

**UNDERTAKING BUSINESS CONTINUITY PLANNING FOR A
GLOBAL BUSINESS OPERATOR IN LESS DEVELOPED
ECONOMIES:**

A CASE STUDY OF GENERAL MOTORS EAST AFRICA

By

Sylvester Muoki Joseph

**A management research project submitted in partial fulfillment of
the requirements of the degree of Master of Business Administration,
School of Business, University of Nairobi**

November 2010

DECLARATION

CANDIDATE

I declare that this report is my own work, unaided except as indicated in the references and acknowledgements. It is submitted in partial fulfillment of the requirements for the degree of Master of Business Administration at the School of Business, University of Nairobi. It has not been submitted before for any degree or examination in this or any other university. I further declare that I have obtained the necessary authorization and consent to carry out this research.

Joseph Sylvester Muoki

Registration Number: D61/8381/2006

Sign 

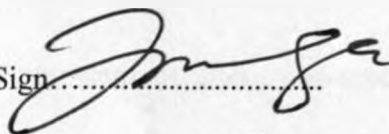
On the 15th day of NOVEMBER 2010

SUPERVISOR

The Management Project has been submitted for examination with approval as University Supervisor.

Dr. Njihia Muranga

University Supervisor

Sign 

On the 15th day of November 2010

ACKNOWLEDGEMENT

I wish to acknowledge the Almighty God who has enabled me to accomplish this work, without Him, I am nothing and my wisdom is null.

I wish to express my sincere thanks to the following peoples, for their support, guidance and assistance.

To my family for their unconditional support and encouragement throughout the course of this study especially my parents who taught me that education is the only thing I can inherit from them.

To my supervisor Dr. Njihia Muranga , for his commitment to the project and devotion of time towards the progress of the study through the initial stages to this level. Your time, patience, interest and support is highly appreciated.

I extend my sincere gratitude to the General Motors East Africa family for granting me the opportunity to use the company as a case study. To the ICT manager, Mr. Ben Mbinji for been instrumental in my effort to access information on the company that is relevant to my area of study. To all Employees who helped me understand and access the very vital for my study.

Without some people, my MBA program would have been too difficulty a task to achieve and that's why my colleagues take a piece of my acknowledgement. To Mr. Ngati, Madam Nthuka, Sam Maingi the Wairias', you people made my MBA program make sense to me.

To the entire teaching, non-teaching staff and students' fraternity in the school of business, University of Nairobi, your hospitality shall forever remain engraved in my education path.

DEDICATION

To my wife Phoebe and my son Ethan who have sacrificed a lot for me to fulfill this goal thank you for your love and support.

ABSTRACT

Globalization has made business enterprises expand geographically and in the process they encounter different business operating environments ranging from developed to under developed economies. Each environment poses different risks to the business which includes social-cultural, technological, legal and transactional challenges. The continuity of the business in the event of a disruption largely depends on the pre-established processes to mitigate risks. One of the major process is the business continuity planning. This study seeks to establish the applicability and operability of the business continuity planning process for a global business operator in less developed countries.

In order to reach the purpose of the study, I have used a qualitative research approach. The study was conducted using a case study at General Motors East Africa. The researcher conducted in depth face to face interviews with General Motors East Africa employees who are involved in the business continuity planning process. The information was obtained and compared with the best practices as per the disaster recovery institute and the business continuity institute of the United Kingdom (UK). The study has come up with results that relate to business continuity planning for a global business operator in a less developed country.

The study has found out that business continuity planning plays a vital role in the operations of any business. Global operators in less developed countries need to plan, create awareness and do proper training to the company's staff if the benefits of business continuity planning are to be achieved in the less developed countries. Finally all the research questions have been answered and the research objectives have been achieved.

Table of Contents

| | |
|---|------|
| DECLARATION..... | i |
| ACKNOWLEDGEMENT | ii |
| DEDICATION | iii |
| ABSTRACT | iv |
| Table of Contents | v |
| List of Tables..... | viii |
| List of Abbreviations..... | ix |
| CHAPTER ONE: INTRODUCTION | 1 |
| 1.1 Background..... | 1 |
| 1.1.1 Business Continuity planning | 2 |
| 1.1.2 Global Business Environment and Business Continuity planning | 3 |
| 1.2 Research problem | 5 |
| 1.3 Research objectives..... | 7 |
| 1.4 Importance of the study..... | 7 |
| CHAPTER TWO: LITERATURE REVIEW | 9 |
| 2.1 Less developed economy defined..... | 9 |
| 2.2 Information and communication technology in less developed countries..... | 9 |
| 2.3 Business technology..... | 10 |
| 2.4 Business continuity planning (BCP)..... | 11 |
| 2.4.1 Definition..... | 11 |
| 2.4.2 History of business continuity planning | 12 |
| 2.4.3 Objectives of business continuity planning..... | 15 |
| 2.4.4 Scope of business continuity planning | 15 |

| | | |
|---|---|----|
| 2.4.5 | Benefits of business continuity planning | 16 |
| 2.5 | Business continuity planning methodology | 16 |
| 2.5.1 | Project initiation..... | 17 |
| 2.5.2 | Risk assessment/Business impact analysis..... | 18 |
| 2.5.2.1 | Business Impact Analysis Activities | 20 |
| 2.5.3 | Design and development (Pitt & Sonia, 2004) | 21 |
| 2.5.4 | Creation of business continuity plans | 21 |
| 2.5.5 | Testing and exercising | 22 |
| 2.5.6 | Maintenance and updating | 22 |
| 2.6 | Business continuity processes..... | 23 |
| 2.6.1 | Recovery methods..... | 23 |
| 2.6.2 | IT for business continuity | 23 |
| 2.6.3 | Role of management in business continuity planning | 24 |
| 2.6.4 | Business Continuity planning drivers | 24 |
| 2.6.5 | Business continuity strategies..... | 25 |
| 2.7 | Use of Standards in business continuity (BS 25999, PAS 56, ISO/IEC 17799) | 25 |
| 2.8 | Conclusion | 26 |
| CHAPTER THREE: RESEARCH METHODOLOGY | | 27 |
| 3.1 | The Research design..... | 27 |
| 3.2 | Population and choice of case study..... | 27 |
| 3.3 | Sample design | 28 |
| 3.4 | Data Collection | 28 |
| 3.5 | Data Analysis | 29 |
| CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION | | 30 |
| 4.1 | Data Analysis | 30 |
| 4.1.1 | General Motors East Africa and Business continuity planning | 30 |
| 4.1.2 | Content Analysis..... | 31 |

| | |
|--|----|
| 4.1.2.1 Data preparation | 31 |
| 4.1.2.2 Unit of analysis and development of themes | 31 |
| 4.2 Results | 32 |
| 4.2.1 Business continuity planning process and its justification | 32 |
| 4.2.2 Applicability and operability of business continuity planning in the less developed countries..... | 33 |
| 4.2.3 Strengths, opportunities and challenges | 34 |
| 4.3 Discussion..... | 36 |
| 4.3.1 Business continuity planning and its justification | 36 |
| 4.3.2 BCP methodology usage..... | 37 |
| 4.3.3 Challenges and opportunities | 38 |
| 4.3.4 Best practice usage..... | 39 |
| CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS | 41 |
| 5.1 Summary | 41 |
| 5.2 Conclusion | 42 |
| 5.3 Recommendation | 43 |
| 5.4 Study limitations..... | 45 |
| 5.5 Suggestion for further study | 45 |
| REFERENCES | 46 |
| Appendices..... | 51 |
| Appendix 1 GMEA organizational chart | 51 |
| Appendix 2 Management structure and planning process..... | 52 |
| Appendix 3 Interview guide | 53 |
| Appendix 4 Introduction letter..... | 55 |

Table of figures

Figure i The Continuity Management process12

Figure ii Evolution of Business continuity.....13

Figure iii Schematic of Risk assessment19

List of Tables

Table 1 BCP Steering committee18

List of Abbreviations

| | |
|-------------|---|
| BCI | Business Continuity Institute |
| BCM | Business Continuity Management |
| BCP | Central Bank of Kenya |
| BIA | Business Impact Analysis |
| CBK | Business Continuity Planning |
| DRI | Disaster Recovery Institute |
| ERP | Enterprise Resource Planning |
| FDI | Foreign Direct investment |
| GDP | Gross National Product |
| GMEA | General Motors East Africa |
| ICT | Information and Communication Technology |
| IT | Information Technology |
| KPI | Key Performance Indicators |
| LDE | Less Developed Economy |
| PAS | Public Available Specifications |
| SBD | Significant Business Disruption |
| SME | Subject Matter expert |
| USD | United States Dollar |
| WAN | Wide Area Network |

CHAPTER ONE: INTRODUCTION

1.1 Background

The modern business world unlike its predecessor has become more risky with the advent of information communication technology. The business environment is changing rapidly with enormous office automation, e-mail, e-commerce, centralization, decentralization, downsizing, right sizing (Tipton, 2007) and over dependence to technology. Global terrorism has increasingly become more organized and lethal with business interconnectivities and dependencies becoming more complex and prone to failures. The global customer is more sophisticated and adversely informed about his environment. Most governments have built mechanisms through regulators to protect their business environments (Graham, 2006) and pressure to develop resilience plans (CBK, 2008). These regulations are required to protect privacy and make organizations maintain business continuity. This has brought about the issue of business continuity in the event of interruption emanating from the risky business environment.

