 2011; Seeger, 2006; Lindsay, 2011; White & Plotnick, 2010; Veil et al., 2011) Online organizations should have user guidelines and a team responsible for their online efforts. However, most members lack these guidelines and rely on peer pressure and social norms to correct their practices such as abusive language. The dynamics of online social norms of an online community are effective in enhancing a desirable conduct (Millar & Choi, 2009 Jerbi, 2011; Meier, 2011).

2.2.1 Social Network Theory

The theory's focus is on the relationships between communication structures and people, other than individual characteristics. Roger 1986 defines communication platforms as 'interconnected persons linked to communication lines'. According to him the theory is the study of 'social links formed through the spread of information in the social communication structure'. The theory's flexibility facilitates examination of the networks at community, organizational and individual level and analyse their relationship (Varda et al 2009).

Social networks play a vital role in recovery and response and studies show that individuals with great access to social support mostly have mental health and physical following of a disaster (Haines et al., 2002). Inter-organizational platforms facilitate the flow of information during tragedy response, allocate resources and coordinate relief efforts (Kapucu 2005).

The theory has been used by authors to identify the role of individual networks on life crisis (Haines et al., 1996), the networks at institution levels on crisis response (kapucu, 2005) and

the Hurricane Katrina by Hurlbert ,2005.In this paper the theory is used to study impact of social networks on tragedy events such as the Kenyan ,Nairobi Westgate terrorist attack. Four categories will be used in this paper that include (out/seeker, in/seeker, out/provider and in/provider) as from Varda 2009 to evaluate use of social media by individuals, the type of communications and the merits and demerits of social media. This will help in understanding the dynamic of the Westgate attack.

2.2.2 Actor Network Theory(ANT)

ANT was the original works of law (1992), Callon (1986) and Latour (1996) that was upgraded by Law and Mo l(1994).Law stated that all the sociology theories to have equal impact in any situation and that the actors can be either technologies or people. Lantour referred the participants of social welfare to translators who would translate data into information through the process of interest, mobilization, problematization and enrollment so as to attract more participants. When a user tags a photo, the participants can use their own inscription to help in constructing the story of the event (latour,1987&1999). The inscribed information validates the image sent of the particular tragedy. Giving significance to artifact the content can be translated for the community.

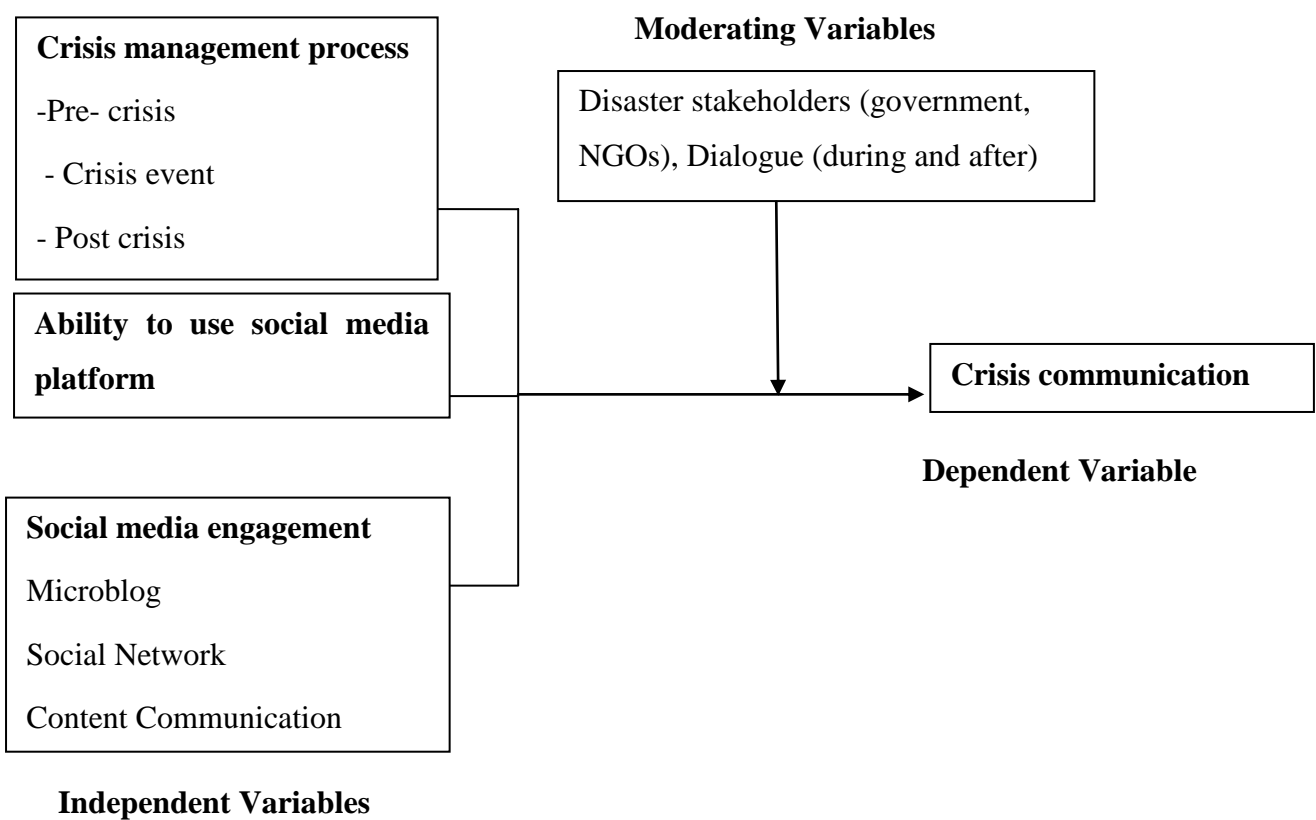
This theory is hence useful in evaluating the Westgate attack incident as it permits the information designers to map the movements and uses of participants and document it on a website. Mapping the actors facilitates creation of systems that enhance free flow of information about an event.

