Risk Management for Achieving Sustainable Competitive Advantage in Counter Insurgency Operations of the Nigerian Army

Dissertation Manuscript Draft

Submitted to Northcentral University

Graduate Faculty of the School of Business Administration

in Partial Fulfillment of the

Requirements for the Degree of

DOCTOR OF PHILOSOPHY

by

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San Diego, California

July 2019



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# Approval Page

Risk Management for Achieving Sustainable Competitive Advantage in Counter Insurgency Operations of the Nigerian Army

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#### Abstract

The problem to be addressed by this study was that of the low success rate in counterinsurgency operations and the need to determine if, through the application of risk management, an increase in success rate was possible. The purpose of the study, therefore, was to explore how the application of risk management as a strategy will help to achieve a competitive advantage in counterinsurgency operations of the Nigerian Army. The study was a qualitative case study design that elicited the lived experiences of 17 military commanders of the Nigerian Army operating in the Northeast of the country. The approach involved a combination of data collection methods, such as interviews, review of manuals and journals, and visiting combat zones to understand the participants own perspectives. The method used had many advantages but particularly, it enabled the researcher to explore the many experiences of the participants who were key figures in counterinsurgency planning in the Nigerian Army. Themes were extrapolated from the data, and from these themes, commonalities and differences were discerned, leading to further analysis of the data using Nvivo 12. The analysis of the interview data showed that risk management was presently not well understood and applied in the Nigerian Army as education constituted a barrier. Further analysis revealed that the use of the risk management process would increase the competitive advantage of the Nigerian Army troops when implemented. When these findings were triangulated with data from other established researches on risk management in military operations, there was a relationship. The main finding from the study was that risk management would give a competitive advantage. It was recommended that the risk management process be taught and implemented in the Nigerian Army counterinsurgency operations.



ii

#### Acknowledgement

I want to above every other person thank the Almighty GOD who in HIS infinite grace and mercies helped me to complete this study despite all the obstacles along the way. Thank you, LORD. Then I want to thank all my Advisors throughout the course of study; they were wonderful. There encouragement and reminders at various times was rewarding. My profound thanks go to the Faculty members who demonstrated the good in one-to one study which NCU implements. The ease of direct access to Faculties at all time made it easy to complete assignments on time; thank you all too numerous to mention. Not forgetting my dissertation Chairs, Subject Matter Experts, and Academic Readers who guided and made the study a reality. Thank you all. Not forgetting others especially, the technical team members who at every prompting resolved issues without delay; thank you all.

This acknowledgement will not be complete if I do not thank my dear loving wife Patience Jummai who kept the home front going without complaint through the course of the study and made life bearable. You are indeed a treasure. I acknowledge my children Kelvin and Edwin for your prayers and support during the period. I love you all.

Finally, to all who in one way or the other have contributed to the completion of the project: the Nigerian Army, Defence Intelligence Agency, survey participants, brothers, sisters, pastors, friends, and others not mentioned who rendered help during the study, I say a very big thank you. GOD bless you all.



iii

Chapter 1: Introduction	1
Statement of the Problem	
Purpose of the Study	
Theoretical Framework	
Research Questions	
Nature of the Study	9
Significance of the Study	
Definition of Key Terms	
Summary	
Chapter 2: Literature Review	14
Theoretical/Conceptual Framework	
Risk Management	
Risk Management Applications	
Project Risk Management	
Risk Management Processes	
Leadership and Risk Management	
Teamwork and Risk Management	
Planning Risks Management	
Risk and Uncertainty	
Complexity of Risk Management	
Risk Management Sustainability	
Risk Management Foresight	
Risk Management and Competitive Advantage	
Risk Management at Tactical Level	
Strategic Risk Management	
Risk Management and Military Operations	
Insurgency and Risk management	
Risk Management in Counter Insurgency Operations	
Conflict Resolution and Risk Management	
Concept of Conflict Resolution	

# Table of Contents



Case Study of Indian Military in Conflict Resolution	
Case Study of the Pakistani Military in Conflict Resolution	50
Overview of Conflicts in Nigeria	
Nigerian Army Procedure for Conflict Management	53
Assessment of Military Involvement in Conflicts Management	
Challenges to Conflict Management by The Military	55
Lessons Learnt in Risk Management of Military Operations	
Military Force in Insurgency	
Nigerian Army in Counter Insurgency Operations	57
Summary	
Chapter 3: Research Method	60
Research Methodology and Design	
Population and Sample	
Materials/Instrumentation	
Study Procedures	
Data Collection and Analysis	
Assumptions	
Limitations	71
Ethical Assurances	
Summary	
Chapter 4: Findings	74
Trustworthiness of the Data	75
Results	77
Evaluation of Findings	
Summary	
Chapter 5: Implications, Recommendations, and Conclusions	114
Implications	
Recommendations for Practice	
Recommendations for Future Research	
Conclusion	
References	127



v

Appendix	A:	Introduction	to	Risk	management:	Understanding	Military	Risk
Management								
Appendix B: List of Questions for the Interview of Participants								



#### **Chapter 1: Introduction**

The research was an attempt to study the impact of the application of risk management process as a strategy to gain competitive advantage in counter insurgency operations of the Nigerian Army. For a strategy to be effective, it must possess certain qualities or properties (Prochazkova, 2013). Risk management was defined as the identification, analysis, assessment, and control using any or combination of the strategy of avoidance, minimization, elimination or transfer of the risks (Project Management Institute, 2013). It is the methodical application of management processes, practices, and actions to the task of assessing, analyzing, evaluation, and control of risk in an activity (Liwang, Ericson, & Bang, 2014). It is one of the project management techniques that guarantees the successful completion of a project (Royer, 2000). The occurrence of risk is because of limited knowledge on a task or project (Chatzipoulidis, Mavridis, & Kargidis, 2010). Risk occurs in all activities, training, endeavor, and in civil or military operations (Tanner, 1997). The most common cause of risk was that of human error because of the inability to systematically identify, assess, and mitigate threats (Chao, Xiaofen, Yonghu, & Libang, 2014). The application of risk management to military operations decisions making to achieve competitive advantage is therefore an idea that was worth the study and subsequent application in the Nigerian Army.