The global business environment operates across national borders to satisfy the objectives of companies. This is in line with setting up of businesses for specific aims and objectives such as to grow, provide services as well as acquire other businesses. In order to operate across borders, organizations need to appreciate transactional environmental factors such as technology, laws, cultures and societies (Czinkota, 2004). The dominating factor has been technology enablers with most businesses having to adopt technology as their bloodline in their operations. Delma, (2002) argues that this phenomenon has brought in the concept of an eighth continent with wide use of computers, cell phones, set-top-boxes and personal organizers. Businesses operating in this kind of environment include but not limited to import

export trade and foreign direct investment (FDI). FDI's can either be fully owned subsidiaries, joint ventures, and licensing, franchising and management contracts (Czinkota, 2004). Kenya global business operators contributed to over 728 million USD in 2007 (UNCTAD, 2008).

1.1.1 Business Continuity planning

Business continuity planning is founded on the basis of a business's ability to be a going concern. Business continuity planning is an organization understands at the highest level that aims and objectives are not compromised by unexpected interruptions. This process recognizes that some business services or products must be continuously delivered without interruption. Business continuity planning can hence be defined as a process that seeks to ensure that an organization will continue doing business when its normal facilities are unavailable. The main focus of this process should be to return an organization into a business as usual state as quickly as possible. (Peltier, 2005). Until 1970's most organizations did not have any business continuity planning at all because major disasters were rare and reliance on insurance to protect against assets losses. The OPEC oil embargo shattered this complacency and showed companies that they were vulnerable to external events beyond their borders (Rittinghouse & James, 2005).

The primary objective of a business continuity plan is to protect an organization's critical business operations when all or part of its operations is rendered unusable. A standard business planning process will provide assurance that the plans for interrelated activities are properly coordinated at both country and global levels. These activities need to focus on the values, attitudes and beliefs of members. There is need to have such an interaction which reduces the amount of cognitive processing

and energy members need to expend in case of a disaster. In the event of a disaster, a global business will be adversely affected. The organization is interlinked with other global operations around the world. This interconnectivity is because of shared applications. Any loss of connectivity will amount into adverse losses. African countries form, in general, a comparatively tight cluster with respect to environmental, geopolitical, health and technological risks dimensions which results to a high exposure even though low economic risk than any other continent (Global Risks Landscape 2009).

1.1.2 Global Business Environment and Business Continuity planning

The global business environment can be defined as the environment in different sovereign countries, with factors exogenous to the home environment of the organization, influencing decision making on resource use and capabilities (UNCTAD, 2008). This environment is faced with numerous threats emanating from terrorism, natural disasters, floods, blizzards, earthquakes, fire, accidents, and sabotage, power and energy interruptions among others. These threats can lead to communication outages, lack of access to reliable transportation, lack of power leading to inoperable computer systems as well as destruction of property. Global businesses deliver some critical services and they must deliver these products and services to satisfy shareholders, customers as well as to survive in competition. Delivery of these business objectives in a global business environment will be the worst affected in the event of an interruption of its critical operations (Security, 2008). These challenges can be mitigated by a business continuity plan which is the task of identifying, developing, acquiring, documenting and testing procedures and resources that will ensure continuity of a firm's key operations in the event of an accident,

disaster, emergency and or threat (Business continuity planning (BCP) definition, 2010). This will in turn sustain the free flow of communication around the world cross borders with minimal downtime in the event an interruption occurs.

OGC (2002) noted that effective and proactive management of technology is becoming more important in the business world. This has been necessitated by increasingly dependence on information and communication technology as a significant channel for delivery of services and products. Information communication technology infrastructure is becoming more complex, larger and more distributed. OGC further notes that users are demanding more services and more organizations are doing heavy investments in technology. This interruption to data access can affect the company's functionality as well as its reputation (Mohawc, 2009). With this there is need to have the ability to remain operational throughout any disruption.

Kenya is an active player in the global business arena and relies on other world economies. It has on several occasions been exposed to terrorist attacks like the August 7th 1998 bombing of the US Embassy. It is with this in mind that the Central Bank of Kenya gave a guideline on business continuity which requires all financial institutions to establish sound and effective business continuity management practices (CBK, 2008). Kenya was cited in the Global Enabling Trade Report 2009 as among the countries with the poorest physical security measures to safeguard investments as well as unavailability of efficient and effective information communication infrastructure. This puts the country's global business operators at a disadvantage with other players in their respective industries.

The September 11th attacks in the USA made global world businesses wake up to the reality that they require sound business continuity plans. Kenya was hit by terrorists in

1998 and 2002 where hundreds of people lost their lives, thousands injured and business premises destroyed. This caught the business society and the government unaware. In the event of an attack companies with global operations will be adversely affected. There exist significant business disruptions (SBDs) which can either be internal or external. Internal ones emanate from within the business while external ones such as terrorist attacks, flood as well as wide scale regional disruptions such as strikes.

1.2 Research problem

World Bank ICT report of 2006 noted that the management of global information systems in less developed economies is faced with many challenges. Technological challenges like inadequate infrastructure with narrow broadband lines which cannot accommodate high volume transmissions are difficult to cope with. They require capital, technical knowhow and modern telecommunication infrastructure which are wanting in most of the less developed countries. Regulation and tariffs, difference in payment methods in less developed economies. Language difference in that data cannot be transmitted in real time because it has to be transmitted as well as some countries prohibiting the presentation of financial and accounting information into foreign language. Other challenges include cultural, conflicting economic, scientific and security interest, legal politico and different time zones. Less developed economies lack extensive telephone network coverage, infant fiber-optic systems with majority of the population with limited or no access to broadband service and in most cases the technology architecture in use is often outdated (World Bank, 2006).

Global enterprises operating in these environments are faced with multiple threats to their business operations. The urgency and need for a well developed business continuity plan cannot be over emphasized (Hanseth & Ciborra, 2007). Globalization

has shifted information and communication technology departments to one global division with standardized technologies. Increased competition and unpredictable environment has forced business enterprises to increase global integration of their processes. This has resulted in the wide adoption of applications like Enterprise Resources Planning (ERP). These are done to standardize local practices with provision of shared and seamlessly integrated systems (Hanseth & Ciborra, 2007). Global enterprises have links with manufacturers, component suppliers, financial organizations, transportation companies and government departments. The global industry is further influenced by market, products, technological, economic, financial, trade, and energy, demographic and political forces.

A recent study by analyst firm Gartner, 2006 shows that 72% of companies do not have a business continuity plan and 50% of companies that experience major disruptions are no longer in business 1 to 2 years later. For example, during a 22 hour system outage at eBay, 28% of its market capitalization was lost translating to 3B USD. This would translate to billions of dollars lost due to lack of business resilience. Analyst firm Gartner, further estimates that only 35% of businesses have comprehensive disaster recovery plan in place and fewer than 10% have crisis management, contingency, business recovery and business resumption plans despite the recent terrorist attacks (Witty, 2006).

Research questions

1. What is the rationale for multinational organizations operating in less developing economies in undertaking business continuity planning?
2. How practical is business continuity planning methodology in less developed economies business environment?

3. Do multinational organizations encounter any unique challenges or opportunities while undertaking business continuity planning in less developed economies?
4. How can Multinational organizations benefit from business continuity planning best practices while operating in the less developed economies?

1.3 Research objectives

1. To get establish how multinational companies can embrace and draw the benefits of Business continuity planning in their less developed countries' operations.
2. To establish if there exists any unique business continuity planning related challenges or opportunities for the global operators in less developed economies.
3. To establish the applicability and operability of business continuity planning methodology in less developed countries for multinational organizations.

1.4 Importance of the study

This study will have the following as its key benefits not only to global business operators in less developed countries but to other global business players;

1. Create awareness of the importance of BCP for global business players not only in the automotive sector but as well as other sectors. This will help create an organizational culture in business resilience.
2. By publishing the results, the study will contribute to new knowledge in academia as well as creating areas for further study.
3. The study will seek to expose gaps in BCP practices in global business operations in less developed countries vis-à-vis the BCP best practices.

4. The study will offer guidelines to formulation of policies for business continuity planning. This can be used by government agencies, consumers as well as the civil society.

CHAPTER TWO: LITERATURE REVIEW

2.1 Less developed economy defined

The United Nation argues that a less developed economy (LDE) is a country with poorer people than in a more developed country, with economies based purely on agricultural production, with low gross national product (GDP), and under developed technologies. The United Nation further approximates that 77 countries in the world with majority concentrated in Africa, Latin America and some in Asia as well as the Caribbean are less developed (Wright, 2001). A country's economy is further determined by the general economic welfare of the inhabitants, technological sophistication among other characteristics. These economies have not reached the threshold of full industrialization. Hardwick (1999) stated that a less developed economy has low GDP, heavily depends on agriculture and has a very high population growth. LDEs exhibit poor infrastructure and over dependence on international economy as well an infant economy which is unable to compete at a multinational level. (Hardwick, 1999)

2.2 Information and communication technology in less developed countries

Compared to developed countries, less developed economies do not have extensive telephone network coverage. They have limited or no access to high speed broadband services especially in the rural areas. The technology in use as well as network architecture is often obsolete with use of copper cables instead of fiber optic. These countries are characterized by lack of a well established interconnection regime as well as lack of sound regulation policies (Wright, 2001).