2.3 Conceptual Framework

A conceptual framework makes an attempt to describe graphically the association existing amongst study parameters and constructs. In this research, the process of managing crisis and

the capability to exploit social media form part of the independent parameters and communication crisis is the dependent variable. Dialoguing with the stakeholders when crisis strikes and its aftermath which is deemed to impact on usage of social media constitutes the intervening variable and disaster stakeholders moderate this relationship as depicted below.

Figure 2.1 Conceptual Framework



CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

The research has described that methodological approach that was utilized to accomplish the goal of this research as follows:

3.2 Research design

This research implemented a descriptive research design. Donald and Pamela (2003), explicate that a descriptive study aimed at determining the what, when and how of a phenomenon studied. It is an apt means to gather information when goals call for qualitative and quantitative data (Pollard, 2005). This was to enable the researcher to understand better the role of social media in crisis communication. The method chosen allowed collection of comprehensive, intensive data and provides a deeper investigation on the utilization of social media for disaster relief efforts.

3.3 Unit of analysis and unit of observation

Unit of analysis is the major entity that is being analyzed in a given study. In a typical social science research, unit of analysis may include commonly individuals, social organisations, social artifacts and group. In this study the unit of analysis is the variety and effectiveness of social media during tragedy communication. In the current study the units of observation were communication officers in disaster relief agencies in Nairobi and residents of Nairobi County. Also included were key informants drawn from Red Cross, Police, Nairobi County Government and St. John Ambulance.

3.4 Target Population

The population of study consisted of staff in the communication departments from organisations (Red Cross, St. Johns Ambulance, Nairobi County Government, Kenya National Disaster Operation Center) that engage in disaster relief services in Nairobi and the mall (Westgate Mall) affected in the incident. The total population for the staff from these departments is 50.

3.5 Sample Size

Census, is used when the target population is less than 200 (Creswell, 2009). A census entails exploring all the elements involved in a population. It is a regularly occurring and official count of a particular population (Baffour et al 2013). Since the target population of the study is less than 200; the study conducted a census where every unit was included in the study. A census is a process involving systematic acquisition and recording data regarding population members. It takes place in a given population (Baffour et al 2013). Since the target population of the study is less than 200; the study conducted a census where every unit was included in the study.

The population was spread as indicated in the table below

Table 3.1: Target population of staff in communication departments of organisations that engage in disaster relief services

Organisation	Size of staff
Kenya National Disaster Operation Center	8
Nairobi County Government	7
Police	5
Military	8
Red Cross	10
St. John's ambulance	7
Westgate	5
Total	50

3.6 Methods of data collection

A questionnaire was designed for the staff from the target disaster relief firms including members of committee. At least 7 questionnaires went through a test to verify their suitability and whether the questions asked tallied with the goal of this research. Pre-test was executed among the residents in Nairobi. This was intended to achieve respondents' anonymity as well as the process of identification and follow-up including clarifications if need be. All anomalies were identified at this stage and corrected before the actual process of research took place.