Risk management is currently being implemented in small, medium, and large industries. In addition, government organizations, research institutes, and hospitals are introducing risk management (Potts et al., 2014). The applications of risk management for military use have some similarities with its use in the civil organizations. However, while the application for civil organization use was inclined to safety, the military uses it mostly in security. While risk



1

approaches for safety and security may be similar, the methods proposed for security activities such as operations should be tested for security cases (Edmunds, 2012).

In military operations, commanders at all levels are responsible for ensuring proper implementation of procedures and appropriate resources to perform assigned tasks (Liwång et al., 2014). The implementation of risk management into military operation early in the planning stage will provide opportunities for commanders to take informed risk decisions and implement effective mitigation controls (Johnson, 2012). There is the need to fully integrate risk management into the planning and execution of the operation to provide a method that will assist in identifying the best course of action (Liwång et al., 2014).

In military planning, risk management could be used to create awareness and support the analysis of options available to the mission commander (Gallagher, Mackenzie, Blum, & Boerman, 2016). Casualties in military operations are a reality, and the aim of the higher command is to avoid them as much as possible for the mission to be termed successful. Consequently, a balance of risk is required. The application of risk management will involve a comprehensive risk assessment, prioritization, and analysis of the situation by the commander (Haerem, Kuvaas, Bakken, & Karlsen, 2011). The importance of risk management in combat operations is underscored by the fact that several nations' military utilize some form of risk mitigation approaches to analyze the level of exposure to risk in the operation. Some established military risk management approaches are the Comprehensive Operations Planning Directive's (COPD) used by NATO. The COPD approach uses risk analysis in planning of military operations. Others like the US Army, the US Marine Corps, and the Swedish Armed Forces also use risk management procedures for military operations and force protection.



In civilian or business approaches to risk management, the argument is on the strengths and weaknesses of the method and the tools required to execute; this is absent in conventional military approaches to battle where there are no discussions on problems or limitations. It is supported by the prospect theory which states that decisions based on a spontaneous reasoning manner are usually influenced by the probability of a loss or gain (Kahneman & Tversky, 1979). The theory deviates methodically from the assumptions of conventional economic theory (Haerem, et al., 2011 & Pressman, 2006). However, the applications of risk management to military operations still has great similarities with their civil or business use. While the civil use of risk management is mainly for safety, the military applications are often for security. The risk management process adopted by businesses involve the five steps of identifying, assessing, developing controls, implementing controls, and evaluation (Project Management Institute, 2013). The military has developed five steps process and integrated it into the decision-making process as follows: start a plan, organize reconnaissance, execute reconnaissance, finalize the Plan, issue the Orders, and supervise the implementation (US Army DOA, 1998). Risk management methods for security though consistent with safety approaches, it is important that the methods proposed for security such as in military operations be specifically tested for such cases (Liwang et al., 2014).

Risk management is focused on factors such as vulnerability, threat, impact, and probability assessment of an adverse event occurring (Aven, 2012). If any factor equates to zero, the risk amounts to zero since risk is equal to vulnerability x threat x impact x probability (Liwang et al., 2014). Continuous monitoring will provide the data required to identify and assess the risk. The following strategic framework is used in the military: First identify the opponent's goals (ends), then find the methods he or she intends to use against friendly forces



(ways), and the resources at their disposal to accomplish the goals (means). In using attackerbased threat modeling focus should not only be placed on getting the friendly forces defence ready, but it is important to examine adversary capabilities and intent (Johnson, 2012). Knowing what an opponent wants, the tools available, and the ways they can affect systems and networks, enables the military to develop a better model of the threat.

The study relied on the existing established successes of risk management process in civil organizations to achieve competitive advantage when applied to combat operations of counter insurgency in the Nigerian Army. The study used the risk management processes applied in businesses to formulate a generic military risk management process that will help to gain competitive advantage in operations.

#### **Statement of the Problem**

The problem addressed by this study was that of achieving sustainable competitive advantage in counterinsurgency operations of the Nigerian Army through the application of risk management. The key barriers to adoption of principles of risk management in COIN are currently unknown yet there are several challenges confronting the Nigerian military in counter insurgency operations. First is the inability of the Nigerian Army to fight irregular enemies with no operational structures (Etim-Bassey, 2011). Secondly, there is the challenge of operational failures due to inability to gather intelligence, forecast threats, and prepare contingency plans (Barno, 2006). Finally, there is the tactical challenge due to the Nigerian Army's use of the conventional order of battle which is not suitable for counterinsurgency operations (Cancian, 2017 & Fritz, 2013).

Insurgency has been on the rise in different parts of Nigeria affecting the civil populace, industries, governments at all levels, and especially members of the military. Several lives and



properties have been lost while trying to counter such insurgencies. To address the problem, the study is aimed at using the perspectives, knowledge, and opinions of key figures in counterinsurgency planning in the Nigerian Army for assessment and mitigation of the risk. There are also several researches on the benefits of risk management in business organizations but few on the application of risk management to military operations. Johnson (2012) opined that military operations start with limited knowledge about the enemy therefore the use of risk management like in civil organizations will not suffice. It is important to find out if risk management is effective in other project types.

Risk management principles are not currently applied in the Nigerian Army operations and therefore its application into counterinsurgency operations as a strategy remains unexploited. Some authors have opined that military discipline and training coupled with risk management would help in achieving competitive advantage (Liwang et al., 2014 & Edmunds, 2012). Others state that corporate risk management techniques will not take care of the risks in military operations (Johnson, 2007). These contradictions and inconsistencies leave a gap in the study that needs to be researched.