This industry is playing a major role in the global economy. These include telecommunication operators, computer and software producers, and electronic

equipment manufacturers. McKinsey research shows that this technology can be used to reduce carbon dioxide emissions by 15% in 2020 (Dutta, 2009). ICT broadens technologies such as high speed internet, mobile broadband and computing making it easier for people to interact with each other. Advancing broadband access can move GDP from US\$300 to USD 400billion to the worlds GDP. Organizations that do not have an ICT infrastructure to collect, manage, analyze, act upon, and learn from sustainability initiatives can easily be paralyzed into inactivity. (Dutta, 2009)

2.3 Business technology

Forrester analysts coined business technology term to reflect the concepts and technologies of enterprise resource planning, supply chain management, customer relationship management, e-commerce and business intelligent. This technology has driven businesses to offer a more powerful source of competitive advantage. This has brought changes in the business environment making IT risks business risks (Bajgoric, 2009). This has made markets become global, dynamic and very customer oriented. For businesses to compete on this platform, they require redundant hardware and networks, fault tolerant technologies, data replication capabilities, disaster resilient technologies, remote administration and diagnostics and above all, a secure environment. Turban (2005) noted that technology enables businesses perform high speed, high volume computations as well as provision of fast, accurate communication within and between organizations worldwide. According to continuity central, (2006) IT failures affect businesses more than any other external event such as natural disasters and terrorism.

Bajgoric (2007) noted that technology related threats to business may cause system unavailability in a business environment. These range from physical threats such as

damage or theft, natural threat such as floods, logical threats such as corrupted data, technical glitches as well as application failures. Wide Area Network (WAN) infrastructure problems, human errors and loss of key personal pose a serious threat to business operations.

Business continuity in less developed countries

Less developed countries have their own unique challenges which can disrupt business operations any time. Recent floods in Malawi and major power outages are experienced for many months and the impact of illnesses such as malaria, Tuberculosis and HIV/AIDS (Lauri, 2010) like in the case of Africa.

2.4 Business continuity planning (BCP)

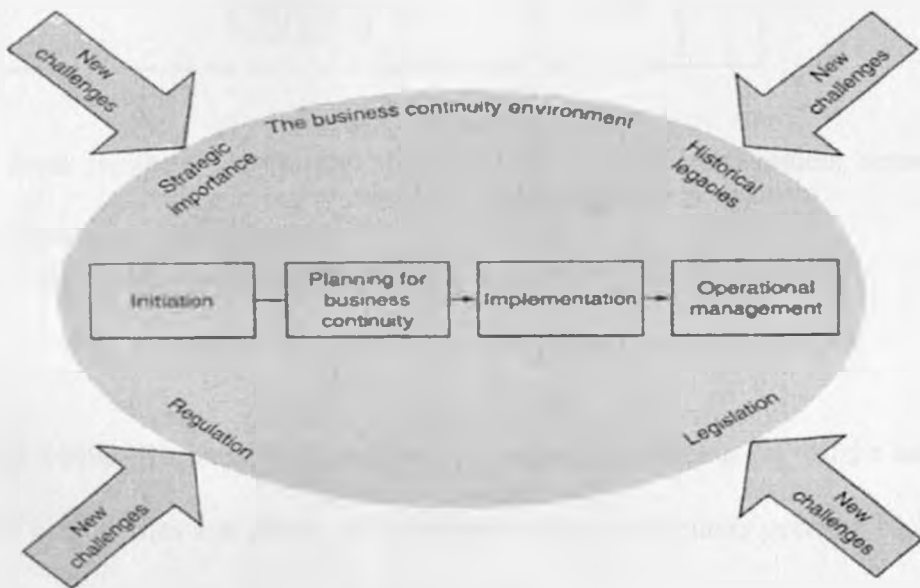
2.4.1 Definition

Fulmer (2005) defined business continuity planning as an all encompassing umbrella term covering both disaster recovery planning and business resumption plans. Business continuity planning focuses on sustaining an organizations functions during and after a disruption while business resumption plan provides the procedures for recovering business procedures immediately after a disaster. The planning should ensure that the whole end to end business process can continue if a serious incident occurs (Fulmer, 2005).

The Business Continuity Institute (BCI) define BCP as a holistic management process that identifies potential impacts that threaten an organization and provides framework for building resilience and the capability for an effective response that safeguards the interests of its key stakeholders, reputation, brand and value creating activities (Herman, 2006). The process of developing prior arrangements and procedures that

enable an organization to respond to an event in such a manner that critical business functions can continue within planned levels of disruption (Heng G. M., 2008) leads an enterprise to the document called business continuity plan. The Encyclopedia of security management defines this plan as a comprehensive statement of consistent action taken before, during and after a disaster outage. The planning process (Elliot, 2002) as shown in the figure below is what is more important to a business (Fay, 2007).

Figure i The Continuity Management process



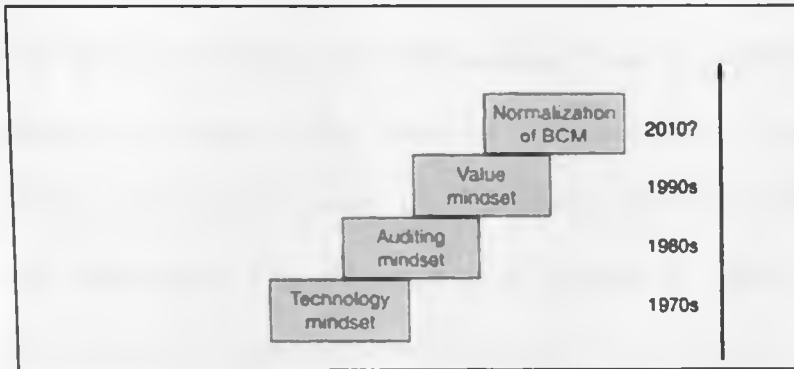
Adapted from Business Continuity Management: A crisis management approach
 Dominic Elliot et al, 2000. Page 3.

2.4.2 History of business continuity planning

According to Elliot (2002) the theoretical principles of BCP have their origin in the military where the need to operate efficiently and effectively in catastrophic to situations, locations and personnel disrupt normal flow of things. This has since evolved to become a fully fledged management discipline of managing the continuity

of business so that all information technology systems and business process operate at a continuously constant level. These changes were occasioned by the rapidly changing technological, environmental and business demands (Elliot, 2002).

Figure ii Evolution of Business continuity



Adapted from Business Continuity Management: A crisis management approach
Dominic Elliot et al, 2000. Page 10.

1950s and 1960s; Business focus on disaster recovery, sourcing for offsite secure storage of critical files and paper. With increased use of computers periodic back up and remote storage of centralized backups became an essential process. The preservation of data during interruptions became a challenge prompting business to come up with means of responding and recovery from business interruptions in a quick manner.

1970s; Businesses realized that backups were useless without the hardware and the ability to access and process data. Computer backups were introduced as a way of insulating organizations against failures a process which was driven by the computer manager. This was the birth of disaster recovery which was purely a process of

recovering information technology infrastructure after a disaster (BCI, 2005). This was purely a technology mindset (Pitt & Sonia, 2004) where the main focus was to protect computer systems.

1980s and 1990s; the use of information technology in business was growing tremendously (Heng G. M., 2008) shifting from main frame to end user (Pitt 2004). This led to the need to come up with data centers. These are centralized repositories either physical or virtual for the storage and dissemination of data (Heng G. M., 2008). These were meant to protect the organization against natural threats such as floods and earthquakes. This concentration of systems and data created new risks hence the introduction of alternative recovery sites. The cost of these alternative sites was prohibitive giving way to the growth of commercial recovery centers offering services on shared basis. The risk of responsibility on the end user front brought about an auditing mindset (Pitt & Sonia, 2004) to ensure compliance.

2000 and after: With expansion of businesses operation, the need to have information systems supporting various internal operations as well as external interactions with customers, suppliers and partners (Heng G. M., 2008). This was with the emergence of the internet and the web. This brought up the need for organizations to embark on enterprise risk management hence the birth of the business continuity planning. The emphasis moved from being mainly on IT to an approach that considered all aspects (Burtles, 2007) of an organization's business and relationships (Gallagher, 2003). The business continuity institute sees BCP as a wide ranging discipline which is no longer synonymous with disaster recovery. The main focus of this was on the needs of the business and it's seen as a value adding (Pitt & Sonia, 2004) process to the enterprise business.

2.4.3 Objectives of business continuity planning

The typical objectives of this process is to continue critical business operations, minimize the risk of setting up an alternate business location, minimize the duration of a serious disruption as well as the damage and loss (Fulmer, 2005). On the business perspective, a business continuity plan can help in the determination of management succession and emergency powers, identification of the critical lines of business and supporting functions. This helps in the provision of recovery tasks and reduction of the complexity of the recovery efforts. The provision of a standard for testing the process and the minimization of the decision making process during a disaster. Business continuity planning protects the shareholder's interest and the image through positive media coverage as a result of advance planning hence putting the enterprise at a competitive advantage (Fulmer, 2005). On a professional point, the BCP is to ensure the recovery of business processes to an acceptable level within a pre defined time frame to minimize the loss impact to the organization ((Kothari, 2007)

2.4.4 Scope of business continuity planning

Fulmer (2005) argued that a business continuity plan is a business issue not just a data processing issue. This is because for many years, development of BCPs has been planned to restore computer resources with the full responsiveness to the broader business needs. Planning for single type scenario may blind side an enterprise yet with globalization, an event in the west can adversely affect an enterprise in the south as witnessed with the volcanic eruption in the Iceland. BCP should therefore be prepared on the worst case disruption imaginable. BCP should put into consideration scenarios such as destruction of the primary facility, in accessibility of critical buildings, facilities or geographic regions, unavailability of power and

telecommunication as well loss of access to information resources such as systems and networks. Kothari (2007) noted that BCPs should be developed to be more accommodating in order to meet changes in the business environment (Kothari, 2007).