3.8 Ethical Considerations

Ethics in research is aimed at protecting the welfare of research participants. Apart from maintaining confidence of the participants, the research is expected to acknowledge source from other scholars such as plagiarism (Blanche et al, 2009). The researcher obtained a research permit from the National Council of Science which together with a letter from the University of Nairobi was attached to the interview guide, and questionnaire. During the course of data collection, the participants were informed on the research goals. Participation in the research is voluntary. Informed consent was sought from all the participants and confidentiality and anonymity was maintained during this research.

3.9 Data analysis

Through analysis of data, the researcher is able to achieve order, organisation and meaning from all the information collected. (De Vos 1998). Interpretation entails deriving meaning in a manner that makes sense to collected information. Gathered information was edited and coded. Descriptive statistics was used to analyse data into easily understood information by measuring central tendency such as mean, frequency and standard deviation with the help of SPSS. The data was presented in tables, charts and graphs. The qualitative data was analysed using content analysis. Qualitative form of data was achieved using unstructured questions and analysis was executed based on similar themes and a prose form was employed for presentation of that information.

CHAPTER FOUR: DATA ANALYSIS, INTERPRETATION AND PRESENTATION

4.1 Introduction

Outlined in this chapter is data analysis and presentation of the results. The goal of this research involved examining the different varieties and effectiveness of shared media in tragedy form of communication, using the Westgate attack as a case study. Presentation of findings has been done with the aid of frequency tables, percentages, mean and standard deviation.

4.2 Questionnaire Return Rate

The study targeted 50 respondents from organisations that engage in disaster relief services. From the target, 43 questionnaires were fully filled representing 86% return rate as shown in table 4.1 below. This return rate was deemed sufficient for generalization as indicated by Mugenda and Mugenda (1999).

Table 4.1 Response Rate

Response	Frequency (n)	Percentage (%)
Responded	43	86.0
Non response	7	14.0
Total	50	100.0

4.3 Social and Demographic Characteristics of the Respondents

As part of background information, the participants were questioned regarding their gender, age, marital status, and, educational level. The section below is a presentation of the findings.

4.3.1 Gender of the Respondents

It was uncovered that majority (55.8%) of these participants were female and the rest (44.2%) were male. This signalled that most of the female were involved in communication of disaster relief institutions as compared to male.

Table 4.2 Gender of the respondents

Gender	Frequency (n)	Percentage (%)
Male	19	44.2
Female	24	55.8
Total	43	100.0

4.3.2 Distribution by age

The study aimed to investigate the age bracket that respondents were. Table 4.3 shows the summary of the findings, from the study 30.2% of the respondents aged 40-49 years, 9.3% aged above 60 years, 18.6% aged 50-59 years, 25.6% aged between 30-39 years while 16.3% aged below 30 years as shown in in the table below. This imply that majority of the respondents being under 40 years are likely to be conversant with the use of social media.

Table 4.3 Distribution by age

	Frequency (n)	Percent (%)
Under 30	7	16.3
30-39	11	25.6
40-49	13	30.2
50-59	8	18.6
60 and above	4	9.3
Total	43	100

4.3.3 Marital status of the respondents

Table 4.4 illustrates the relationship status of the respondents, majority (51.3%) of the respondents were married, 27.9% were single, and 13.9% were separated while 6.9% had lost their partners.

Table 4.4 Marital Status

Status	Frequency (n)	Percent (%)
Single	12	27.9
Married	22	51.3
Separated	6	13.9
Widowed	3	6.9
Total	43	100

4.3.5 Education Level of the Respondents

. Table 4.5 depict that most (97.7%) of the participants had tertiary level of education, 2.3% had secondary certificate.

Table 4.5 Education Level of the Respondents

Level of Education	Frequency (n)	Percent (%)
Secondary	2	2.3
Tertiary	42	97.7
Total	43	100.0

4.4 Media platforms used during disaster relief efforts

The study sought to establish the social media platforms that are used during disaster relief services. The finding revealed that all the respondents use Facebook and Twitter during disaster relief services, about 90.7% of the respondents use LinkedIn alongside Twitter and Facebook during relief services, these was followed by 39.5% of the respondents that used YouTube besides other platforms during relief efforts to showcase their activities and mobilise resources. The findings are echoed by findings in other studies that reveal a massive use of Twitter and Facebook during disaster relief services (Nachison, 2005). Findings from the key informant interviews corroborated these findings, one discussant said, social media has been of great help to us during relief effort, I remember during the Westgate attack, we were all over on Facebook and twitter, either updating the public or mobilizing for funds and the results were awesome.