#### **Purpose of the Study**

The purpose of this qualitative case study was to explore how the application of risk management as a strategy will help to achieve competitive advantage in counterinsurgency operations of the Nigerian Army. Levine, (2005) stated that risk management is applicable to all types of organizations and all types of projects. Due to the large number of stakeholders in military operations, a multiple objective approach using risk management process can significantly improve the success rate (Garanovich et al., 2013). The approach involved a combination of data collection methods, such as interviews, review of manuals and journals, and



visiting areas to understand the participants own perspectives. The interviews were structured to investigate the benefit of the application of risk management as a strategy to achieve sustainable competitive advantage in counter insurgency operations of the Nigerian Army. Key figures in the strategic planning offices and higher echelons of the Nigerian Army were interviewed. The study involved interviewing 8 key personnel to include the 2 General Officers Commanding (GOC) the Infantry Divisions and 6 Brigade Commanders of the combat and support arms involved in the North-East Operation. Using such credible participants helped the study results reach data saturation (Fusch & Ness, 2015). The interview of key personnel also helped to achieve rich and quality data. Finally, additional data from counterinsurgency manuals and expert opinions on insurgency was examined and analyzed to triangulate data received from the interviews and to identify how risk management is conducted or applied.

The study was conducted in two locations of the Country. First is the North-Eastern part where presently an insurgent group known as Boko Haram is fighting against the Nigerian Army and in the Niger Delta where another militant group carried out insurgency.

#### **Theoretical Framework**

In military planning risk management helps to create awareness to support the analysis of options available to the mission commander (Gallagher et al., 2016). Casualties in military operations are a reality, and the aim of the higher command is to avoid them as much as possible for the mission to be termed successful. Consequently, a balance of risk is required. The application of risk management will involve a comprehensive risk assessment, prioritization, and analysis of the situation by the commander (Haerem et al., 2011).

Risk management is focused on factors such as vulnerability, threat, impact, and probability assessment of an adverse event occurring (Aven, 2012). If any of these factors are



zero, the risk is zero since risk is equal to vulnerability x threat x impact x probability (Tanner, 1997). Continuous monitoring will provide the data required to identify and assess the risk. In the military, the following strategic framework is often used: Identify the goals of an opponent (ends), the methods that can be employed against friendly forces (ways) and the resources available to accomplish this (means). If what an opponent want is known, the tools available, and the ways they can affect our systems and networks, a better threat model can be developed. The two major concepts in the study of risk management are risk assessment and risk analysis (Pressman, 2006). The analysis of risk is an important part of the decision-making in all organizations and affects every aspect of the risk estimation. Several nations apply risk management approaches in military planning and others security operations. There are discussions on limitations with the risk-based approaches in areas such as uncertainties, nature of threat, and possible risk to civil populace. The aim of the study is to identify important constraints to the application risk management to military operations.

The military decision making has become increasingly important as military operations involve taking a decision that could result to life or death. Despite this grave consequence, no empirical investigations of a process or theory in military settings that could give competitive advantage. Most military decision especially in counterinsurgency operations are made under high levels of uncertainty. The prospect theory which states that decisions based on a spontaneous reasoning manner are heavily influenced by the prospects of losses or gains is thus apt for such military operations (Haerem et al., 2011). The military situations driven by extreme conditions, might uncover phenomena that are relevant in other civil settings as well. However, it was opined that the military setting, with its culture would likely give rise to behaviors different from those found in civil organizations (Johnson, 2007).



The unpredictability and growing uncertainty which organizations must face in this era, requires the implementation of some level of risk awareness. One of the early theories was expected value which was a decision-making tool that states that the expected value of a product is equal to its payoff multiplied by its probability. The decisions are judgments made from uncertainty. Such judgements under conditions of uncertainty are challenging and difficult to foresee the consequences or outcomes with clarity (Edmunds, 2012). It is also important to note that decisions from uncertainty will involve some value trade-offs of the goals.

#### **Research Questions**

Research begins when interest is developed in a topic. However, some knowledge about the topic will help in determining appropriate research questions. The research question identifies the phenomenon to be studied. Research questions help to prevent one from going off track as one shift through large volume of materials during a research (Alvesson & Sandberg, 2011). Questions may change or expand as progress is made but it keeps the study organized. An established way of generating research questions is to spot gaps in existing theories and challenge the underlying assumptions (Alvesson & Sandberg, 2011). The research questions are derived from the title and ask the why and what statements (Newman & Covrig, 2013).

Risk management has the potential to deliver immense benefits and other values to an organization. However, adopting risk management as a strategy to achieve competitive advantage in military operations is still a research gap. This research was intended to address this research gap of achieving sustainable competitive advantage in counter insurgency military operations using risk management. The study answered the following research questions:

Q1. What is the level of understanding of risk management among officers responsible for counterinsurgency COIN planning in the Nigerian Army?



Q2. What will the officers and men engaged in COIN perceive as barriers in the application of risk management as a strategy?

Q3. What is the interface between risk management and military operations strategy?

Q4. How will the experience of stakeholders optimize the application of risk management to COIN operations in the Nigerian Army?

#### Nature of the Study

The research method chosen for the current study was qualitative. Qualitative research secures the perceptions of study participants through a means of subjective, generalized questioning followed by text analysis for overt and covert patterns, themes, or meanings (Adams & van Manen, 2017). Conversely, in quantitative research the focus is in using specific questioning and unbiased analysis using numerical measurements (Neuman, 2006). However, there are reasons why other methods would not be better suited for the study. The alternative method referred to will be the use either the quantitative or mixed method. The quantitative method will be less desirable for the study of the advantage of risk management in counterinsurgency operations due to the small sample population that will be involved in the study (Charoenruk, n.d.). Not much is known about the application of risk management to counterinsurgency operations (Heng, 2006). Therefore, quantitative method which is not suited for exploring a subject about which little is known would not be suitable.