2.4.5 Benefits of business continuity planning

BCP minimizes the economic loss due to interruptions. This can be achieved through minimization of downtime due to system interruptions as well as reduced disruption to normal services (Hiles, 2004). This in turn reduces the financial impact when incidents do occur. BCP maximizes organizational stability and ensures orderly recovery. Over reliance on key personnel is minimized. Hiles, 2004 further notes this is achieved through the designation and training of alternate people to support key processes. BCP has been used in ensuring assurance on asset protection. BCP ensures safety of personnel and customers as well as compliance with legal and regulatory requirements (CBK, 2008), partners and other key stakeholders requirements. In the event there is a disaster, BCP minimizes decision making process and ensures the organization survives irrespective of the disaster magnitude. An organizations reputation is maintained through professional approach to management of adverse situation with proper communication plan. When essential services continue operation in time of disasters, customer service experience is maintained hence customer loyalty and confidence building.

2.5 Business continuity planning methodology

This methodology ensures that a structured approach is adopted and consistently applied throughout the development and implementation. This gives enterprises assurance that the plan will be executed within time and budget (Doughty, 2000).

There are two best practice methodologies developed by the world leading business continuity organizations, the disaster recovery institute (DRI) (USA) and the Business continuity institute (BCI) (UK). There are several other BCP methodologies (Hinks, 2001; Heng, 1996; Varcoe, 1998 as well as DRI International) all include the following six phases namely; project initiation, risk assessment/business impact analysis, design and development of the BCP, creation of BCP, testing and exercising and maintenance and updating (Pitt & Sonia, 2004). This methodology has been widely used by both the DRI and BCI and it's a part of the BS 25999, PAS 56, ISO/IEC 17799 standards.

2.5.1 Project initiation

The project initiation involves the establishment of the need for a BCP including management support and the elements of organizing and managing the project to completion. The organization need to define the need for business continuity and communicate the need from the top most authority as well as create awareness. The dangers of not having it in place are communicated to senior managers as well as real operational incidents. Link the business continuity and the organization's vision, mission and values statement. The underlying benefits of business continuity planning should then be stressed through a statement from the senior level management. The organization should then set a continuity policy because it signals the high level approval for projects ad helps empower the continuity manager.

With the policy in place, a planning / steering committee is then established. This needs to represent all interest in the organization and must have the authority to make decisions on continuity issues. The steering committee is comprised of senior staff

within the organization which includes directors, senior managers cutting across the business as shown in the table 1 below.

Table 1 BCP Steering committee

| <u>Steering Committee Members:</u> |
|------------------------------------|
| Finance Director |
| Marketing Director |
| PR Manager |
| Business Unit Managers |
| Operations Manager |
| Support Managers |
| Facility / Premises Manager |
| IT / Comm Manager |
| BC Project Leader |

Adapted from Business Continuity: Best practices World-class Business continuity management by Andrew Hiles, Page 6.

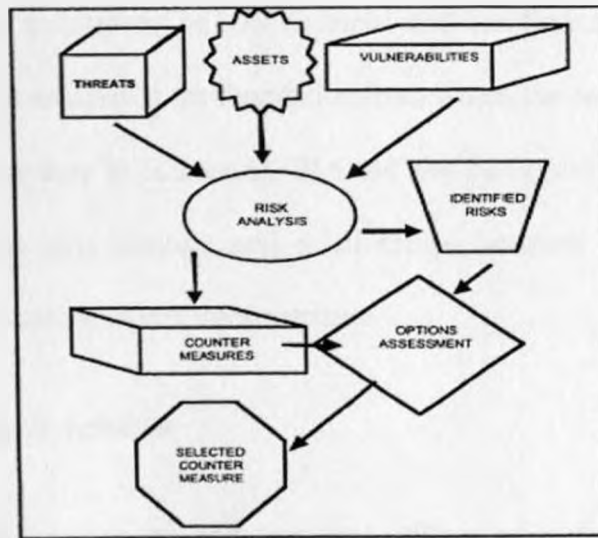
The terms of reference, scope and assumption should be clearly defined at this stage, accepted and understood by the business unit. The steering committee appoints a project leader to help in offering direction to the process. A budget is then drawn and reported to the senior management for approval

2.5.2 Risk assessment/Business impact analysis

Hiles (2007) defines business impact analysis (BIA) as the management level analysis by which organization assesses the quantitative and qualitative impacts, effects and loss that might result if an organization were to suffer a business continuity emergency, incident or crisis.

This phase relates to data gathering and review of alternative courses of action (BCI, 2005) and is treated as a project (Hiles, 2004) in itself. Heng, 2008 sees BIA as process of identifying an organization's critical business function and analyzing the potential disruptive impact to the business as shown in *Figure (iv)* below. This will allow management to make decisions on critical aspects of the core business operations. Karakasidis (1997) identified this as the key step in protecting organizations operations.

Figure iii Schematic of Risk assessment



Adapted from Business Continuity: Best practices World-class Business continuity management by Andrew Hiles, Page 28.

Hiles (2004) stated business impact analysis as the identification of the effects on the organization of the risks to it should they occur. The BIA is used to identify both financial and non-financial costs (Heng G. M., 2008), vital materials and records necessary for continuance as well as the inputs to risk assessment. The DRI further

argues that business impact analysis raises awareness of continuity and helps individuals focus on their potential responsibilities, solutions and costs (Hiles, 2004).

This process will help establish how interruptions will impact on the company survival, profits, image and customers. This process will enable the organization to exploit the available alternatives (Hiles, 2004). Data collection is done through thorough the analysis of critical success factors, review of Key performance indicators (KPI), process flows, activity categorization, desk procedure review, questionnaires, interviews and workshops.

Hiles (2007) looked at BIA as a statement of how financial and non-financial losses occur. He further notes that risk analysis is the foundation from which the company's continuity and recovery strategy may be elaborated. BIA can also be argued to be an enterprises means to establish dependencies and relationships between business processes and the supporting communication infrastructures.

2.5.2.1 Business Impact Analysis Activities

Determination of the critical requirements and resources, effects of a disaster on people, place, process and premises. Determination of critical or vital business processes. These function need to be restored within very short time following a disaster. The minimum acceptable hardware configuration is determined at this stage.

Estimation of expected recovery time for each core business process is done by checking the system's ability to cope with interruptions. This is measured by tolerance levels to interruptions (Hiatt, 2000).

Other important BIA activities noted by Hiatt (2000) include the establishment of core business recovery priorities and the identification of key personnel, equipment and facilities needed to support the core function. Estimated cost of extended business disruption and the identification of the resources required to develop, test and implement BCP are other key BIA activities.

2.5.3 Design and development (Pitt & Sonia, 2004)

Pitt and Sonia (2004) noted that in this stage a detailed scope strategy and objectives of the plan as administration procedures and requirements are to be indicated in at this stage. The formation of the business continuity committee and downstream recovery teams, lines of communication, escalation notification and plan activation. The plan execution is set records storage and access outlined.

2.5.4 Creation of business continuity plans

At this stage, the creation of emergency response procedures, evacuation and access are outlined. The establishment of emergency control centers, command and control procedures as well as detailed procedures for communication, delegation/designation of duties and key stakeholders. A detailed resumption, recovery and restoration procedures, external support, vendor contacts and resources are further stipulated (Hiles, 2004).

Doughty (2001) argues that the riding factor in all this is the documentation of specific functional areas and the business operating environment. This includes but not limited to organizational charts, job descriptions, procedure manuals, technical support requirements and existing BCPs. Previous business risky analysis, BIA and vulnerability assessment reports should be put into place.

2.5.5 Testing and exercising

Hiatt (2000) noted that this is an organization's window through which business recovery ideas work in practice and it's the only way to get assurance that a plan will make a grade when it really counts in an actual disaster. Doughty (2000), argued that testing is done to check whether it can uncover failure points. A Disaster Recovery Journal survey showed that 65% of plans are not tested yet this is the most critical aspect of business continuity planning. The main objective of this phase is to establish the effectiveness of the plan. This process intends to find errors and omissions as well as prepare teams to functions at alternate site and verify the adequacy of the whole process. This involves preparation of exercise programs and objectives, detailed exercise scenarios, monitoring and recording procedures and identification of training requirements and induction of new staff. The scope of the testing should include the elements of plans, people, places and resources. The testing environment should be flexible enough (Heng G. M., 2006). Testing can be component walkthrough, integrated or simulated. Doughty, 2001 further noted that BCP testing is a learning experience and it should be done until failures makes for a true test. The most effective testing is to start simple, build confidence and then increase the complexity (Hiatt, 2000).

2.5.6 Maintenance and updating

All shortcoming and testing results should be used during this phase. This also includes providing necessary lines of communication to ensure that all changes in the organization that may have an impact on the BCP are communicated and updated in the plan. (Doughty, 2000) Further notes that the BCP coordinator needs to determine change indicators and develop procedures to ensure proper timing and communication of changes. The coordinator receives changes and develops an action plan to update

the BCP. The action plan includes identification of risks, prioritization of the tasks and coming up with a timetable for the implementation of the tasks. This highly depends on the size and complexity of the BCP infrastructure. Sufficient time is required to allow for thorough review of the changes by key stakeholders before implementation. The use of tools such as word processing packages, database products as well as BCP software has been widely used in maintenance of BCPs.

2.6 Business continuity processes

2.6.1 Recovery methods

Online redundant systems entail the provision of remote computing systems that are continuously updated to ensure that they stay synchronized with their production counterparts. High speed broad band lines are required to ensure near mirror image copies of data. This type of system requires huge investments in monetary and human capital (Tipton, 2007). Disaster recovery vendor facilities offer a way of sharing cost but they have the risk of having several subscribers declare disaster at the same time. Other enterprises reserve vendor equipments for shipping during a disaster (Tipton, 2007).

2.6.2 IT for business continuity

Information technology has been recognized as a business continuity enabler and enhancers. IT can be used to reduce downtime because each minute of downtime has its price. Several technologies have been used to increase systems uptime. Examples of these include server platforms. Businesses have become IT-dependent and data driven. The BC has been seen as an engine that provides powerful source of competitive advantage. The need for systems reliability, availability and scalability hence the need for business continuance, fault tolerance, DR, fast and reliable data access (Nijaz Bajgoric Emerald).