(Geasey,2011). As in the literature review, an organization should only use social media if it has the relevant resources and time to use it (Pearson & O'Connell, 2010).

Another explanation could be that twitter is easy and simple to use. Organizations that respond to disaster crisis, employ social media networks due to their popularity and the vast access by the users as ascertained by Joyce 2011 and LaTouche 2011. Most interviews allude that social media has potential to reach many people on its platforms they are already utilizing it. Organizations should utilize social media platforms that successfully contribute to their campaigns (Pearson & O'Connell, 2010). Moreover, an organization should select the most popular tools to effectively maximize on their social media platforms and highly achieve their objectives.

During the Westgate attack, disaster relief agencies indicated that they hardly used social media for relief efforts, limited amount of time to dedicate to social media during the attack was cited as the most hindrance to the use. In addition to lack of time, it was also revealed that small communications staff deters some of the organizations from using social media during the Westgate attack. In the interviews a discussant said,

“Whereas we know the effectiveness of social media, we opted not to use it because of lack of enough staff to dedicate to social media at the time; we could have easily done it though you realise that we cannot hire someone for the purpose of a current disaster. Anybody that is tasked with the social media of our organisation must be well vast with the organisation’s undertakings”.

This views are supported by literature that suggests that social media should not be a task that is passed off to a person unfamiliar with the organization’s communication plan or to a low-level employee because social media requires dedicated attention in order to be used effectively (Pearson & O'Connell, 2010). It was also noted that social media was not used by

some of the organisations because they discovered that phone communication served better. This could be for many reasons. Phone communication may reach the organization’s target demographic more effectively than social media.

4.5 Benefits of social media use

4.5.1 Trust in information provided by social media

Table 4.7 illustrates the finding of the study on the respondent level of trust on selected aspects use of social media. From the findings, most of the respondents strongly felt that government can use social media to spread propaganda; social media have no reason to give false information during disaster; social media is a fast means of spreading information; and, that information from Kenyans on twitter can be relied upon. This was depicted by the mean score of 4.95, 4.93, 4.91 and 4.33 respectively. Further, it was revealed that the respondents also trusted bloggers and this had a mean score of 3.72.

Table 4.7 Trust in information provided by social media

Statement	CD	DS	N	TS	CT	Total		Mean
						Percent	N	
Bloggers are usually credible people	13.9	16.3	11.6	34.9	23.5	100.2	43	3.72
Information from Kenyans on twitter can be relied upon	0	9.3	4.7	34.9	53.5	102.4	43	4.33
Social media have no reason to give false information during disaster	0	0	0	7.0	93.0	100	43	4.93
Government can use social media to spread propaganda	0	0	0	4.7	95.3	100	43	4.95
Social media is a fast means of spreading information	0	0	0	9.3	90.7	100	43	4.91

Key: CD = Completely distrust, DS = Distrust somewhat, N = Neutral, TS = Trust somewhat, CT = Completely trust

4.5.2 Social Media Provided Useful Information during the Westgate Attack

The study sought to establish whether information provided by social media during the Westgate attack was useful. The findings are presented on table 4.8 below. It was revealed that majority (83.7%) of the respondents were of the opinion that social media provided useful information during the attack, only 16.3% of the respondents indicated that social media did not provide useful information during the Westgate attack. The findings are corroborated by the views from key informant interviews that revealed that social media was very useful during the Westgate attack, a discussant indicated that, *social media was very essential during the attack, the mainstream media did not have much to offer, information from the government was very disjointed, different government agencies gave differing information. At least there was consistency in the social media information.*

Table 4.8 Useful information from the social media

	Frequency	Percent
Yes	36	83.7
No	7	16.3
Total	43	100.0

Social media was useful because it acted as a trigger for response, social media, the present media is more influential than the traditional media whereby it provokes and causes disasters ignited by its content such as scandals, leaked sensitive information and the online influencers. Gonzal-Herrero & Smith 2010, cited similar reasons that social media contributes to the emerging challenges in a disaster communication: presently, stakeholders have unlimited access and a wide source of information. The online stakeholders have the

power to influence against institutional interests and hence diminishing the gatekeeping function of traditional media and dig out scandalous information about the institution and share it (Gonzalez-Herrero & Smith 2010).

