The Role of Disaster Preparedness on Business Continuity Management for Corporate Organisations: A Case of Equitol Bank, Kenya

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Abstract: *Major emergencies, disasters and other crises are no respecters of national borders and never occur at convenient times. The magnitude of human suffering caused by these events is huge, and many aspects of people's lives are affected – businesses, health, security, housing, access to food, water and other life commodities, to name but a few. That is why it is vital to have emergency plans in place, so that the effects of disasters on people and their assets can be mitigated, and a coordinated response may be launched as effectively and efficiently as possible when disasters or other crises strike. Although many emergencies are often unpredictable, much can be done to prevent and mitigate their effects as well as to strengthen the response capacity of organizations at risk. This study focuses on the importance of disaster preparedness in corporate organizations to ensure business continuity. The study was carried out in Equitol Bank in Kenya. A case study design was adopted for the study. A sample size of 60 respondents from a target population of 200 staff members using stratified random sampling technique was obtained. Questionnaire and document analysis were the main tools of data collection utilized. Data obtained was organized, coded and analyzed using qualitative and quantitative methods. Descriptive statistics such as means, and cumulative frequencies were employed in summarizing data. The study found that a clear disaster preparedness plan has a positive effect on business continuity management of an organization. This implies that organizations need to be adequately prepared for any unexpected events which could interrupt business operations and survival chances in both short and long run.*

Keywords: *Disaster Preparedness, Business Continuity, Corporate Organizations.*

1. INTRODUCTION

According to Kubitscheck (2001), business continuity management has evolved since the days when contingency planning was narrowly biased on the recovery of computer systems and data, "Business continuity management has grown out of the recognition that "disaster recovery" would be ineffective without complementary arrangements for the necessary human resources and infrastructure to be in place.

Contingency theory pinpoints that management principles and practices are dependent on situational appropriateness. Luthans (1976) also notes that "The traditional approaches to management were not necessarily wrong, but as at today they are no longer adequate. The needed breakthrough for management theory and practice can be found in a contingency approach." In Business Continuity Managent (BCM) different situations are unique and require a managerial response that is based on specific considerations and variables. The appropriate use of a management concept or theory is thus contingent or dependent on a set of variables that allow the user to fit the theory to the situation and particular problems. It also allows for management theory to be applied to an intercultural context where customs and culture must be taken into consideration (Shetty, 1974).

Through a series of common managerial functions, i.e., mitigation, preparedness, response, and recovery, business continuity management if well conceptualized and understood by the organization can offer an all-hazard approach through implementing a series of broad strategies and specific tactics (Lindell & Perry, 1992). Additional parameters should be put in place to ensure an optimum result from a business continuity management. McCarthy (2004) discusses that businesses should prioritize functions, "ranking their importance from highest to lowest and

determining the resources the firm must have to restore operations within the desired time frame "Successful long-term business continuity efforts depend upon the collaborative participation and engagement of all sectors of an organization and the society at large, including both government and private sector organizations (Drabek & McEntire, 2004).

In 2005, World Health Assembly (WHA) passed a resolution calling on the Organization to provide technical guidance and support to countries building their emergency response capacities, stressing a multispectral and comprehensive approach. The following year, another resolution called on Member States to further strengthen and integrate their response programmes, especially at the community level, and emphasized interagency cooperation at the international level.

Emergency preparedness has traditionally focused on stockpiling relief goods and providing urgent services to meet the public's basic needs. In most countries political commitment and financial and human resources are concentrated overwhelmingly on these short-term emergency contingencies. While building up capacities for humanitarian response continues to be a priority for all countries, it is now widely believed (perhaps influenced by the severity and frequency of disasters and conflicts in the past decade) that more should be done to reduce the social, economic and human consequences of these emergencies. This translates into a need for placing much greater attention on the implementation of proactive strategies and a call for a more comprehensive approach to building national capacities in emergency preparedness and response as well as in risk reduction. Preparedness is essential in securing the right to life with dignity. States bear the primary responsibility for protecting their populations and ensuring a dignified life but the modern approach to preparedness extends well beyond those traditionally involved in relief efforts, such as civil protection forces, emergency offices and humanitarian organizations. In the same way organizations have a responsibility to ensure safety and security of their stakeholders. This therefore calls for strategies on disaster preparedness, an objective that this paper focuses on achieving. Communities need to work closely with local authorities, public organizations and the relevant section of the private sector, in order to strengthen their own capacities to prepare for and manage the consequences of various risks.