2.6.3 Role of management in business continuity planning

Due to business continuity planning process complexity (Kothari, 2007), the urgency to prioritize and the general understanding of the impact of interruptions, management plays a very key role in the business continuity planning. The management plans, prioritizes, develops and finalizes the plans for any given process. The development of alternative recovery sites requires top management sanctions. The management needs to oversee the periodic testing of the plans. Management buy in is very critical for the successful implementation of the BCP process. The management according to Elliot (2002) plays a key role in determining the mindset that drives business continuity planning in a strategic way. This offers support and ownership in a top down direction which offers board level commitment and plays a very critical role. The management makes continuity policy decisions and makes sure it's communicated properly. The management appoints the BCP subject matter experts (SME) as well as the team (Elliot, 2002). Without this kind of board-level-buy-in, the BCP process will fail (Reuvid, 2005)

2.6.4 Business Continuity planning drivers

The emergence of online businesses and customers demand for 24 X 7 services availability. Customer wants reassurance that they will continue to receive services irrespective of what happens. New financial trends focused on cost reduction, total cost ownership and return on investments as well as Capital expenditure reduction. Organizational trends focusing on continuous productivity, scarce qualified resources, internet time and consolidation of resources. Stakeholders are looking for profits in volatile markets. Increased cross boarder threats, increased vulnerability accompanied by great risk and exposure globally. New technology trends with improved network capability, exponential storage growth, emerging protocols and application management. Legislative drivers (Elliot, 2002) for business continuity planning

include SEC17a-4, NASD 3010, Federal Reserve /SEC/OCC, Sarbanes-Oxley, HIPAA among others. A survey by SunGard found out that 62% of BCPs were driven by the need to safeguard customer relationships. Other research findings show that 10% of companies were driven by threat of terrorism, 54% by regulation requirements while 20% driven by strategy to keep information and people connected (Continuity central, 2006).

2.6.5 Business continuity strategies

Disaster recovery has been seen as a technologically driven process where else business continuity is about facilities and resources. This is a very demanding investment with huge expenditures. Disaster recovery strategies range from dual redundant systems, harmonic recovery, hot sites, mobile recovery services, cold site, portables cold site, reciprocal agreements and a second site. Business continuity strategies include alternate sourcing, emergency or standby stock, buffer stock, redeployment, reduction of operations, termination or change of product, service or function. Other strategies include outsourcing and bypass agreements (Burtles, 2007).

2.7 Use of Standards in business continuity (BS 25999, PAS 56, ISO/IEC 17799)

Watson (2007) defined standards as an agreed way of doing something. It can be recorded and published formally, or may simply be a company's informal unwritten procedure. In 2005 the British Standard Institute, the Business Continuity Institute and other stakeholders created the BS 25999 – Business continuity Management. The standards were published in two parts. BS 25999-1:2006 - the Code of practice for business continuity management published in November 2006. BS 25999-2:2007 which specifies the requirements for achieving certification was published in 2007. These standards play a great role in ensuring that business continuity capability is

appropriate to the size and complexity of an organization. The importance and benefits of using standards in managing business processes cannot be overstated.

Watson (2007), went further to enumerate benefits of using standards especially the widely accepted BS 25999 as offering competitive advantage for an organization through benchmarking for quality in a consistent manner. This is as a result of its wide application on all sizes and types of organizations the world over. The use of the standard also offers greater assurance to the various stakeholders all the time strengthening their partnership with the organization.

2.8 Conclusion

Today's businesses are complex and tightly coupled and dependent on infrastructure. This interconnectivity spans across telecommunication, power generation, distribution, transportation and medical. Disruption to this chain causes ripple effects with business processes failures inevitable. As noted by Rader (2009), power outages and extreme climatic conditions present difficulties in IT continuity planning in the developing countries. The risk of general infrastructure outages increases the chances of business disruptions and data loss. Data storage systems are underdeveloped exposing businesses to the risk of data loss and high exposure to damages (Rader, 2009). Most Less developed economies exhibit strain on communication resources, voice and data posing a serious threat to business continuity capacity planning (Continuity central, 2006).

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 The Research design

A case study approach was adopted in order to help in bringing the understanding of business continuity planning for global businesses operating in less developed economies. The case study of General Motors East Africa (GMEA) was used to investigate (Gillham, 2000) such practices and give real life context (Dul & Hak, 2008) in global businesses operating in the less developed economies. Robson (2002) defined case study as ‘a strategy for doing research which involves an empirical investigation of a particular phenomenon within its real life context using multiple source of evidence.’ Yin (2003) defined a case study as an empirical inquiry that investigates contemporary phenomena within its real life context ((Dul & Hak, 2008).

Yin (2003), noted that a case study is useful when there is need of determining a complex interaction between a phenomena and its context (Yin, 2003) (Klenke, 2008). This helped in the acquisition of a detailed and intensive analysis of business continuity planning as well as its nature and complexity (Bryman, 2007). Since the main objective of the study was to get an in-depth understanding of the business continuity panning and its uniqueness in less developed economies with emphasis on global business operators, an idiographic approach was used.

3.2 Population and choice of case study

General Motors Corp. (NYSE: GM), the world's largest vehicle manufacturer, and employs about 325,000 people globally. Founded in 1908, GM has been the global automotive sales leader since 1931. GM today has manufacturing operations in 32 countries and its vehicles are sold in 192 countries. General Motors East Africa was picked as the case study. The choice of GMEA was made because it is one of the

'child' businesses for GMC. The GMC operations are tightly inter-linked to create one big global operation. GMEA operates in a less developed country Kenya, unlike most of the other operation in the GMC family.

3.3 Sample design

Judgmental sampling was used for the study. Hayes (2008) noted that, the decision about who to include in the sample is at the discretion of the person conducting the sampling procedure and it's very useful for case studies. This helped in understanding the business continuity planning as a business process (Hayes, 2008). For the purpose of this research, staffs across the organizational chart were interviewed (see appendices 1).

3.4 Data Collection

This was the most important section of the research which helped in getting the answers for the research questions (Ghauri & Gronhaud 2005). This was achieved by either the use of primary or secondary data. Secondary data was gathered through the use of peer reviewed articles, journals, books, government publication among other documents. This helped in understanding and explaining the research problem.

This study used primary data which was obtained through interactive personal interviews which are the best and most important (Yin, 2003) (Klenke, 2008) data collection methods. This was achieved through an interview guide for the face to face interviews. Yin (2003) noted that interviews are the most suitable when detailed information is required. Interviews also allow for flexibility and closeness to respondents. This is very important in a qualitative study. The interviews further allowed for focused direction on case study topic and focused interviews were conducted. Open ended questions were used because they permitted free responses

which enabled the answers to be recorded in the respondents own words. Open ended questions helped in getting facts which were not clear as well as opinions, attitudes, suggestions and sensitive issues (The international Development research center, 2010).

3.5 Data Analysis

Content analysis was used in this case study since the study was interested in the meaning of Business Continuity Planning. Klenk (2008), defined content analysis as the methodological measurement applied to text and its certain concept. Being a case study this approach was useful in getting areas of consensus and disagreement from various interviews and with already documented data. Content analysis is described as 'any technique for making inferences by systematically and objectively identifying specific characteristics of messages (Krippendorff, 2004).

Cooper & Schindler (2003), noted that content analysis measures the semantic content or the 'what' aspect of the message. Its breadth makes it a flexible and wide-ranging tool that may be used as a methodology or problem-specific technique. It guards against selective perception of the content (Klenke, 2008), provides for the rigorous application of reliability and validity criteria. The data collected through interview is usually very large and thus analyzing the meaning is of importance. The analysis was based on the meanings and implications which emanate from the respondents information.

CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Data Analysis

This chapter presents the analysis of data collected from the interviewees using the schedule guide. The interviews were done across the enterprise to include finance, manufacturing, information technology, internal controls, administration, human resources, distribution and materials management. The staff levels include, executive management, leadership, line managers cum supervisors and operational. The interview guide contained the area of the justification of business continuity planning, the use of the methodology, the strengths, challenges and opportunities for the process and the use of best practice.

4.1.1 General Motors East Africa and Business continuity planning

General Motors East Africa Limited was formed in 1975 in Kenya and is a joint venture between General Motors Corporation (57.8%), Industrial and Commercial Development Corporation (20%), Centum Investments (17.8%) and Itochu Corporation (4.4%). The vehicle manufacturing plant in Nairobi assembles a wide range of Isuzu trucks and buses. It is the largest manufacturer of commercial vehicles in the Eastern Africa region with more than fifteen models. GM East Africa also retails fully built Chevrolet and Hummer brands. The business supports a wide range of local companies and employs thousands of Kenyans indirectly. Like any other company in the General Motors family, GMEA has the continuity planning as an integral business process.

4.1.2 Content Analysis

The objective of this study was three fold: (1) to get a better understanding of how multinationals operating in less developed countries can draw the benefits of business continuity planning; (2) to establish if there exists any unique challenges and opportunities; and (3) to establish the applicability and operability of the BCP process in less developed countries. The study used structured interviews to collect direct account of information from respondents across the General Motors East Africa. The respondents were selected through judgmental sampling. In order to enhance the contextual richness and minimize disintegration, all participants were interviewed in their normal working places. A total number of 20 were interviews cutting across the enterprise (Appendix 1 & 2).

4.1.2.1 Data preparation

The interviews were done using a written guide (Appendix 3) which was generated as per the research questions. The interview results were written down on paper and emerging themes highlighted. The responses were written down as provided by the respondents in order to avoid compromising the original meaning as expressed by the respondents.