However social media was deemed important as it united organizations with similar goals for a good cause. Coombs 2011, cited that social media provides a platform for stakeholders to actively express themselves. Moreover, it is useful for activists, consumers and employees voice their issues and achieve their objectives collectively due to its fast, wide and direct communication that enables stakeholders to communicate effectively without the media intermediary.

4.5.3 Ways in which Social Media is Useful

The study sought to establish ways in which social media could be useful to the respondents. From the findings, it is evident that social media is useful in numerous ways. Table 4.9 below is a presentation of the findings. There was strong agreement that the number of people connected with such networks today makes social media such a valuable communication tool and that social media enables monitoring of timely reports from the public as well as general public opinion before, during and after a crisis, with both factors having a mean score of 4.95. Followed by another strong agreement that through the use of social media, volunteers can be reached within a short time and Social media reinforces crisis alerts being sent to the public through traditional routes, e.g., sirens and traditional media, while simultaneously fostering public feedback both with a mean score of 4.91. A strong mean score of 4.63 was recorded on the statement that in addition to connecting people and informing them during a crisis, social media can be used to raise funds for relief efforts and that social media allows for sending pertinent information out quickly, without a lot of other distractions for the viewer with a mean score of 4.37. The respondents further agreed that regular monitoring of social media

can help serve as an early-warning system for helping first responders identify pending disasters and that social media is useful in terms of rumour control during disaster response each with a mean score of 4.14 and 4.13 respectively.

Table 4.9 Ways in which Social Media is Useful

Statement	1	2	3	4	5	Total		Mean
						Percent	N	
The number of people connected with such networks today makes social media such a valuable communication tool	0	0	0	4.7	95.3	100.0	43	4.95
Through the use of social media, volunteers can be reached within a short time	0	0	0	9.3	90.7	100.0	43	4.91
Social media is useful in terms of rumour control during disaster response	0	9.3	4.7	44.2	41.9	100.1	43	4.19
In addition to connecting people and informing them during a crisis, social media can used to raise funds for relief efforts.	0	7.0	0	16.3	76.7	100.0	43	4.63
Social media allows for sending pertinent information out quickly, without a lot of other distractions for the viewer	0	0	11.6	39.5	48.8	99.9	43	4.37
Social media reinforces crisis alerts being sent to the public through traditional routes, e.g., sirens and traditional media, while simultaneously fostering public feedback.	0	0	0	9.3	90.7	100.0	43	4.91
Regular monitoring of social media can help serve as an early-warning system for helping first responders identify pending disasters.	0	11.6	0	51.6	37.2	100.4	43	4.14
Social media enables monitoring of timely reports from the public as well as general public opinion before, during and after a crisis.	0	0	0	4.7	95.3	100.0	43	4.95

Key: 1 = Very small extent, 2 = Small extent, 3 = Neutral, 4 = Great, 5 = Very Great

4.6 Effectiveness of Use of Social Media Attack

The study sought to compare the opinions of the respondents on the effectiveness of the use of social media during a crisis Vis a Vis the traditional media. The section below presents the findings of the study.

4.6.1 Social Media is more incredible than Traditional Media

The study sought to establish whether social media is more incredible than traditional media. The findings are presented on table 4.10 below. It was revealed that majority (90.7%) of the respondents were of the opinion that social media is more credible than traditional media, only 9.3% of the respondents indicated that traditional media is more incredible than social media. The findings are supported by the views from key informant interviews that revealed that social media was incredible than traditional media, a discussant indicated that, social media is a definite plus to us, imagine if all our communication was to be done in the conventional way, it would have to take time to consult media houses who would take time to repackage and deliver that information to the public. But with the advent of social media, communication is almost real-time, people do not have to wait a long time to get information. In times of crises, time is very critical, any minute lost could cause a big damage.

Table 4.10 Social Media is more incredible than Traditional Media

	Frequency	Percent
Social media	39	90.70
Traditional media	4	9.30
Total	43	100.0

4.6.2 Having smart phones/tablets is essential for crises communication

The study further sought the opinion of the respondents on whether having SMART phones/Tablets during crises communication is essential. All the respondents felt that it was very necessary for communication officers to have smart phones and/or tablets during crises

communication if they were to be effective. Similar findings were revealed from the key informant interviews. Every key informant was of similar view that the phones and/or tablets would enhance communication during disasters.