1.1. Disaster Preparedness

In today's business environment it is clearly evident that both small and big organizations are good at coming up with vision and mission statements as well as strategies that are geared towards increasing profitability and shareholders' value, but poor at implementing business continuity plans and managing the same plans and strategies. This has been so because most of the companies are not willing to commit an extra cost on any unforeseen event as they always believe the same will not happen. Managers have a misconception that the cost associated with designing, developing, implementing, training and delivery of business continuity management programs and plans exceeds the benefits. The most common objectives include: lost revenue, customer confidence, compliance penalties and fines, staff confidence and effectiveness (Laudicina, 2005).

From a business standpoint, a disaster is serious disruption, distress, or destructive effect of a fatal event (such as bombing ,drought, flood, fire, hurricane, war stampedes, fires, transport accidents, industrial accidents, oil spills and nuclear explosions/radiation and deliberate attacks) of such scale that disrupts (or threatens to disrupt) critical or core business functions of an organization, society or system, for such a period long enough to significantly harm it or cause its failure. It is the consequences of a disastrous event and the inability of its victims to cope with them that constitute a disaster, not the event itself (Wallace & Webber, 2004).

Disasters can be classified into two categories: namely, natural disasters and man-made disasters. Manmade disasters are always far worse than natural disasters. With the advent of science, various scientific experiments especially nuclear tests and human follies like oil spills, fire hazards, gas leaks along with the much discussed global warming has heavily skewed the balance of the ecosystem (Smith, 1976).

1.2. Business Continuity Management

Business continuity management (BCM) means ensuring the continuity or uninterrupted provision of operations and services. Business Continuity Management is an on-going process with several

different but complementary elements. Planning for business continuity is a comprehensive process that includes disaster recovery, business recovery, business resumption, and contingency planning.

Business continuity management has changed remarkably over the years and can be traced back to 1975 in France where there was intimidation through the reign of terror by the France government (Smith, 1976). To date, terrorists continuously cause havoc and damage to organizations and individuals. There is a history of terrorists across the world ranging from gun attacks, road side bombing, suicide bombing, car bombs, improved explosive device, and even grenade attacks. This Happens every single day across the world and affects governments, corporate bodies and individuals (Follain & Emmanuel, 1985). The East African region was also affected in July 11, 2010 when militants from al-Shabab terror group bombed Uganda's capital city, Kampala where seventy six people watching football world cup soccer final were killed (Bariyo, 2010). This was apparently in retaliation for Uganda's decision to send troops to Somalia to fight the extremist insurgents. The same group upstaged their fight in Kenya on September 21, 2013, where gunmen used grenades and assault rifles to attack and upscale the Westgate Mall in Nairobi, killing 59 people and wounding 175 others (Laura, 2013). Many corporate organizations, including Nakumatt supermarket, Barclays bank, Diamond Trust Bank, among others, had businesses within the mall. Most of these organizations had no alternative plans on how to serve their customers and most of the businesses have since been closed (Tochia, 2013).

This has been the turning point in Business continuity management in Kenya, with corporate organizations more concerned with the continuity of their businesses in worse events of disaster. Although a good number of corporate entities and other businesses have supported measures that militate/mitigate against threats to their company core resources and businesses, the whole concept of BCM is not well conceptualized and understood by these organizations.

Smith (2005) highlights that far too often business continuity is thought of as an expense, overhead, or something we have to do to please the auditors. He notes that organizations should "Look at it as a business opportunity and a competitive advantage instead." Businesses should realize that there is need to take steps aimed at improving chances of business survival during any incident and still continue to operate and deliver an up to standard level of customer service and still generate income for their shareholders.

According to Graham (2006), an organization needs first to analyze its business and understand the risk for it to design and implement an effective roadmap to business continuity management and then design as well as implement affective and efficient business continuity plans. Snedaker (2007) says directly that failing to plan is planning to fail. Every business should know how they will manage an emergency situation. Planning is best done before an event, not in the middle of it. Time spent planning is never wasted. How quickly a company gets back to business after an emergency often depends on the planning done.