4.1.2.2 Unit of analysis and development of themes

This is the basic unit of analysis and for the purpose of this study themes were used. The themes picked for this study were primarily expression of ideas from respondents as per the question asked. The themes included; (1) business continuity planning and its justification; (2) applicability and operability of the methodology; and (3) opportunities and challenges in less developed countries.

4.2 Results

4.2.1 Business continuity planning process and its justification

The interviewees were asked on whether there is a business continuity planning process in place. From the responses, it was evident that there is a business continuity planning process in the organization. This process is well represented across the business enterprise. The need for the process was brought up by the need to be a going concern as a business entity. The business operates in a very competitive environment hence the need to continue its operation with minimal interruption so as to remain competitive. To comply with the global business policies, the business had to put up the process, the process is audited by the global auditing services. The 1998 bomb blasts in Kenya and the continued threat from global terrorism reminds the business of the risks of interruptions. Kenya neighbors Somali which has been without a government for some time. The fact that the GMEA is an American investment in the region puts it at a risk of been attacked by the terrorists. Kenya has experienced several riots which include the recent political violence relating to elections, destructive industrial riots which pose a major threat to business operations. Poor legal and political systems have been a reason to make the organization think about the business continuity planning process. Organized gangs and militant groups brought about by poverty have paralyzed operations in the country once in awhile. Fires have broken out and burnt whole business enterprises because of ill equipped fire fighting systems. Some of the fires have been brought about by power faults. The risk of employee deaths due to road carnage, AIDS and other tropical related diseases is high accelerated by poor access to hospitals hence the need to think about continuity. Fulmer (2005) noted that business continuity planning is very important

because it helps organizations to minimize on the effects emanating from disruption to business critical processes (Fulmer, 2005).

The business process is an internally driven process in GMEA. This is in line with formation of a BCP coordination team with representatives from all the departments and has executive backing. This should take a strategic role within organizations, given that resources and priorities should be considered to save lives and property by top management. Moreover, (Herban, Elliot, & E.M, 2004) examined the potential of considering the business continuity planning on a strategic level. Moreover, they show general parallels between strategic management and continuity management in terms of: Planning processes, capability development and socio technical approaches, speed, configuration, resilience and obligation (Naill, 2010).

4.2.2 Applicability and operability of business continuity planning in the less developed countries

General Motors East Africa uses the business continuity methodology as per the DRI/BCI model. Project planning and initiation has been an ongoing process, this process does not come to an end once the BC plan has been produced (Hiles, 2004). BCP coordination team is set up every beginning of the year and endorsed by the management. The team then prepares its calendar of events running up to the end of the year. The team's responsibilities and measurable activities are discussed and communicated to the leadership. Risk assessment is done and a business impact analysis report produced in conjunction with all departments. All business processes relating to the continuity of the business are factored. The design and development of stage is also reviewed with the creation of each department's resumption process, disaster recovery process, call trees as well as communication plans leading to the

plan creation. Apart from the disaster recovery plan testing, the other processes are not tested. The updating process is done ad hoc especially if new processes are added, or in case of staff separation for the communication plan, call tree and succession plan.

4.2.3 Strengths, opportunities and challenges

The interviewees said that there is minimal assurance from the planning process that the business will continue in the event a disaster strikes the organization. According to the interviewees, the process lacks the comprehensiveness of assuring business continuity to the enterprise because it's a new concept to employees.

The interviews felt that the prevailing economic status in Kenya does not fully support the process. There was consensus in that Kenya as a less developed country lacks the human expertise in the business continuity planning process. There is no university in Kenya that offers BCP at degree level. The expertise in GMEA was mainly from accountants, IT experts and auditors, who by default learn about it in their course of studies. On the other side, there is plenty of skilled and knowledgeable human resource to fit in the business process in the event a disaster strikes. Human resource can be drawn from the registered members of professional bodies such as Institute of certified public accountants Kenya, Certified Information Systems Auditor, and engineering bodies. There are also enough unemployed graduates in the country.

The communication infrastructure in the country is wanting. Lack of well distributed broadband network across the country with most of it crowded in the capital city putting it at a higher risk of collapse. There is lack of adequate communication infrastructure such as road and telephones coverage. The interviewees also claimed

that emergency response systems in Kenya are very weak and cannot be relied upon such as the fire fighting systems which either does not exist or are wanting.

The interviewees noted that there are inadequate funds to propel the process. The company is more concerned with more profitable processes like sales and marketing. On a country level, the government is more concerned with the basics of development such as education, food, health and shelter and very little is going towards infrastructure development. The economy is geared towards profitability hence more emphasis is put on the income generating processes. There is no budget allocation for the process development and no adequate time allocated for the process testing. The business would rather engage increasing profitability instead of engaging on the continuity planning process.

The interviewees noted that lack of understanding of the process as a key hindrance to its adoption. The process is too theoretical and lacks the practicability due to the nature of businesses and prevailing infrastructural environment. The logistics for doing the testing are too demanding and may lead to shutting down of the factory which will translate to business losses.

The level of awareness is wanting in the organization. The process is only known to the coordinators and the executive team who by the virtue of their strategic management level must know about it. The line managers and supervisors do know about the process but they do not fully appreciate it. Operational staffs have no idea about the business planning process. The management does not give full support to the BCP process.

4.3 Discussion

From the interviews conducted, it was evident that General Motors East Africa has a business continuity planning process in place. All the interviewees have a consensus that this process is value adding (Pitt & Sonia, 2004) and it is very crucial for the continuity of critical business operations in the event a disaster strikes the organization.

4.3.1 Business continuity planning and its justification

The business continuity planning was put in place in order to protect the company's critical operations as noted by Fulmer, (2005). It was also evident that global business policies from the mother corporation played a big role in the adoption of the planning process. Roessing, (2002) noted that compliance to external and internal audit to measure facts and evidence against accepted standards (Roessing, 2002) are very vital for enterprises. Such standards for General Motors East Africa include the NFPA 1600 Standard on Disaster/Emergency Management and Business Continuity Programs. It was also evident that GMEA been an American interest in Kenya, has some peculiar risks of been attacked by terrorist especially with its proximity to Somalia where it is believed that Al-Qaeda has operations. Sadgrove, (2005) noted that Kenya is one of the high risk region for foreign business with anti-western terrorist threat. The bombings of the US Embassy building in Kenya in 1998 reminded the organization of the importance of a business continuity planning process. Kenya been a less developed country (UNCTAD, 2008) has very high poverty levels; this has brought about formation of organized gangs which pose a serious threat to business operations (Sadgrove, 2005). These gangs include the outlawed Mungiki sects, Bagdad boys among others. The poor legal and political

systems as witnessed during the post election violence continue to pose serious threats to business operations hence the need to continue planning for business continuity. These bring about prolonged economic effects such as depressing investor confidence which affects business operations (AfDb, 2010).

4.3.2 BCP methodology usage

From the interview, it was evident that the methodology is used to ensure a structured approach, consistent throughout the development and implementation as noted by Doughty (2000). The organization continues to perform proper project initiation evident in the formation of business continuity coordination committees which have the highest level of approval from the top management (Hiles, 2004). Risk assessment has been a continuous enterprise exercises and all emerging threats to business operations are well incorporated in the process. Heng, (2008) noted that risk assessment helps an organization to make critical decision on critical aspects of business operations. New business processes are as well incorporated in the continuity planning as well as emerging infrastructure opportunities such as information communication and technology. Kothari, (2007) noted that the business planning process should be accommodative to meet changes in the business environment. The business continuity plan continues to be an integral part of the enterprise business strategic plan. Pitt and Sonia (2004) noted that scope, strategy and objectives of the business continuity process should be well indicated in the enterprise strategy. Testing of the application disaster recovery plans continues on a semi-annually basis with backup systems maintained at a 100% operation. Hiatt (2002) argued that this is the only way recovery ideas work in practice as well as test the adequacy of the whole

process. Business resumption planning tests have been done with fire drills and communication tree testing been done regularly. The process is well maintained with a comprehensive updating of the all the variables done as need arises. As part of compliance, the process is audited both by the external and internal auditors.

The interviews noted that the process gives some assurance of continuity in the event a disaster strikes the organization. There was consensus that the process is too theoretical and more resources and time is required for it to give full assurance of business continuity.

4.3.3 Challenges and opportunities

The prevailing economic status in Kenya (UNCTAD, 2008) continues to pose various challenges to the business continuity planning process. There is inadequate expertise in the field of business continuity planning with no university offering this as a course. However, it was noted that there is adequate human resources in other fields to be factored in the planning of business continuity. The information, communication and technology infrastructure in the country is wanting. Bajgoric, (2009) noted that reliable, available and fault tolerance infrastructure is essential for business continuity. Kenya is characterized by limited and expensive broadband which is not very reliable, lack of good telecommunication network (Wright, 2001) with most operations concentrated in the city. Information technology failures continuously affect businesses more than any other external events (Continuity central, 2006). As noted by Hardwick, (1999), LDEs' poor road infrastructure poses a serious threat to access to premises in case of disasters as well as in adequate facilities to host remote locations. There is no budgetary allocation to the process as well as to the infrastructure. This is because the government has no regulations and most of the

funds are directed towards development of the basic such as provision of food, shelter and health. Bridge, (2010) noted that developing countries spend little money to set up systems to control fires yet they are more susceptible due to limited fire suppression systems and increased risk due to cultural use of fire (Bridge, 2010).

The cultural orientation in Kenya does not support the business continuity process. Kenyans do not anticipate for disasters hence shy away from planning for them. There is lack of enough resources to propel the process because of lack of appreciation of the process. There exist no know regulation from the government to give direction on the process with an exception of the banking industry (CBK, 2008).

