

**ROLE OF SOCIAL MEDIA IN CRISIS COMMUNICATION  
IN PUBLIC ORGANIZATIONS IN KENYA: A CASE OF  
KENYA PIPELINE CORPORATION AND MUKURU-  
SINAI FIRE DISASTER**

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**ABSTRACT**

The role of the social media in crisis communication has increased in the last couple of years and some organizations have positively mainstreamed social media in crisis communication, but there are some organizations especially in the public sector that are still reluctant to incorporate social media in communication during disasters and instead view social media as a threat to disaster management. Therefore the objective of the study was to examine the role of the social media in crisis communication in public organizations in Kenya with specific reference to Kenya Pipeline Corporation and Mukuru- Sinai Fire Disaster. The specific objectives of the study included the effect of influence of rapid information sharing, reinforcing disaster response strategy and provision of platform for participation and contribution on crisis communication in public organizations in Kenya. The research study used descriptive research design in collecting the data from respondents. The target population was drawn from Kenya Pipeline Corporation and composed of management, communication staff and crisis management committee all totaling to sixty nine (69) respondents. The research study undertook survey of the total population as a sample. The primary data for the study was collected using the questionnaires and analyzed using descriptive and regression statistics with the aid of Statistical Package for Social Sciences. The study established that there is a significant relationship between rapid information sharing, reinforcing disaster response strategy and provision of platform for participation and contribution on crisis communication in public organizations.

**Key Words:** Social Media, Crisis Communication, Public Organizations, Disaster

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## Introduction

### Background to the Study

The current uncertain environmental brings with it opportunities for crises, which are magnified by the proliferation of both traditional and new media. Hence organizations have placed a higher premium on crisis communication (Coombs, 2007). Vital to successful crisis management is effective crisis communications which is more about managing the outcome, impact, and public perception of a crisis (Gray, 2003). In fact crisis communications is associated with utilizing information to identify risk and in spurring mitigating behaviors that can reduce the risk, coordinate support and recovery in case a crisis occurs (Ulmer, et al, 2007).

Organizations have begun to utilise social media in crisis communication and this has drastically changed the way in which crisis communications is handled as it has enhanced the extension and depth of communication and response and removed the communication barriers during crisis (Freberg, 2012). Social media allows organization crisis communicators to share information quickly and instantly hence facilitating the effect of crisis communication. Social media has not only provided but also increased the ways and methods in which stakeholders can support and involve themselves in disaster situations by either supporting direct crisis victims or those indirectly affected by the disaster (Palen & Liu, 2007). In Kenya an example of such disaster was the Mukuru- Sinai fire disaster which occurred on 12th September 2011. The fire disaster occurred from petroleum product spillage within the Kenya Pipeline industrial area terminal and led to the death of about hundred people.

### Statement of the Problem

The importance of efficient crisis communication cannot be downplayed as it assists organizations to tackle the crisis that has the probability for bringing, a lot of harm to the organization image and reputation hence overall business performance (Fearn-Banks, 2007). The role of the social media in crisis communication has increased in the last couple of years and some organizations have positively mainstreamed social media in crisis communication, but there are some organizations especially in the public sector that are still reluctant to incorporate social media in communication during disasters and instead view social media as a threat to

disaster management (Duin, et al, 2012). However there is limited information of the role of social media in crisis communication in public organizations in Kenya. Hence this research study seeks to fill this research gap by examining the role of the social media in crisis communication in public organizations in Kenya

### **Objective of the Study**

To investigate the role of the social media in crisis communication in public organizations in Kenya: A case study of Kenya Pipeline Corporation and Mukuru- Sinai Fire Disaster

The specific Objectives of the study included:

- i) To examine the influence of rapid information sharing on crisis communication in public organization.
- ii) To determine the effect of reinforcing disaster response strategy on crisis communication in public organization.
- iii) To examine the effect of provision of platform for participation and contribution to crisis management on crisis communication in public organizations.

### **Significance of the Study**

The study will be important to the Kenya Pipeline Corporation communication staff and management who will be able to understand the role of social media in crisis communication and seek to effectively integrate the social media in their crisis communication. The study will also facilitate the corporation stakeholders to understand and appreciate the role of social media in crisis communication. The study will be significant to other corporate institutions because they will be able to understand the role of social media in crisis communication and leverage on the same to enhance their crisis communication. The findings of the study will of value to humanitarian organizations as their understanding the role of social media on crisis communication also helps to shed light on some key issues in the use crisis communication and how it can be leveraged to enhance the management of disasters. The findings of the study will also of value to government policy makers as they will appreciate the importance of integrating social media in their communication strategy especially in crisis communication because of its

accessibility to most citizens In theory the study will be of value to scholars and academicians who will benefit from the information of the study as the study will contribute to existing body of knowledge..