The research design for the study was descriptive case study which is used to elicit the indepth experience of participants through direct observation or interaction with subjects (Yin, 2012). In the use of the case study design, peoples lived experiences and their interpretations of such observations will be analyzed. The case study design would be suitable for data collection of real world lived experiences of participants in COIN operations using non-structured



interviews (Helena, Melanie, Richard, & Jane, 2017) The collection of data from various sources such as interviews, manuals and journals, and observations from site visits created opportunity for triangulation of the data. The case study used the in-depth participants' narrative of their lived experiences for analysis that will lead to likely solutions to the problems of COIN operations of the Nigerian Army. Holmberg, Waters, Whitehouse, Daly, & McCaskill-Stevens (2015) stated aptly that lived experiences of individuals was more important than estimating probabilities in making informed decisions.

#### Significance of the Study

This will be the first study that will directly solicit the perspectives of key stakeholders in COIN strategic planning in the Nigerian Army with respect to use of the principles of risk management in the planning. The application of risk management as a strategy can help the Nigeria Army (NA) to gain competitive advantage in COIN operations and reduce the present high casualty rate suffered by the NA in such operations. Achieving competitive advantage will involve developing a risk management process that will assist in the planning of COIN operations. Specifically, the study will be aimed at uncovering new strategies for COIN that have not been explored. In so doing a new process or theory of COIN operations may be developed. Such a development would contribute to the validity of the National Institute of Standards and Technology (2014) risk management framework (RMF) which provides a process that integrates risk management processes and security activities of an organization.

The critical resources of the Nigerian Army include the men and women in active service. The resources are used to generate overwhelming combat power to fight quickly, decisively, with minimal losses, and win any conflict. Risk management could form an effective process for preserving these valuable resources (Tanner, 1997). The goal of the study is to help



the NA develop a sustainable strategy to gain competitive advantage in COIN operations. Achieving such a goal would reduce the huge losses of men and materials and raise the moral of the troops. The goal can be achieved by the collection and analysis of comments of military personnel and other stakeholders affected directly or indirectly by such operations. The findings of the study would be a source for the implementation of risk management to COIN operations in the NA. The outcome of implementing risk management will not only benefit the NA but the Nigerian nation in general considering the serious impact of insurgency on the society. The review at the Appendix introduces risk management and its military application for better understanding of the process.

## **Definition of Key Terms**

Risk management in the context of this study is the process of facilitating the mitigation of the risks to own forces. The following other terms are defined in this study as follows:

**Competitive advantage**. This describes attributes that allow an organization to outperform its competitors or rivals. These attributes may include access new technology, highly skilled personnel, and use of best practices (Porter, 2004).

**Counter insurgency**. Counterinsurgency includes all military, paramilitary, economic, political, and civil actions taken by government with the aim of defeating insurgency (Nigerian Army, 2011).

**Counter insurgency operations**. It describes the operations undertaken by forces when restoring and maintaining law and order in support of government (Nigerian Army, 2011).

**Framework operations**. All overt military operations contributing to the defeat of an insurgency is referred to as framework operations (Nigerian Army, 2011).



**Insurgency**. It is the actions taken by a minority group in a state to force a change by means of subversion or armed conflict with the aim of intimidating government to accept the change (Jones & Johnston, 2013).

**Military operations**. A military operation is a planned military action against a state or a non-state group, in response to actions that are against taken by these groups against the state (US Army DOA, 1995).

**Military strategy**. This is the process of achieving operational presence everywhere at once by integrating various tools, technology, and tactics (Wald & Johnson, 2017).

**Operation Risk Management**. The systematic process of identifying, assessing, analyzing, and control of options and measures to enable commanders to make informed decisions (Johnson, 2012).

**Risk management.** Risk management is the series of actions taken to identify, assess, and control risks arising from operational activities. The aim is to take decisions that will balance risk costs with mission benefits (US Army DOA, 1998).

**Military Risk Management**. Risk Management is the military risk mitigation process used to protect own and friendly forces. The goal is achieved by making risk management a a part of the planning and execution of operations (US Army DOA, 1995).

**Risk management framework**. A disciplined and structured process that integrates security and risk management activities into the system development life cycle (National Institute of Standards and Technology, 2014).

**Threat**. A threat is any source of danger by an opposing force, source, or circumstance likely to impact a mission negatively (Nigerian Army, 2011).



## **Summary**

Risk management is currently being implemented in small, medium, and large industries. In addition, government organizations, research institutes, and hospitals are introducing risk management (Potts, et al., 2014). Risk management could be applied to all activities and environments and therefore can be applied to the wide range of military operations. The study was aimed at finding the advantages of the application of risk management in counterinsurgency operations of the Nigerian Army. A risk in military settings is summed up of both the probability and severity of loss resulting from hazards inflicted by an enemy, adversary, or some other hazardous activities. In the military application of risk management, it is important to compare and balance risks against mission expectations and accept risks only if the benefits outweigh the potential costs or losses.

The military decision-making during operations is increasingly important as military personnel more often engage in life and death decisions in operations. Despite the dangers, there is no empirical investigations of a theory or process in military settings that helps to accept, minimize, or reject the risk. The study of the use of risk management as a strategy to gain competitive advantage in counterinsurgency operations of the Nigerian Army is therefore worth the time and energy.



#### **Chapter 2: Literature Review**

In a fast-paced and highly competitive world characterized by changes and increased complexity in risks and uncertainty, organizations should find strategies to mitigate risk to gain and retain competitive advantage. One of the several strategies available to organizations to gain the competitive advantage is risk management. The literature review is therefore conducted to provide an overview and in-depth analysis of current risk management systems and applications. There are many publications on risk management and the added value to corporate organizations. However, there is little information on its application in military operations. The review of literature is aimed at investigating the application of risk management and prepare grounds for the research on the use of risk management as a strategy to achieve competitive advantage in military operations. In the course of the review, areas related to the research will be identified and examined.

Studies showed that the use of risk management in military operations had been implemented by some militaries in different parts of the world (Moon, Whitbread, & Dortmans, 2013; Belan, 2015). The implementation follows the same process framework of the PMI used by corporate organizations in project management. However, projects implementation in civil and corporate organizations have no direct link to how military operations are conducted. The purpose of the study was therefore to investigate the impact of the application of risk management as a strategy to achieve a sustainable competitive advantage in counter-insurgency operations of the Nigerian Army. According to Levine (2005), risk management applies to all types of organizations and all types of projects.