4.3.4 Best practice usage

There is low level awareness on the best practice as per DRI and BCI in the organizations. This has been brought about by high staff turnover with minimal training to new employees on business continuity planning. The process is taken as secondary and hence lacks sufficient support from the management. Elliot (2002) argued that management should play a key role in determining the mindset that drives BCP in an organization. The executive management awareness is very high by the fact of their position in planning for the company's future while the awareness is very low at the operational level. Elliot, (2002) noted that it's because of the top down direction ownership of business processes in an organization. There is no staff involvement at the operational level in the management. There has been no major disaster to warrant for more emphasis on the process hence most employees do not take much interest in it. Hiles (2004), noted that awareness program is important because it reinforces the corporate vision into the process (Hiles, 2004).

The organization follows the BCP best practice in the planning process. This has been achieved for compliance purpose and to mitigate on some of the emerging business threats.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

The study set out to get a better understanding of whether multinational companies can embrace and draw the benefits of business continuity planning in their less developed country operations. The study also sought to establish the applicability and operability of the business continuity planning process for a global business operator in a less developed country. The study also sought to establish whether there exist any unique challenges or opportunities for the global operators in less developed countries.

To achieve these objectives, the study sought to find out the existence of business continuity planning process and its justification in GMEA. Results obtained from the study showed that the business continuity planning has been widely adopted by General Motors East Africa as a part of its core business operations. It was evident that the process has been adopted to mitigate on the multiple risks the business continues to face in Kenya. The operations in Kenya continue to face such threats like, terrorism, organized gangs, fires and risk of employee deaths due to high rates of HIV infections. One of the core benefits of BCP is to cushion business operations from adverse effects of interruptions; this has been achieved and continues to be a justified business operation in the less developed countries.

The study further found out that the business continuity planning methodology is applicable in the less developed countries. This was evident with study results showing that General Motors East Africa continues to embrace the BCP methodology from project planning, risk assessment, design and development, BCP creation,

testing and maintenance. Business operation constraints have however affected the testing process due to lack of adequate resource allocation in the organization. This has limited testing to IT application disaster recovery instead of the whole enterprise continuity.

The study showed that there exist multiple challenges to the business continuity planning process. These challenges are emanate from the prevailing economic status in the country. Kenya been a less developed country faces social, cultural, political and legal challenges which adversely affect the business continuity process. The study showed that there is lack of adequate communication infrastructure, lack of enough BCP expertise and poor emergency response systems. The study showed that there is lack of enough budget allocations for the BCP related infrastructure. This is because the economy is geared towards profitability and development of basic infrastructure a common feature in the less developed countries. There is plenty of human resource due to the high unemployment levels in the country. The study found this to be a critical strength in planning for the continuity process.

5.2 Conclusion

The findings of this study have shed adequate light on the business continuity planning in less developed countries. Business continuity planning as adopted by GMEA is in line with the best practice requirements. This is a very important cardinal business process which cannot be overemphasized. This is because of the various numerous risks to business operations in the less developed countries. The business continuity planning process gives assurance of resilience if any interruption to critical operations was to happen. The findings will be of great importance not only to global operators in LDE's but to any other organization.

There exist numerous economic challenges to the process ranging from human resource expertise, infrastructural, cultural, social, legal as well as financial. It is however worthy to note that these challenges pose a serious threat to this process and more involvement and resource commitment is required in order to achieve the continuity objective of the process.

The best practice awareness is wanting due to the factors stipulated in the findings. This level of awareness is concentrated in the top management and its critically lacking in the operational levels of the organization.

There is no doubt that business continuity planning is an important program in the multinational operators in the less developed countries. Major disasters have shown that only businesses with an efficient BCP program in place can survive, this is a must have program and must be included into every risk management of an organization.

5.3 Recommendation

The researcher would like to make the following recommendation;

Business continuity planning should be made a core business process in any organization operating in the less developed countries. This will in turn give all stakeholders the assurance that all critical business operations will continue with minimal interruption in the event a disaster strikes. Business enterprises should establish a foundation of business continuity principles and practices where metrics can be devised to provide both qualitative and quantitative results of operational performance. Organizations need to define business continuity policy to govern the process. This policy should be in alignment with organizational strategic objective.

More awareness programs should be put in place. This will lift the approval rates of the process and make it easy for adoption in the less developed countries. Only the aware employees will be enabled to respond in an efficient manner and they must be confronted with the topic, redundantly through different sources. Training programs should be available for staff at entry level so as to embrace the concept of business continuity programs. Lack of awareness leads to ignorance and poses a more serious threat to business operation. The process should be given a companywide approach to ensure that critical business functions can be maintained or restored as quickly as possible in the event of internal or external incidents. It should involve all business and organizational areas within the company.

The government as the biggest regulator should implement BCP as a requirement for all businesses operating in the country. This should be achieved through regulatory bodies such as capital markets authority and Kenya association of manufacturers. Lack of regulation leads to chaos in the industry and endangers business operations. There is need for the government to fully develop viable infrastructure which can be incorporated in the planning process.

The BCP methodology must be followed to the letter. Enterprises should be encouraged to adopt the process in totality especially on testing. It is from testing where the process will be proven to work or not. This is important because it shows the practicability of the process. It is advisable to coordinate the individual test activities in form of systematic testing plan. This will ensure standardized reporting and lay down good processes for monitoring and remedying of weak spots. Efforts should be out into place to encourage the use of the methodology because the importance cannot be understated and has been clearly indicate by this study.

Organizations should establish a business continuity policy. This will signal high level approval of the process and empowers the process managers. The policy should in turn be envisioned in the organizational strategic plans and made known to all stakeholders.

5.4 Study limitations

The study encountered limitation just like most of other studies. Executives who hold key information about the process under study were not readily available. This was due to their busy schedule and sometimes they were inaccessible. This affected the length of the study and affected the amount of information obtained. There was limited local material on the subject, as it was noted that this is a new concept in the less developed world and that it is a foreign driven agenda.

5.5 Suggestion for further study

This study explored the applicability and operability of the business continuity planning process and methodology in the less developed world. It is worthy to note that further studies, different market surveys and analysis are required in order to get deep understanding and analysis of problem in more efficient and effective manners. Further study should be done to establish the effectiveness of the process in the less developed world. A survey should also be done to measure the use of business continuity planning process in other sectors of the economy such as educational as well as local companies. This is because the study dwelt on multinational organizations.

REFERENCES

- AfDb. (2010). *African Economic Outlook 2010*. Tunis: AfDB/OECD.
- Bajgoric, N. (2009). *Continuous computing technologies for enhancing business continuity*. Hershey: Information Science Reference.
- BCI. (2005). *Business Continuity Research*. Caversham: BCI.
- Bridge, J. R. (2010, 11 26). *Disaster Recovery Journal*. Retrieved 11 26, 2010, from Disaster Recovery Journal:
http://www.drj.com/j10/index.php?option=com_content&task=view&id=5460&Itemid=429
- Bryman, A. E. (2007). *Business research methods*. Oxford: Oxford.
- Burtles, j. (2007). *Principles and Practices of Business continuity; Tools and Techniques*. Brookfield: Rothstein Association Inc.
- Business continuity planning (BCP) definition*. (2010, July 5th). Retrieved July 5th, 2010, from Business Dictionary.Com: <http://www.businessdictionary.com/definition/business-continuity-planning-BCP.html>
- CBK. (2008). *Business Continuity Management*. Retrieved from Central bank of Kenya: http://www.centralbank.go.ke/downloads/acts_regulations/Business_Continuity_Management.pdf
- Continuity central*. (2006, December 14). Retrieved July 10, 2010, from Survey looks at UK Business continuity investment: <http://www.continuitycentral.com/news02966.htm>
- Cooper, D., & Schindler, ,. S. (2003). *Business Research Methods*. New Delhi: Tata Mc Graw Hill.
- Czinkota, M. R. (2004). *Fundamentals of International business*. South-Western: Mason.

- Doughty, K. (2000). *Business Continuity Planning: Protecting your Organization's Life*. CRC Press.
- Dul, J., & Hak, T. (2008). *Case Study Methods in Business Research*. Oxford: Elsevier.
- Dutta, S. (2009). *The Global information technology report 2009-2010; ICT for Sustainability*. INSEAD.
- Elliot, D. e. (2002). *Business Continuity Management; A crisis management approach*. London: Routledge.
- Fay, J. J. (2007). *Encyclopedia of security Management (2nd ed.)*. Oxford: Elsevier.
- Fulmer, K. L. (2005). *Business continuity planning; A step by step guide with planning forms on CD-ROM*. Brookfield: Rothstein Associates Inc.
- Gallagher, M. (2003). *Business Continuity Management: How to protect your company from danger*. London: Pearson Education Limited.
- Ghuri Pervez, G. K. (2005). *Reserach methods in business studies*. Essex England: Prentice Hall.
- Gillham, B. (2000). *Case Study Research Methods*. New York: MPG Books.
- Graham, J. e. (2006). *A risk management approach to Business continuity; Aligning Business continuity with coroprte governance*. Brookfield: Rothstein Associates.
- Hanseth, O., & Ciborra, C. (2007). *Risk, cmplexity, and ICT*. Edward Elgar Publishing Limited: Cheltenham UK.
- Hardwick, P. (1999). *An Introduction to Modern Economics (5th ed.)*. London: Pearson Education.