### **Theoretical Review**

Horsley and Barker (2002) synthesis model for crisis communication focuses on the various phases of crisis and observes that for each phase of crisis specific nature of information is required to be created and delivered to the organization stakeholders. Hence the pre-crisis phase involves planning for the likely crisis; initial phase communication involves rapid communication to the stakeholders with the aim of conveying empathy and reassurance. During the crisis maintenance phase communication is aimed at updating stakeholders on ongoing crisis and on how the crisis is being controlled. Crisis resolution phase involve continued communication to the stakeholders and victims of the crisis, while the crisis evaluation phase focuses on the evaluation of the effectiveness of crisis response by the organization and other stakeholders to determine if it was effective. The Situational Crisis Communication Theory (SCCT) hypothesized by Coombs (1998) and is hinged on crisis situation, crisis response strategies and matching of crisis situation to crisis response strategies. The crisis situation is based on the victim cluster, accidental cluster and preventable cluster; crisis response strategies focus on the words and actions the organization uses in relation to the crisis which impact on organization's reputation, while matching the crisis situation and the crisis response strategies ensures that crisis response strategies are selected according to the perceived nature, responsibility and damage of the crisis (Cooley & Cooley, 2011).

### **Literature Review**

Usually crisis communication focuses on explaining the meaning and impact of stakeholders, provision of adequate information about what has happened and what is on-going and extent of damage or harm to property and reputation (Ahmed, 2006). Social media makes it possible for the news of a crisis to be shared and re-shared hence reaching many stakeholders (Sutton, et al, 2008). In most cases crisis responses are based on a number of strategies which include denial, diminish rebuilding and bolstering crisis communication strategies hence social media is used to strengthen these crisis response strategies (Coombs, 2007). Social media provide information

and instructions with on time alerts and warnings; emergency telephone numbers, location of hospitals, evacuation routes and identification of survivors and victims of the disaster (Stephens & Malone, 2009). It is also used to solicit donations and to encourage friends, families and networks to contribute to crisis situation (Palen, 2008).

## Research Methodology

The study used descriptive design because it ensured complete description of the situation, minimizing bias in the collection of data. The target population was drawn from Kenya Pipeline Corporation and composed of management, communication staff and crisis management committee all totaling to sixty nine (69) respondents. Because the population was small the study undertook census survey of the total target population of sixty nine (69) respondents as a sample. The primary data was collected using closed ended questionnaires. Validity and reliability of research instrument was guaranteed by discussion of the instrument with experts and research supervisor and thereafter pilot study was conducted on seven (7) respondents from the target population who were not included in the final sample. The result of the pilot study was analyzed using Cronbach alphas with a set lower limit of acceptability of 0.60 and all the results of the analysis indicate Cronbach alphas of above 7.0. The questionnaires were self-administered as the researcher dropped and picked the questionnaire from the respondents after the agreed period. Prior Informed consent was obtained from each respondent before dropping the questionnaire. Collected data was cleaned, tabulated and analyzed using descriptive statistics and regression statistics with the aid of SPSS 21 and presented using Tables,

## Study Findings

Out of the 69 issued questionnaires, 61 questionnaires representing 88.4% of the total questionnaires distributed were returned fully completed, while 8 questionnaires were not returned representing 11.6% of the total questions distributed to the respondents. It can be inferred that the response rate was good. According to Mugenda and Mugenda (2003) a response rate of 70% and over is excellent for analysis and reporting on the opinion of the entire population.

### Demographic Characteristics

The analysis on table 1 below sought to find out the highest level of education, respondents' categories and number of years in service in the organization

**Table 1. Demographic Characteristics**

Demographic factors	Categories	Frequency	Percentage %
Level of education	Diploma	31	39.3
	Degree	24	50.8
	Others	6	9.9
Respondent Categories	Management	14	23.0
	Crisis Management Committee	12	19.7
	Communication Staff	35	57.4
Years of Service	0-4years	15	24.6
	5-9 years	29	47.6
	10-19 years	11	18.0
	20+ years	6	9.8

The results of the analysis on table 1 above show that majority (50.8%), (57.4%) and (47.6%) of the respondents indicated respectively that they had at a degree level of education, worked as communication staff and had served for a period of 5-9 years.

### Crisis Communication

The analysis shown table 2 below sought to find out the indicators of crisis communication in public organization.