The first part of the review considered the theoretical framework and summarized the prospect theory. The theory is about decision under risk which typifies what happens in military



14

operations. The prospect theory is well-supported, and the purpose is to demonstrate that the relationships can be applied to risks in military operations. Next risk and risk management were discussed in detail, and its application in different categories in a corporate organization was reviewed to find the benefits and possible setbacks.

The central theme of the review will be the risk management processes or frameworks application for project success. To achieve the study purpose, academic and practical works were previewed to gather findings on successes in the implementation of risk management. The literature review was conducted in the field of risk management with emphasis on its application to military operations. The search engine of Google Scholar at http://scholar.google.com was used to find relevant books, periodicals, and theses while scholarly and peer reviewed articles were gotten from the Northcentral University Library. Other sources included online journals of management, defense, and project management. All these were used to complement the comments and teaching notes provided by faculties during the coursework. Table 1 is a summary of the keywords used in the search.



## Table 1.

Topic of Examination	Peer Reviewed	Popular Articles	Books
	Articles		
Risk Management	34	20	8
Theoretical Framework	15	4	1
Counter Insurgency	8	31	3
Military Operations	6	12	4
Leadership	15	11	5
Conflict Resolution	8	12	2

Overview of keywords used to Research Databases

There were very few sources that provided sufficient peer-reviewed articles on counter insurgency and military operations. However other sources, not peer-reviewed supported and added credence to the study and improved the content of the dissertation. Referrals obtained from peer-reviewed articles and books were also used to explore the web and yielded some additional relevant information.

## **Theoretical/Conceptual Framework**

Risk occurs in all activities, training, endeavor, and in civil or military operations (Tanner, 1997). The most common cause of risk is that of human error because of the inability to systematically identify, assess, and mitigate threats (Chao et al., 2014). Risks can also be categorized regarding the impact it has on the organization. These risks are categorized as either strategic, technical, operational, management, financial, or compliance risks (Krane, Rolstadas, & Olsson, 2010). Many theoretical and conceptual frameworks have been propounded on how



risk is managed in different organizations. The perspectives under which these frameworks are conducted are many and can be categorized as psychological, social, organizational, or economic (Green, 2014). All the above-stated perspectives have one unique and relevant aspect of risk in different endeavors of life. The review will dwell more on operational risks such as encountered in military operations and referred to as decision making under risk.

Understanding risk and how it is perceived is a decisive step toward creating processes to mitigate such risks (Dobbie & Brown, 2014). It is important to find the reasons why individuals take risks as risk perception, or the ability to discern risk, is tied to risk tolerance levels, or an individual's capacity to accept a certain amount of risk (Parimah, Davour, & Kofi, 2018; Shahrabani, Rosenboim, Shavit, Benzion, & Arbiv, 2018). Several theories explain risk perception including theories related to protection motivation, habituated action, risk compensation and social action.

In civil organizations, risk management is now an integral part of the process of achieving strategic objectives (Dîrvă, 2017). In this study prospects theory was used to analyze a case study of the risk management of counter insurgency operations for competitive advantage. The study assesses the impact of the risk management process in COIN. The evidence available from civil organizations shows that the process works well and has led many organizations to make it an integral part of the organization's success management (Carvalho & Rabechini Junior, 2015). The issue of risk management has moved to a level where the Nigerian Army needs to improve its risk management of operations with the high level of casualty suffered in counter insurgency operations. The Nigerian Army sought to minimize the risk in future operations therefore, units need to improve risk control and compliance processes to minimize loss of human and material resources. The question of the effectiveness of militarized risk management



remains open (Belan, 2015). A relative lack of casualties Johnson (2012) states does not necessarily demonstrate that such risk-management is effective, especially where the actual level of risk may be close to residual.

Although corporate risk and military risk are well-discussed no research has provided a conclusive relationship between them (Liwång, Ericson, & Bang, 2014). That may sound true as economics always finds theories to explain only economic events. Military events are more complex because they are based on how individuals take decisions or perceive risks (Johnson, 2012). Military risk management therefore requires investigating theories of the behavior of individuals. Since it is difficult to predict the risk decisions by persons in the heat of an operation there is the need for a theoretical framework on which to hinge the decision (Díez-Esteban, García-Gómez, López-Iturriaga, & Santamaría-Mariscal, 2017). There is the need to identify and investigate the theory or process that will help to achieve competitive advantage when risk management is applied.

The National Safety Council (2003) defined risk as "a measure of the probability and severity of adverse effects". The definition of risk is therefore the likelihood and severity of an event occurring. The ability to accurately assess risk in an activity or risk from the result of a set of actions such as a military operation, is dependent on an individual's risk perception and risk tolerance. The study was conducted using one of the theories of decision making under risk. Included in these theories are expected value theory, expected utility theory, prospect theory, rank dependent utility theory, and dual theory of expected.

In this study risk management was explained from the view point of the prospect theory (Kahneman & Tversky, 1979). In military operations, the decision on what level of risk to take in the heat of an operation are always spontaneous and are based on the operations commanders'



appreciation of the threat. One of the early theories of decision making under risk was the expected value. The expected value is the payoff times its probability. However, the theory failed in most cases to predict the right outcome because the value was subjective, and the remuneration expected by a person may not meet the monetary worth. The failure to predict the correct outcome led to the development of the prospect theory. The biases that people rely on to make decisions is explained in the theory. The prospect theory was proposed by psychologists Kahneman and Tversky and states that in choosing among several alternatives, individuals or groups try to avoid losses and would rather go for options of sure wins. The explanation is that the pain of losing is greater than the satisfaction of an equivalent gain. The prospect theory is a decision-making theory under conditions of risk that addresses how choices are made in the decision process. These decisions are usually challenging due to the status of uncertainty such as is prevalent in military operations (Verendel, 2008).