- Hayes, B. (2008). *Measuring customer satisfaction and loyalty: Survey design, use and statistical analysis methods*. Milwaukee: ASQ.
- Heng, G. M. (2008). *Managing your Business continuity planning project* (2nd ed.). Tampines central: GMH Pte Ltd.
- Heng, G. M. (2006). *Testing and Exercising your business continuity plan* (2nd ed.). Tampines, Singapore: GMH Pte Lid.
- Herban, B. D., Elliot, D., & E.M, S. (2004). *Business Continuity management: Time fr strategic rols?* Long Range Plan: DOI.
- Herman, P. (2006). *When Disaster strikes - A guideline to business continuity awareness*. Norderstedt: GRIN Verlag.
- Hiatt, C. J. (2000). *A Primer for Disaster Recovery Planing in an IT Environemnt*. London: Idea Group Publishing.
- Hiles, A. (2004). *Business Continuity: Best practices, World Class Business Continuity management* (2nd ed.). brookfield: Rothstein Associates.
- Klenke, K. (2008). *Qualitative Research in the study of leadership*. Bingley London: Emerald.
- Kothari, P. (2007). Is Your Business Continuity Plan a Paper Tiger? *ISACA Journal* , 3.
- Krippendorff, K. (2004). *Content Analysis: An Introduction to its Methodology*. London: Sage Publications Inc.
- Lauri, E. (2010, September 13). *Business Continuity: A critical issue for doing business in Africa*. Retrieved 09 13, 2010, from AfriBiz Making business happen in Africa:
<http://www.afribiz.info/>

Mohawc, U. (2009, August 19th). *Business Continuity Planning*. Retrieved 2009, from Business Continuity Planning: <http://www.uppermohawkinc.com/>

Naill, M. (2010). Business Continuity Planning: Are We Prepared for Future Disasters. *American Journal of Economics and Business Administration* , 2 (3), 272-279.

OGC. (2002). *Best Practice for ICT infrastructure management*. Norwich: TSO.

Peltier, T. R. (2005). *Information Security Fundamentals*. Boca Raton, Fla: Auerbach Publications.

Pitt, M., & Sonia, G. (2004). Business continuity as a facilities management tool. 22 (3/4).

Rader, S. (2009, 2 23). *Industry Week*. Retrieved 10 July, 2010, from Manufacturers in developing countries Experience IT disaster Recovery planning Challenge: http://www.industryweek.com/articles/manufacturers_in_developing_countries_experience_it_disaster_recovery_planning_challenges_18508.aspx?Page=1?ShowAll=1

Reuvid, j. (2005). *Managing Business risk; A practical guide to protecting your business*. (2nd ed.). London: kogan page and contributors.

Rittinghouse, J. W., & James, F. R. (2005). *Business continuity and disaster recovery for infosec managers*. Amsterdam ; Boston: Elsevier.

Robson, C. (2002). *Real World Research*. Oxford: Blackwell.

Roessing, R. v. (2002). *Auditing Business Continuity: Global Best Practice*. Brookfield: Rothstein Associates Inc.

Sadgrove, K. (2005). *The Complete guide to business risk management* (Vol. 2nd). Burlington: Gower Publishing.

Security, D. o. (2008). *Lessons from Hurricane Katrina*. Retrieved from http://www.ffiec.gov/katrina_lessons.htm

The international Development research center. (2010). Retrieved July 10, 2010, from Design of research instruments.

Tipton, H. F. (2007). *Information Security Management Handbook* (6th ed.). Boca Raton: Auerbach.

Turban, r. &. (2005). *Introduction to Information technology*. Wiley.

UNCTAD. (2008). *World Investment report 2008*. Retrieved from www.unctad.org/wir or www.unctad.org/fdistatistics.

Watson, L. D. (2007). *BS 25999 Toolkit: A BCM Guide, Business Continuity and Risk*. UK.

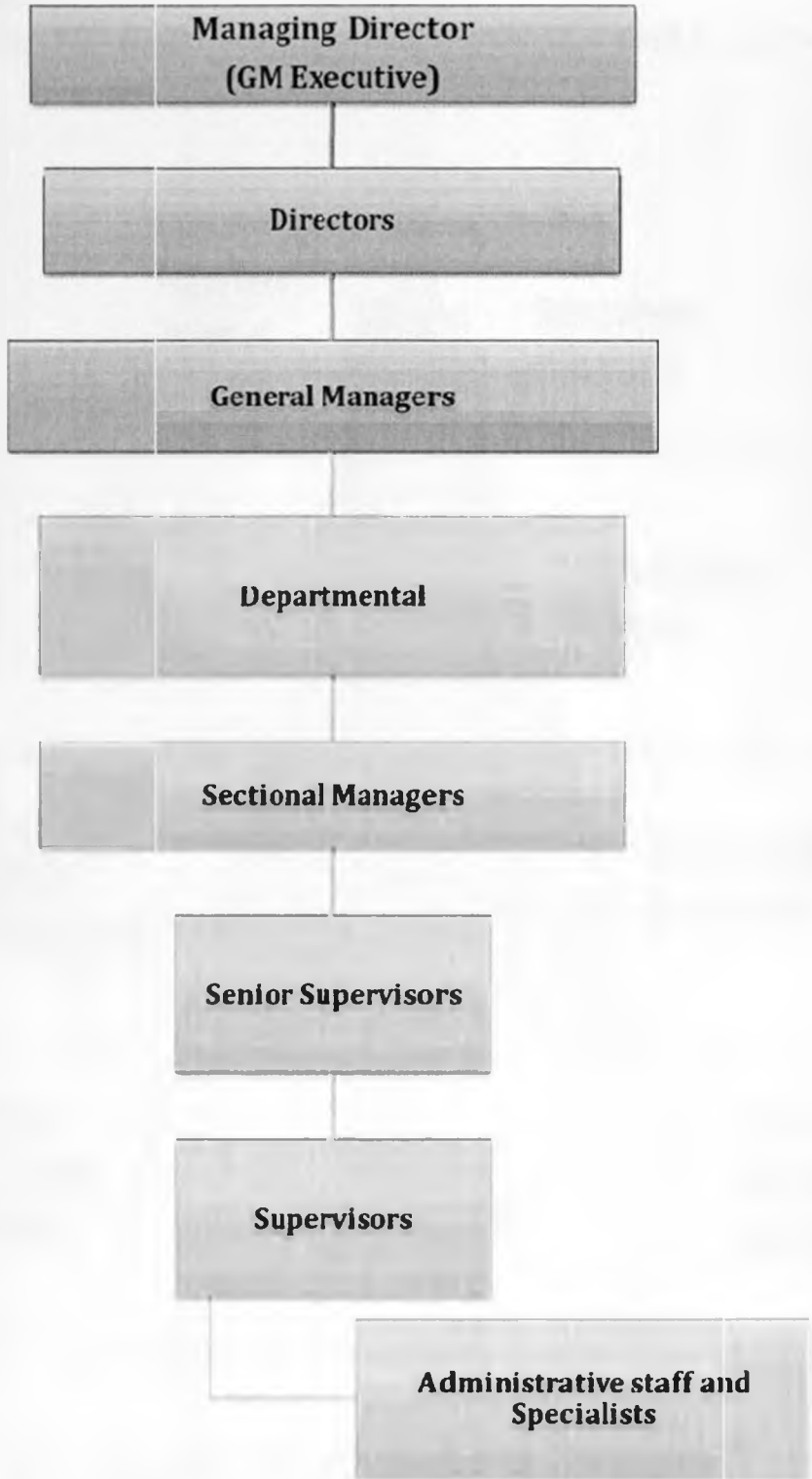
Witty, R. J. (2006). Disaster Recovery Journal Fall 2006. *Disaster Recovery Journal* .

World Bank. (2006). *Information and Communications for Development*. World Bank.

Wright, J. W. (2001). *The Almanac Or record*. London: Penguin Putman Inc.

Yin, R. K. (2003). *Application of case study research* (2nd ed., Vol. 34). California: Sage Publications.

Appendices



Appendix 1 GMEA organizational chart

Appendix 2 Management structure and planning process

Adapted from

<http://www.cognitivedesignsolutions.com/Information/PlanningProcess.htm>



Management Structure & the Planning Process

Appendix 3 Interview guide

QUESTION ONE: The rationale of BCP (Justification)

1. Do you have a business continuity planning process in place?
2. Elaborate on why the business put the business continuity planning in place?
3. Explain peculiar circumstances which necessitated the process?

QUESTION TWO: BCP Methodology

1. Explain whether the process outsourced or internally developed and why the choice?
2. Explain the development of the process as per the methodology your business followed?

If yes, explain the following;

- Project initiation?
- Risk assessment?
- Design and development of the continuity planning?
- Creation of a business continuity plan?
- Plan Testing?
- Process updated and how frequent?

Question three: Strengths and opportunities;

1. Explain the extent to which the process gives assurance in case of a disaster?
2. To what extent does the current prevailing economical status in the country support the process in the event of a disaster?
 - a. Human resources?

- b. ICT infrastructure?
 - c. Financial engagement?
3. Are there any challenges/opportunities that are there in Kenya for BCP process?

Question four: Best practices:

- 1. Explain the level of awareness of the BCP best practice as per DRI/BCI?
- 2. To what level does your organization follow the BCP Best practice?

Appendix 4 Introduction letter

To.....
Position.....
Company.....
Date.....

Dear Sir/Madam,

REFERENCE: JOSEPH SYLVESTER MUOKI (D61/8381/2006)

The above named person is a Post Graduate student doing Master of Business Administration in Management Information Systems from University of Nairobi. He is carrying out his Management Research Project on the *Business continuity planning for a global operator in less developed economy; A case study of General Motors East Africa*. Assistance in providing information on mentioned study will be highly appreciated

Yours Sincerely,

.....

Sylvester Muoki Joseph
(Student)

DR. Njihia M
(Project Supervisor UoN)