Table 2. Indicators of Effective Crisis Communication

Crisis Communication:		n =61; %=100				
		SA	A	N	D	SD
Created awareness among stakeholders	F	24	19	2	9	7
	%	39.3	31.1	3.3	14.8	11.5
Reduced and prevention of possible injuries and death	F	20	16	3	10	12
	%	32.8	26.2	4.9	16.4	19.7
Prevented possible damage organization's reputation	F	27	20	1	5	8
	%	44.3	32.8	1.6	8.2	13.1
Facilitated affected stakeholders to get back to normal state	F	23	26	2	4	6
	%	37.7	42.6	3.3	6.6	9.8
Provided sufficient information on the crisis	F	21	29	3	5	3
	%	34.4	47.5	4.9	8.2	4.9

Based on the scale of 1 to 5 where 1 is Strongly Disagree (SD), 2 is Disagree (D), 3 is Neutral (N); 4 is Agree (A) and 5 is Strongly Agree (SA), the findings on table 2 above indicate that majority of the of the respondents agreed and strongly agreed respectively that social media created awareness among stakeholders (39.3%), reduced and prevented of possible injuries and death (32.8%), prevented possible damage to organization's reputation (44.3%), facilitated affected stakeholders to get back to normal state (42.6%) and provided sufficient information on the crisis (47.5%)

**Test of Significance**

Data analysis on table 3 below sought to establish if there is a relationship between crisis communication and rapid information sharing, reinforcing disaster response strategies and provision of platform for participation and contribution to crisis management.

**Table 3. Model Summary**

Model	R	R Squared	Adjusted R Squared	Std. Error of the Estimate
1	0.509 <sup>a</sup>	0.259	0.214	1.053

Findings of the study on table 3 above indicate a positive correlation coefficient ( $r$ ) = 0.509 and coefficient of determination, ( $r^2$ ) = 0.259 and adjusted  $r$  of .214 between rapid information sharing, reinforcing disaster response strategy and provision of platform for participation and contribution and crisis communication in public organizations. The results of ( $r^2$ ) imply that the variations in rapid information sharing, reinforcing disaster response strategy and provision of platform for participation and contribution explain 25.9% percent of the variation in the Crisis communication. On the other hand, the Adjusted R-squared shows that 21.4% (Adj R-squared=.214) of the variance in the crisis communication can be explained by the variations in rapid information sharing, reinforcing disaster response strategy and provision of platform for participation and contribution to crisis management.

The study on table 4 below used Analysis of Variance (ANOVA) to test the significance of the regression modeling as pertains to crisis communication and rapid information sharing, reinforcing disaster response strategy and provision of platform for participation and contribution to crisis management.

**Table 4. ANOVA<sup>b</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	24.145	3	3.349	2.513	.004 <sup>a</sup>
	Residual	67.902	64	1.215		
	Total	92.047	69			

**Table 4. ANOVA<sup>b</sup>**

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1	Regression	24.145	3	3.349	2.513	.004 <sup>a</sup>
	Residual	67.902	64	1.215		
	Total	92.047	69			

**b. Dependent Variable: Crisis Communication in Public Organizations**

The findings on table 4 above shows that the ANOVA test produced an F-value of 2.513 which is significant at  $p=0.004$ . Thus the regression model is statistically significant in predicting how rapid information sharing, reinforcing disaster response strategy and provision of platform for participation and contribution affect crisis communication.

The analysis of data on table 5 below sought to establish the extent to which rapid information sharing, reinforcing disaster response strategy and provision of platform for participation and contribution to crisis management predict crisis communication in public organization

**Table 5. Regression Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.138	0.502		2.267	0.000
Rapid Information Sharing	0.212	0.110	0.240	2.009	0.001
Reinforcing Disaster Response Strategy	0.327	0.160	0.211	2.044	0.000
Platform for Participation and Contribution	0.223	0.110	0.259	2.028	0.003

**a. Dependent Variable: Crisis communication in Public Organizations**

Table 5 above shows that rapid information sharing; reinforcing disaster response strategy and provision of platform for participation and contribution have positive coefficients, implying that they positively predict crisis communication. Therefore taking all independent variables (rapid information sharing, reinforcing disaster response strategy and provision of platform for participation and contribution) constant at zero (0); crisis communication will be at 1.138. Therefore a unit increase in rapid information sharing, reinforcing disaster response strategy and provision of platform for participation and contribution will lead to 0.212 (21.3%), 0.327 (32.7%) and 0.223 (22.3%) unit increases in crisis communication in public organizations respectively