Ihab (2011) focused on developing an understanding of the significance of placing BCM in the context of Strategic Planning (SP) (i.e. the significance of integrating BCM with SP in one framework). This requires studying the following: firstly, Business Continuity Management, its significance, role and practice; secondly, Strategic Planning, its significance, purpose and potential vulnerability; thirdly, the rationale for placing BCM in the context of SP; and finally, the factors that are likely to influence placing BCM in the context of SP. This study focuses on these key elements of Business Continuity Planning (BCP) which gives a clear roadmap for organizational disaster preparedness.

Although the impact of disaster and business unexpected events can be fatal, it's only the organizations that have BCM that can survive and have continuity in their operations within hours after an unexpected event. For example, Dow Jones had 800 employees on a number of floors on the world trade centre and all of them survived with no loss of data or service which was attributed to their compressive and effective BCM, a company like American express which had a high presence in the world trade centre resumed its normal services in a matter of hours. On the contrary, in the terror attack of 21st September, 2013 on the Westgate mall in Kenya, none of the businesses could resume business within hours apart from a few Banks that referred clients to their nearest branches. Unfortunately, most of the businesses just closed down since then.

2. MATERIALS AND METHODS

The study adopted a case study research design. Since the study involved an in depth investigation of one organization, a case study design was deemed appropriate. According to Mugenda and Mugenda (2003), case study design allows the researcher to gain insight by investigating individual case which can then be generalized to the wider population. Case study design is deemed a convenient method using specific questions to obtain responses and is more relevant for qualitative as well as suitable for exploratory and descriptive purposes. The study area was Equitol Bank being a corporate organization.

The target population of the study consisted of all the 200 employees of Equitol Bank. Stratified random sampling technique was employed in selecting respondents for this study.

Table1. *Sample Size*

Respondents	Target Population	Sample Ratio	Sample
Senior Managers	20	0.3	6
Branch Managers and Departmental Managers	40	0.3	12
Branch and Departmental Staff	140	0.3	42
TOTAL	**200**	**0.3**	**60**

The main data collection instruments used was questionnaires. Data obtained was organized, coded and analyzed using qualitative and quantitative methods. Descriptive statistics such as means, and cumulative frequencies were employed in summarizing data. Open-ended questions were analyzed through coding themes and quotas that emerged. The themes emerging from secondary data were identified to augment the primary data. Qualitative data were organized into themes in order to check on their frequencies based on the research questions. Chi-square correlation coefficient was computed to establish the level of significance of correlation between BCM and disaster preparedness.

3. RESULTS AND DISCUSSION

3.1. Evacuation Procedures

To establish whether there was individual awareness of evacuation procedures and assembly areas in case of emergency disaster occurrences, all the 60 (100%) respondents were gave positive indicators of awareness.
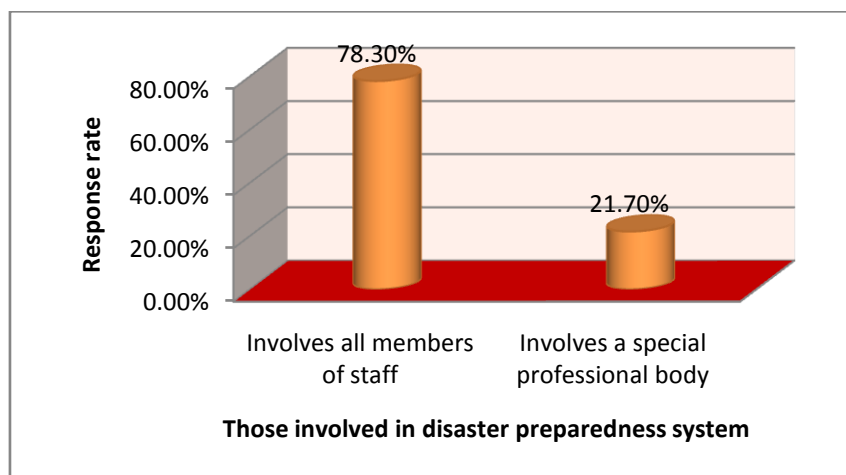
3.2. Disaster Preparedness Programmes

Fig1. *Involvement in disaster preparedness systm*

When asked to indicate whether there was a documented disaster preparedness plan or programme in their places of work, all 60 (100%) respondents were affirmative. Respondents were further asked to indicate whether the disaster preparedness system involved all members of staff or a special professional body. 47 (78.3%) of the respondents indicated that the disaster preparedness system involved all staff. The remaining proportion of 13 (21.7%) was of the opinion that the disaster preparedness system only involved a special disaster preparedness management team as illustrated in Figure 1.