This study was intended to use the prospect theory applied in businesses to formulate a general military risk management framework that will help in gaining a competitive advantage in counter insurgency operations. On close study, the military applications of risk management have significant similarities with civilian use (Wald & Johnson, 2017). While the civilian approach is mainly for safety, the military applications often are about security. Risk approaches for purposes of safety can be consistent with that for security, but the methods proposed for military activities must also be specifically applicable for that purpose (Liwång et al., 2014).

The military decision-making has become increasingly important as military personnel more often engage in life and death decisions in operations. Despite this, there are no empirical investigations of theory in military settings. Military policy makers are expected to make decisions and respond adequately under high levels of uncertainty. Haerem, Kuvaas, Bakken,



and Karlsen (2011) were of the opinion that prospect theory deviates methodically from the assumptions of conventional economic theory because in prospects theory, decisions based on a casual reasoning manner are heavily influenced by the prospects of losses or gains. The military situations driven by extreme conditions might uncover phenomena that are relevant in other civil settings as well. However, the opinion that the military setting, with its culture, may certainly give rise to different behaviors other than those found in public organizations is a valid argument (Vaughan, 1996).

The increasing volatility, occasioned by competition which organizations must face in recent times, has necessitated the implementation of some level of risk management by most organizations. One of the early theories was expected value which was a decision-making tool that states that the expected value is a product of its payoff times its probability. The model failed in predicting outcomes in many instances because the value that a payoff holds for someone was not always related to its monetary worth. Prospect theory is a theory of decision-making under conditions of risk. Sound judgments will help in decision making. The judgments made are under challenging conditions of uncertainty, where it is not easy to forecast the consequences or outcomes of events. Decisions involve an internal struggle over value as trade-offs. Decision making becomes difficult when choices promote different values and goals.

Various authors in their findings on the application of risk management to military operations were not unanimous. Some opined that the difference in the culture of the military coupled with their training and discipline would help in achieving competitive advantage (Liwang et al., 2014; Code-sanchez, 2010). Others stated that corporate risk management techniques would not take care of the risks in military operations (Johnson, 2007). In military operations where return on investment is not the key issue as in the corporate sector, the



expected value is more difficult to calculate (Beeres, Waard, & Bollen, 2010). Organizations that succeed do their projects properly and also do the right projects at the right time with the right amount of resources which include technical, financial and human resources to increase the organizations' value. Dettbarn, Ibbs, & Murphree, (2005) offer that this can be achieved by use of risk management.

These contradictions and inconsistencies left a gap in the theory that needed filling. Kahneman and Tversky, (1979) developed the prospect theory which offers a viewpoint on how decision makers may behave when presented with a risky situation as is often faced in military operations. In decision making under risk, the context that the decision is taken is vital. The reason is that individual risk preferences in any given situation are not always constant but strongly influenced by changes in the context of judgment (Erb et al., 2002). The above reinforces the prospect theory which states that humans tend to be risk seekers when outcomes are bad and risk averse when outcomes are good (Kahneman & Tversky, 1979). Prospects theory is contrary to the traditional theory of value maximization that suggests that a decision maker will choose the option of highest value when presented with valued choices in a given set of alternatives. It is consistent with standard consumer theories that assert that a person's willingness to pay for goods should be equal and willingness to accept compensation if deprived of the good. An important implication of prospect theory is that the subjective decision of a person about the outcome of a transaction affects the utility they expect or receive (Schroeder, 2005).

Probably the most well-developed theory of human decisions using calculated risk is prospect theory and its successor cumulative prospect theory. Prospect theory describes how people make decisions with quantified risk by modeling decision heuristics directly into the



descriptive theory (Pressman, 2006). Three key concepts in prospect theory reflect potential decision bias which differs from other normal rational theories. It is very likely that these biases also operate within military contexts. If so counter-insurgency operations leaders would benefit from awareness of these biases. These biases are:

• Decisions made from a reference point means that it will affect how a prospect judgment is valued as either a loss or a gain.

• Decisions are loss-aversive, meaning that losses are perceived relatively stronger than earnings.

• Decision probabilities are weighted non-linearly. The properties are explicitly modeled using value and weight

It is clear that identification of these cognitive biases helps to deal with the prejudices, stereotypes, and assumptions that lead to errors in risky environments. Also, it lays the basis for an approach that is developmental, characterized, continuous, and professional in its application. In brief, the appropriateness of the prospects theory as explained in practice agrees with the nature and scope of what constitutes a theory (Liu, Wuest, Wei, & Lu, 2014).

Several years after the acceptance of prospect theory there have been few applications of the theory and with most of the studies related to finance (Barberis, 2013). There are no real barriers to the application of prospect theory, but it would require further development in some areas such as proposed in the study. The application of the theory has changed the way economic decision under uncertainty affects final choice. Prospect theory considers how the probability of an event outcome influences the decision and proposes that people will be risk averse when outcomes are presented in positive gains and risk seeking when outcomes are in the negative (Heiman, Just, McWilliams, & Zilberman, 2015). Prospect theory was used in a study related to



health behavior decisions. The prevention behaviors are considered low risk because their consequences and detection behaviors were found to be high risk. The study confirmed the theory's tenets, supporting the role of risk as uncertainty in health decision making. Participants in the loss conditions showed no preference for uncertain high risk or certain low-risk outcomes (Harrington & Kerr, 2017).

In another study by (Zhou, Zhong, Ma, & Jia, 2014) the authors adopted prospect theory to describe drivers' route choice behavior under real-time road conditions information. The result shows drivers' route choice behaviors were as captured and described by prospect theory. Another study Wang, Zhang, and Wang (2015) proposed the use of prospect theory taking a reference point for emergency decision making during urgent or critical situations. Such a situation as in insurgents or terrorist attacks. The findings validated the use of prospect theory in different fields. While the theory rating came with high validity in most cases, a few reported only partial success. The proposers of the theory Kahneman and Tversky suggested that further studies should be conducted for the theory to accommodate other areas of human endeavor (Kahneman & Tversky, 1979).