4.6.3 Benefits of Social Media

The study showed that social media is important as it is humanly active and the information is useful in times of a disaster and crisis relief efforts. It gives a chance for people to respond in a sincerer and personal level during a crisis whereby they empathize and show concern to the victims. This can be well demonstrated through the emerging multimodal functions such as audios and videos. Moreover, social media contributes to agencies response. From an interview of important informants, a panelist argued that disaster response should be shared in all the existing social platforms of an organization because: even when their audios and videos might not be popular, it is important to have this information out there as it might be useful to other stakeholders. Another one argued that social media integrates and makes communication between stakeholders and agencies easy hence building relationship and more personal communication efforts.

Risks of Using Social Media

The study established that there are potential risks of employing social media in disaster communication, in case it is mishandled, it can lead to a double-tragedy. A double tragedy may happen when the original disaster is dominated by a ‘communication disaster’ due to the failure of an organization to uphold the communication guidelines. For instance, there was a disconnected communication from the government during the Westgate attack that lead to a double-tragedy.

CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATION

5.1 Introduction

This chapter presents the discussion of key data findings, conclusion drawn from the findings highlighted and recommendation. The conclusions and recommendations drawn were focused on addressing the objectives of the study. The study sought to establish the role of social media in crisis communication that aim at providing emergency and disaster relief. The study was guided by three objectives; to establish the social media platforms used during emergency and disaster relief efforts; to determine the benefits of social media use during emergency and disaster relief efforts; and, to assess the effectiveness of social media relative to other forms of crisis communication.

5.2 Summary of the Findings

The findings of the study answered the research questions on the variety and effectiveness of social media in crisis communication that aim at providing emergency and disaster relief. The discussion and related literature are presented for each of the three variables of the study. The findings revealed that majority of disaster relief agencies in Nairobi use Facebook and Twitter during disaster efforts. Other social media platforms were not extensively used because of lack of popularity among the public.

Use of social media during disaster relief was found to be beneficial to majority of the respondents. Social media was found to reach many people in a timely manner and had the potential to avert disaster before occurrence if monitored. In terms of rumour control during disaster, social media was found to be very useful. The ability of social media to give communication a human voice suggests its usefulness because many stakeholders trust it.

Social media was found to be effective during disaster relief effort with 90.7% indicating that social media was more incredible than traditional media in relief efforts. It was further found that social media had the ability to reach many volunteers within a short span of time and thereby enhancing an agency's effectiveness during disaster response.

5.3 Conclusions

From the findings, it can be concluded that whereas agencies used social media, the use was not widely spread due to varied reasons. Only Facebook and Twitter were extensively used during this disaster, while more platforms could still have been used to optimise relief efforts. The study further concludes that use of social media is beneficial to disaster relief agencies and through it they are able to give timely information. The study also concludes that the use of social media is effective in disaster relief efforts as people are able to learn about a prevailing disaster and take precautionary measures, it can also help in averting potential disasters.

5.5 Recommendations

The following recommendations are made in an attempt to address the insufficient use of varieties of social media in crisis communication.

1. First and foremost is to integrate social media in their crisis plan, to save time and reduce chaos in a crisis.
2. Disaster relief agencies should employ the use of more social media platforms to help in reaching out more people.

3. Further, an obstacle in making crisis scenarios for shared media is that it is in constant change. Crisis scenarios are likely to be out of date when need arises. The plan should therefore be tested and updated regularly.
4. The government should have a social media policy that guides the nature of information organisations can share on social media to reduce mistakes in communication and at the same time promote accountability.