3.3. Disaster Preparedness Strategies

The 13 respondents who indicated that the disaster preparedness system only involved a special disaster preparedness management team, further confirmed unavailability of strategies in place that could prepare their organizations in the event that the special preparedness management teams were unavailable. A proportion of 23.1% (3) indicated that staff members were continuously sensitized on disaster preparedness, and 30.8% (4) indicated that there were clear procedural policies on delegation (chain of command) of duties in the event of missing officers in charge. A proportion of 15.4% (2) indicated that there were disaster marshal representatives (crisis management team leaders), another 15.4% (2) indicated that there were well displayed security telephone numbers for staff members in the event of disasters and another 15.4% (2) indicted that their organizations carried out frequent staff trainings on disaster preparedness.

Table2. *Alternative Disaster Preparedness Strategies*

Alternative Strategy	Frequency	Percentage
Continuous sensitization on disaster preparedness	3	23.1
Clear delegation chain of command	4	30.8
Presence of disaster marshal representatives	2	15.4
Well displayed security numbers	2	15.4
Frequent trainings on disaster preparedness	2	15.4
TOTAL	**13**	**100.0**

3.4. Frequency of Emergency Trainings and Exercises

The authors also sought to find out the frequency of trainings and exercises for staff members on emergency handling steps in their respective work places. 37 (61.7%) respondents who indicated that the emergency handling steps' trainings and exercises were done quarterly, 10 (16.7%) indicated that they were done annually while 13 (21.6%) indicated that they were done twice every year. This information is presented in Figure 2.
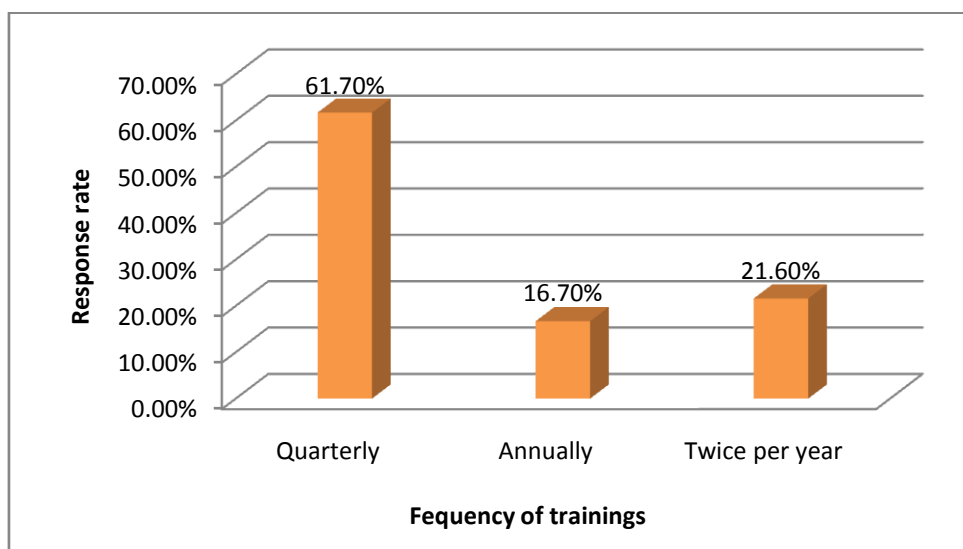