The results on table 5 above further indicate that p-value of = ( $p < 0.001$ ) for rapid information sharing, ( $p < 0.000$ ) for reinforcing disaster response strategy, and ( $p < 0.003$ ) for provision of platform for participation and contribution are less than the significance level of 0.05. The implication of these results is that there is a significant relationship between rapid information sharing, reinforcing disaster response strategy and provision of platform for participation and contribution and crisis communication in public organization. This meant that rapid information sharing, reinforcing disaster response strategy and provision of platform for participation and contribution affect crisis communication

### **Summary, Conclusion & Recommendation**

The study established that rapid information sharing by social media: enabled Kenya Pipeline Corporation to speedily communicate the Sinai fire disaster to staff, partners, and the public, hence reducing both lives, property and reputational damage that might have been caused by the crisis; share experiences, the actions the corporation was taking, give insights on the Sinai fire disaster, facilitated interaction with stakeholders making it possible to quickly know which questions stakeholders were seeking answers for, and getting to know which rumors were circulating, enabling the corporation to counter them and to provide accurate information on the disaster and where more information can be found ensuring clarity of information.

The study also found out that social media communication reinforced crisis response strategies deployed by Kenya Pipeline Corporation which included denial rebuilding and bolstering communication response strategies. The Corporation used denial strategy in which social media

communication was focused showing that the organization's responsibility for the Sinai fire disaster was minimal. In spite of the fact that the organization denied responsibility for the disaster; it also used rebuilding communication strategy, thus social media communication was used to show compassion with the victims and/or apologize for the things that had happened during the disaster; used social media communication to reinforce the bolstering response communication strategy by informing the public on the aspects of the disaster.

The study revealed that social media communication provided platform for participation and contribution to crisis management by stakeholders of Kenya Pipeline Corporation as the Corporation used social media to raise public disaster awareness hence allowing emergency services to be delivered to the affected people. It also enabled the corporation to prevent false advice being circulated by promptly clarifying rumours and for appealing for donation. The Corporation used social media to provide advice and posted emergency phone numbers, location of hospitals requiring blood donations and evacuation routes. It also used social media communication to mobilize volunteers both during and after the disaster and for appeal for the needed in kind contribution, emergency services and materials

### Conclusions of the Study

Rapid information sharing by social media enabled the Kenya Pipeline Corporation organization to speedily communicate the disaster to stakeholders, the victims, partners, and the public, hence reducing both lives, property and reputational damage that might have been caused by the disaster; share experiences, the actions the corporation were taking, gave insights on the crisis, facilitated interaction with stakeholders making it possible to promptly know the critical issues the stakeholders were seeking, and getting to know which rumors were circulating, enabling the organization to counter them and to provide information on the disaster and where more information was to be found ensuring clarity of information.

Social media communication reinforced the crisis response strategies deployed by Kenya Pipeline Corporation which included denial rebuilding and bolstering disaster response strategies. The organization used denial crisis communication strategy in which social media communication was focused showing that the organization's responsibility for the crisis was minimal. In spite of the fact that the organization denied responsibility for the crisis; it also used

rebuilding disaster response communication strategy, thus social media communication was used to show compassion with the victims and/or apologize for the things that had happened; finally it used social media communication to reinforce the bolstering disaster response communication strategy by informing the public on the aspects of the crisis.

Social media communication provided a platform for participation and contribution by stakeholders of Kenya Pipeline Corporation support crisis management by raising public awareness on the Sinai fire disaster hence allowing targeted support services and materials to be delivered to the affected people/victims. It improved disaster preparedness by sharing information promptly, providing essential information and mobilize in kind contribution, emergency services and materials required.

### **Recommendations for Policy**

It is important for Kenya Pipeline Corporation to enhance the use of social media communication in crisis awareness because it gives way to instant information sharing through diverse stakeholder networks and allows access to information by the organization from different types of stakeholders. There is also need for Kenya Pipeline Corporation to adapt the specific crisis communication strategy to the specific external and internal organization environment as it will make the use of social media by the organization focused and transparent and strengthen the envisaged impact.

### **Suggestion for Further Research**

The study focused on the three roles of social media communication in crisis communication (rapid information sharing, reinforcement of crisis responsive strategies and provision of platform for participation). Hence there is need to undertake further study in this area which will include other variables and wider study sample that could include more public organizations

### **Acknowledgement**

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## List of Abbreviations and Acronyms

ANOVA	Analysis of Variance
SCCT	Situational Crisis Communication Theory

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