In the application of prospect theory, changes resulting in losses are weighed more heavily than the changes framed as gains (Kahneman & Tversky, 1979). Some researchers have questioned the effectiveness of the application of prospect theory. Some other researchers have suggested that willingness to pay and willingness to accept should be used only for goods which are close substitutes so that observed differences in their measures can pass without reference to an endowed effect (Hanemann, 1991). The number of studies that have contradicted the views of prospect theory has come from both academic and real-world applications. A study by Pablo



(1997) concluded that the original prospect theory might not predict outcomes accurately as it did not consider elements such as decision context, sampling frame, and policy makers' characteristics.

Despite these contradictions, Prospect theory remains an important contribution to the study of economics and currently the most popular descriptive theory for decision making under risk and uncertainty (Barberis, 2013). It challenges some of the underlying economic assumptions that concern human behavior. However, despite these glowing tributes, in the economics profession prospect theory has had little impact on real world problems. The reason some suggest is that financial economics relied more on assumptions about human decision making which are sometimes misleading. Researchers recognize this fact, making the use of prospect theory in other areas of economics more unlimited. Some are enthusiastic about the potential usefulness of prospect theory in macroeconomics (Barberis, 2013). From the discussion and assessment of the prospect theory it will be useful for finding solution to risk in military operations. The assertion was hinged on the fact that the prospects theory is a decision-making tool under risk like what happens in military operations.

#### **Risk Management**

The Project Management Body of Knowledge (PMBOK), 2013 edition defined risk as an uncertain event or condition, that if allowed to occur, may have a positive or negative effect on a project's objective. A risk is therefore, an event that might occur. Risks are made up of three parts namely: the event, the consequence, and the likelihood or probability of occurrence. It is very necessary to assess the impact of a risk on a project to guarantee the success of it (Jamshidia, Ait-Kadib, & Ruizc, 2017). The Institute of Risk Management defines risk management as "the identification, analysis, and control of those risks which can threaten



operations, assets and other responsibilities of an organization". Royer (2000) buttressed the definition by stating that risk management is one of the most critical project management practices that guarantee a project will be successfully completed. Risk occurs as a result of limited knowledge on a task or project (Chatzipoulidis, Mavridis, & Kargidis, 2010).

Risk management consists of the iterative phases of risk identification, analysis, response, monitoring, and control. A typical risk management process has two phases: the identification, assessment, analysis and the risk response phase (Seyethoseini & Hatefi, 2009). Risk management requires a process that has a clear purpose with reliable inputs to generate value added outputs (Young, 2009). The purpose of risk management is to identify, analysis, and mitigate risks with a view to eliminating such risks or converting them to opportunities. Risk management is a continuous process that runs throughout the project life cycle and is aimed at adding sustainable value to the identified tasks by increasing the probability of success (Dikmen, Birgonul, Anac, Tah, & Aouad, 2008). According to Sheehan (2010) the benefits of risk management in any activity with some uncertainties are huge as it helps to minimize the impact of threats while maximizing the opportunities. Managing risks allows a project manager to meet the triple constraints set by the sponsor.

The need to deal with uncertainty has led to the development of tools, techniques, methodologies, and processes referred to as risk management (Raz & Hillson, 2005). Risk management is basically to identify, analysis, and mitigate risks using qualitative and quantitative methods. All projects require risk management plan which is developed after due assessment for the project's success (Croitoru, 2014). The application of the risk management will be a decrease in the negative risks and improvement of the opportunities on the project.



The most common approach to project risk management is to manage individual risks recorded and assessed in a project risk register. Although this approach is relatively simple and likely to add value if implemented properly, it does not constitute a best practice. There are alternative approaches that have the potential to add more value such as the top-down multi-pass process and quantitative risk-based forecasting. One best practice involves using a top-down multi-pass approach to managing risk in the initial project phases. It is the only one of the three above approaches that both addresses overall project risk and can be used from the beginning of risk management to add the most value. Adopting a multi-pass approach will give better performance by creating a coherent risk register with high level risk insights included. Each of the approaches have different strengths and the best results may sometimes be obtained by combining all three.

#### **Risk Management Applications**

The uncertainty and inability to forecast accurately has led to the implementation of risk management procedures in various products and operations of an organization. The aim is to protect or mitigate against actions capable of running down the fortunes of the organization. Due to the varied problems, there are several risk management applications already in the market to safely resolve the issues. For example, in the pharmaceutical industry, companies are increasingly using risk management applications to product quality and safety (Elleuch, Hachicha, & Chabchoub, 2014). In the field of medicine, many are taking advantage of risk management applications specially developed for this purpose. Also, in the information technology world organizations use risk management applications to determine the extent of the potential threat, vulnerabilities, and the risk associated the system (Barafort, Mesquida, & Mas, 2017).



### **Project Risk Management**

All projects require risk management plan which is developed after due assessment for the project's success (Croitoru, 2014). Risk management focuses on factors such as vulnerability, threat, impact, and probability assessment of an adverse event occurring (Aven, 2012). If any of these variables are zero, the risk is zero since risk is equal to vulnerability x threat x impact x probability (Hardy, 2012). Continuous monitoring will provide the data required to identify and assess the risk. The military often uses the following framework: Identify the goals of an opponent (ends), the methods he can employ against friendly forces (ways) and the resources available to accomplish this (means) (Liwång et al., 2014). Attacker-based threat modeling focuses not only on preparing friendly forces for defense and offense but also examines adversary capabilities and intent (Leveson, 2015). If we know what an opponent wants, the tools available, and the ways they can affect our systems and networks, a better threat model can be fashioned.

Project risk management is the systematic application of management processes, procedures, and practices to the task of analyzing, evaluating and controlling risk in an activity (Liwång et al., 2014). A better approach to risk management will involve asking the following questions (Haimes, 2004).

- What can be done, with the available options?
- What are the trade-offs of costs, benefits, and risks?
- What are the impacts of current policy decisions on future options?