Fig2. *Frequency of emergency trainings and exercises*

3.5. Mode of Emergency Training

The study sought to establish the mode of training used by the respondents' respective work stations in conducting the emergency trainings and exercises. Majority 39 (65%) of the respondents indicated that the trainings were conducted through the use of internal workshops in their respective work stations followed by those who indicated that the trainings were conducted through intranet 37 (61.7%). There were 34 (56.7%) respondents who indicated that the trainings were conducted through awareness campaigns, 4(6.7%) indicated that the trainings were conducted through conferences, 3 (5.0%) indicated that they were conducted through testing while those who indicated that the trainings were conducted through quizzes and posters were represented by 3.3% (2) of the respondents. Figure 3 illustrates this information.
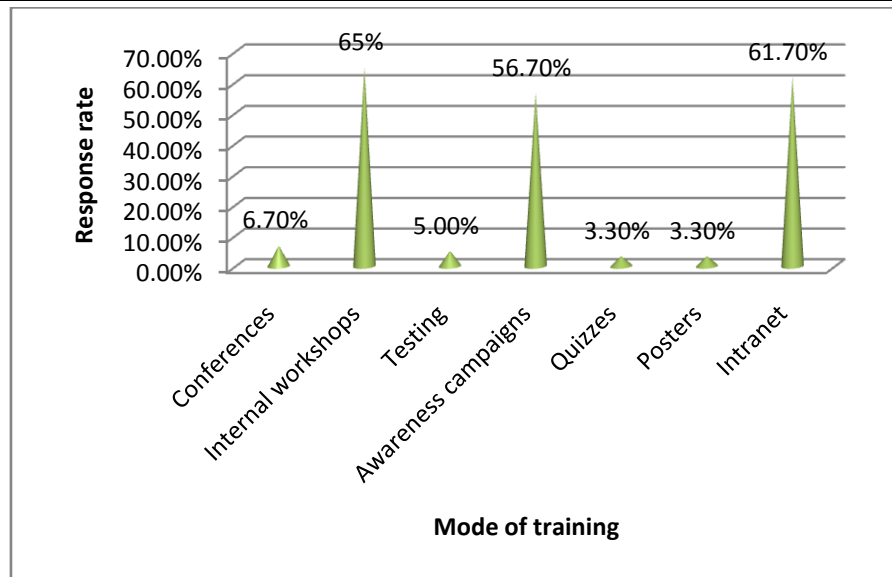
Fig3. *Mode of emergency training*

3.6. Frequency of Mock Emergency Drills

When asked whether their organization conducts mock emergency drills, 76.7% (46) agreed while the remaining 23.3% (14) disagreed. Of those who indicated that mock emergency tests are conducted in their respective work stations, 34.8% (16) indicated that the tests are done annually, 26.1% (12) twice per year, 23.9% (11) quarterly, 8.7% (4) fortnightly and 6.5% (3) weekly. Table 3 illustartes this information.

Table3. *Frequency of mock emergency drills*

Frequency of mock emergency drills	Response frequency	Percentage
Weekly	3	6.5
Quarterly	11	23.9
Annually	16	34.8
Twice per year	12	26.1
Fortnightly	4	8.7
Total	**46**	**100.0**

3.7. Importance attached to Disaster Preparedness

The study also sought to establish the importance accorded to disaster preparedness in their respective work stations. Majority 56 (93.3%) of the respondents indicated that disaster preparedness was very important to the organization. Those who indicated that disaster preparedness was not important to the organization accounted for 6.7% (4) of the respondents as presented in Figure 4 below.
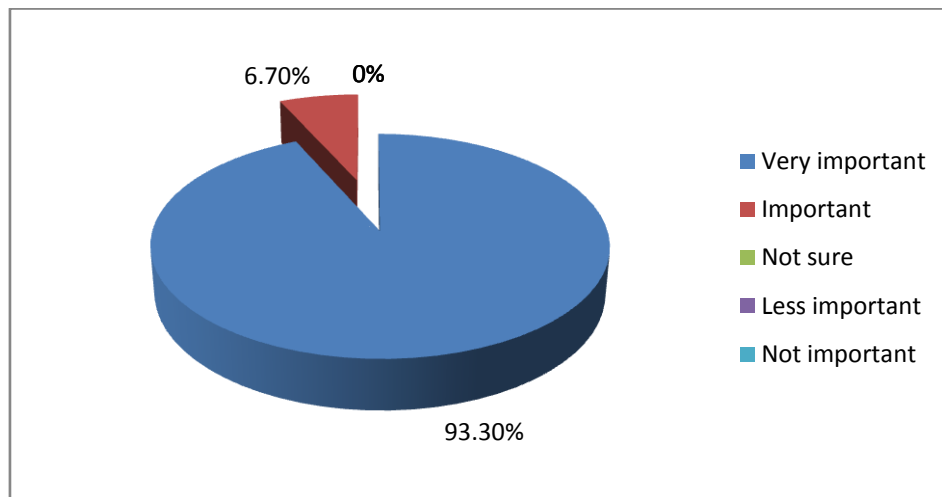