5.6 Suggestions for Further Research

1. Future research will serve a key purpose in determining the best usage of social media.

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LIST OF APPENDICES

Appendix 1: Questionnaire for staff in the Communication Department of Crisis Relief Services

Section A: Questionnaire log book

1. Questionnaire number.....
2. Date of interview.....
3. Place of interview.....
4. Do you own a SMART phone? Yes () No ()

Section B: Social and demographic information of the respondent (Ignore if No)

5. Sex of respondent Male 1. () Female 2. ()
6. Age of respondent 1. **Under 30** () 2. **30 - 39** () 3. **40 - 49** () 4. **50 - 59** () 5. **60 and above** ()
7. Marital status of respondents 1. **Single** () 2. **Married** () 3. **Divorced** () 4. **Separated** () 5. **Widowed** () 6. **Other** () Specify
8. Level of education of respondents (please circle appropriately)
1. None 2. Primary 3. Secondary 4. Tertiary

Section C: Media platforms used during emergency relief efforts

9. Please identify the social media in which you have a presence

YouTube	
Facebook	
Twitter	
Flickr	
LinkedIn	
Vimeo	
Ustream	
Foursquare	
Yelp	
Itune	
MySpace	
Eventbrite	
Instagram	
Digg	

10. During the Westgate attack did you use social media?

Yes No

11. Explain how you used social media

12. Determine each type of organization that uses social media for risk and/or crisis communication.

13. What is the main purpose for an agency to use social media?

Section D: Benefits of social media use

14. On a scale of 1 to 5, where 1= completely distrust (CD), 2= distrust somewhat (DS), 3 = neither trust nor distrust (N), 4 trust somewhat (TS) and 5 = completely trust (CT), how you would rank your trust in the information provided by social media?

Factor in ranking in trust	CD	DS	N	TS	CT
	1	2	3	4	5
Bloggers are usually credible people					
Information from Kenyans on twitter can be relied upon					
Social media have no reason to give false information during disaster					
Government can use social media to spread propaganda					
Social media is a fast means of spreading information					

15. Generally speaking, did social media provide useful or relevant information to help during the Westgate attack?

Yes No

16. If yes, how?

17. What role do you think social media currently play, in regards to crisis communication?

18. On a scale of 1 to 5, where 1 = Very Great, 2 = Great, 3 = Neutral, 4 = Small Extent and 5 = Very Small Extent, Indicate the extent to which you agree with the following statement

Statement	1	2	3	4	5
The number of people connected with such networks today makes social media such a valuable communication tool					
Through the use of social media, volunteers can be reached within a short time					
Social media is useful in terms of rumour control during disaster response					
In addition to connecting people and informing them during a crisis, social media can used to raise funds for relief efforts.					
Social media allows for sending pertinent information out quickly, without a lot of other distractions for the viewer					
Social media reinforces crisis alerts being sent to the public through traditional routes, e.g., sirens and traditional media, while simultaneously fostering public feedback.					
Regular monitoring of social media can help serve as an early-warning system for helping first responders identify pending disasters.					
Social media enables monitoring of timely reports from the public as well as general public opinion before, during and after a crisis.					

Section E: Effectiveness of Use of Social Media

19. In your opinion, which form of communication is++ thought to be most credible during a crisis: Social media traditional media

20. When delivering crisis communications during an emergency, mobile devices (smart phones, tablets, etc.) are vitally important:

Strongly disagree Disagree Neither Agree nor Disagree Agree Strongly Agree

21. In your opinion, social media is most beneficial for: (explain)

22. In your opinion, what are the biggest risks for using social media in crisis situations?

23. Once social media information is gathered, what does an agency do with the information?

24. Which social media platform did you use during the Westgate attack

YouTube	
Facebook	
Twitter	
Flickr	
LinkedIn	
Vimeo	
Ustream	

Foursquare	
Yelp	
Itune	
MySpace	
Eventbrite	
Instagram	
Digg	

25. In your opinion, how would you rate the response rate of the public on your social media use

Appendix 2: Key Informant Interview Guide

The role of social media in crisis communication: Interview guide

1. Tell me about your communication process during a crisis
2. Do you have targeted social media communication when responding to crises?
3. In your opinion, would use of social media help with immediate response?
4. Tell me something about the preparedness of Nairobi County to respond to crises
5. Do you know of any pre-existing crisis communication plans for Nairobi?
6. Who should take control of messaging during the crisis and recovery phase in case any hits Nairobi, and why?
7. Does your organization use social media for alerting the public to increased risk to public safety?
8. During the Westgate attack, did you use social media, and how did you use it
9. What was the social media platform used by your organisation during the Westgate attack?
10. Who is allowed to post/send data during a crises?
11. What is the main purpose for using social media during crises?
12. During a crisis, social media is best used for
13. In your experience, overall, what do you think about the role of social media in the contexts where you operate, particularly looking at emergency response?
14. This concludes my questions but I'd be really interested to hear of any other issues or insights you would like to add.