Fig4. *Importance attached to disaster preparedness*

3.8. Individual Emergency Precautionary Measures

To establish the precautionary measures that the individual respondents had put in place at their respective work places for disaster preparedness, All 60 (100%) respondents indicated that they had mastered the location of all fire extinguishers within their organizations' premises, 50% (30) indicated that they had attended first aid procedures in the event of an emergency while 91.7% (55) indicated that they had mastered emergency numbers. A proportion of 33.5% (20) indicated that they had installed back-up cumulative systems, 93.3% (56) had mastered the location of emergemcy assembly points while 55% (33) indicated that they exercised keenness while in the premises of their respective work stations in order to note any abnormal occurances.

Table4. *Individual Emergency Precautionary Measures*

Precautionary measure	Frequency	Percentage
Mastered location of fire extinguishers	60	100
Attended first aid training courses	30	50
Mastered emergency numbers	55	91.7
Installed back-up data systems	20	33.3
Mastered emergency assembly points	56	93.3
Being alert at all times	33	55

3.9. The role of Disaster Preparedness on Business Contuniuty Management

Based on the Hypothesis that there is no relationship between Disaster preparedness and Business Continuity Management, a chi-square correlation analysis test was computed. A positive significant relationship was found (x^2 (58) =85.56, p < .05). Table 5 presents the result of the analysis.

Table5. *Chi-Square correlation between disaster preparedness and BCM*

	Value	Df	asymp. Sig. (2-sided)
Pearson Chi-Square	85.56[a]	58	.023
Likelihood Ratio	81.242	58	0.059
Linear-by-Linear Association	.002	2	.007
N of Valid Cases	60		
a. 60 cells (100.0%) have expected count less than 5. The minimum expected count is .95.			

These results established that disaster preparedness affects business continuity management. A chi-square value of 85.56 was significant at 0.007 level. The likelihood ratio was also significant at 0.059 level. A linear by linear association that was run was also significant. The null hypothesis was therefore rejected. This implies that there is a positive effect of disaster preparedness on business continuity management in Equitol Bank.

The study found out that a clear disaster preparedness plan affects business continuity management of an organization. This implies that organizations need to be adequately prepared for any unexpected events which could interrupt the way they operate and their survival chances in both short and long run. In line with this finding, Ross (2000) highlighted that many corporate financial organizations were more at risk of financial losses subject to their risk management outlook and approaches which could not prevent them from incurring financial losses. Besides, Alonso and Boucher (2001) noted that disasters provided a big boost to BCM through giving companies experiences to plan and to be ready for any eventuality. They therefore showcased the importance of BCM in critical business functions as far as disaster preparedness is concerned.

Although the impact of disaster and business unexpected events can be fatal, it's only organizations that have elaborate BCM that can survive and have continuity in their operations within hours after an unexpected event. For example, Dow Jones had 800 employees on a number of floors on the world trade centre and all of them survived with no loss of data or service which was attributed to their compressive and effective BCM, a company like American express which had a high presence in the world trade centre resumed its normal services in a matter of hours. On the contrary, in the terror attack of 21st September, 2013 on the Westgate mall in Kenya, none of the businesses could resume operation within hours apart from a few Banks that referred clients to their nearest branches. Unfortunately, most of the businesses just closed down since then.

4. CONCLUSION

It was established that disaster preparedness significantly affects business continuity management. The study established that there were disaster preparedness strategies in place and that the frequency of emergency trainings and exercises were high. Internal workshops were the main mode of emergency trainings adopted. Great importance was attached to disaster preparedness and this explains why there are frequent mock emergency drills.

5. RECOMMENDATIONS

It is recommended that top level management should draw more attention to helping raise BCM to a strategic level and support the existence of integrated framework for BCM.

Organizations should pay more attention to how it should respond effectively to risk, disasters, crises, and business interruptions, by placing BCM in the context of strategic planning and by focusing on the strategic and the enterprise-wide sides of BCM in order to build safer and more secure futures.

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