The two basic concepts in the study of project risk management are risk assessment and risk analysis. The analysis of risk is an integral part of the decision-making process in all organizations and will be necessary for all aspect of the risk estimation. Several nations apply



risk management approaches in military planning and other security operations. There are discussions on limitations with the risk-based approaches in areas of uncertainties, the nature of the threat, and risk to civilians. The study aims at identifying critical challenges when applying risk-based approaches to military activity.

#### **Risk Management Processes**

Risk management is the process of planning, identification, analysis, response, monitoring, and control of the risk on a project (Dikmen et al., 2008). The risk management process is the application of project management processes to the task of establishing a context for risk identification, analyzing, assessing, responding, and monitoring of projects risks. The steps are grouped as in the process diagram. Risk management is the process of planning, identification, analysis, response, monitoring, and control of the risk on a project (Dikmen et al., 2008).

It is an ongoing process that continues through a project life cycle. The process involves planning, identification, analysis, monitoring and control, and communication (Sanchez, Benoit, Bourgault, & Pellerin, 2009). The process of risks identification starts from the project initiation stage with risks increasing as the project matures. When a risk is identified, it is first assessed to ascertain the probability of occurrence, impact on the cost, schedule, scope, and quality; and then prioritized. The identified risks are then entered into a risk register after the criteria for risk probability has been decided.

#### Leadership and Risk Management

Virtually all organizations are facing difficult challenges in trying to respond to rapidly changing, and increased global risks (Gurd & Helliar, 2017). Managing such challenges often rest on the leadership of such organizations. In an attempt to mitigate these risks, the executives


often develop risk management processes that are engrained in all aspects of the company's culture. Senior leadership has the responsibility of ensuring safety and successful implementation of risk management in the organization (Ulrich, 2017). The organization's leaders must proactively manage risk to prevent risk or reduce it. The importance of leadership in the management of risk in an organization was also buttressed by Fernández-Muñiz, Montes-Peón, and Vázquez-Ordás (2014) when they stated that a strong risk management culture could only be created when the leadership is not afraid to facilitate the culture throughout the organization. A risk management culture must be built from the top down as well as the bottom up, or it will likely fail or be just satisfactory (Richter & Haddad, 2015).

The reason why leadership is required in risk management implementation is the fact that if employees need to change their way of thinking or working, the way to engage them starts with effective communication from the leaders. A leader has the greatest impact in creating a team-oriented culture as the leader's actions will speak much louder than words. However, a leader must lead by example. The difference in the performance of two teams is a great leader. A leader must, therefore, be someone who does not just give orders but one who can perform any task that the team is assigned. That is why it is better that leadership should move towards a more tactical and anticipatory approach in helping to identify and mitigate organizational risk rather than remain at the strategic level. As a company's success and survival can depend on the proper implementation of risk management process for the organization. Leaders must therefore not only be seen to have to buy into the idea of risk management but must be ready to follow and implement the processes themselves.

Risk management must take place at all levels and phases of an organization's operation starting from the planning. In the military for example, responsibility should start from NCO,



platoon commander, company commander up to the chief of army staff. The primary objective of implementing risk management in a military operation is to help units protect men and material to win the battle quickly and decisively with minimal losses. It is therefore unacceptable for a leader to approach a situation without first qualifying and quantifying the risks associated with that mission. The most effective leaders include the risk assessment process as part of the organizational strategic planning process and approach the process proactively as a safety measure (Vanvactor, 2014). The importance of leadership in any situation cannot be overemphasized and a good leader must be able to inspire and motivate others by setting examples, delegating tasks and giving clear and detailed directions.

# **Teamwork and Risk Management**

A team is defined as a group of professionals who work together and co-operate to meet set goals either by sharing responsibility or working with a team leader. The success of a leader depends on how well the leader communicates to his team (Crea, 2015). A very critical success factor apart from leadership is teamwork. Teamwork is better captured in the military where personnel work together as a team because lives may be at stake. Teamwork means learning to rely on each other and taking advantage of the combined strength of the team to get the best from every opportunity. One of the challenges to creating an effective team is the tendency in the nature of humans to want to excel beyond others. One way out is to have common goals and giving out of specific responsibilities.

Getting a team to function properly takes time and effort and would require a team leader practically and actively develop team spirit, ethics, trust, and respect. Teamwork is essential in every situation be it a company meeting sales target or a combat situation where your safety is in the hands of teammates and theirs in your hands. Only by working as a team can the organization



or the combat unit achieve its objective. The importance of team work is vital to everyday operation of Military as without teamwork the army, or any of the branches of the military could operate effectively. Furthermore, lack of teamwork would create confusion, lack of commands being sent, duties not being performed properly, and loss of life.

An important factor for work place project success is teamwork because it creates human synergy which amplifies the results of each member of the team thereby making the overall result greater than the individual contributions. Organizations have learnt to increase effectiveness through well-coordinated teamwork. Therefore, developing an effective project team should be the start of any project. There is a limit to what a person can achieve alone but good teamwork can produce the best outcome for the for an organization. That is so because teamwork can help the leader foresee risks he cannot anticipate working alone. Teamwork isn't just about individual help but about coming together as a team and making decisions based on knowledge and experience. In the military teamwork is about an all-round defense of an objective (Howard, 2017). It's about relying on team members to stay alive.

## **Planning Risks Management**

It is important to recognize the fact that even the most carefully planned project can encounter unexpected problems. No matter how well you have planned your project a team member could suddenly quit, a vital resource could come in late or the weather prediction could go wrong. Mitigating such risk requires the planning of how to manage the occurrence. Risk planning can be used in identify potential issues that could cause problems for a project. When planning a project, risks are still uncertain that means they have not happened. Eventually, some of the risks planned for may happen, and have to be managed. The risk management plan is detailed record of how to handle risk in the project.



## **Risk and Uncertainty**

Uncertainty is both a reality and great challenge for most projects (Chapman & Ward, 2003; Hillson, 2010). By definition, risk is a condition that occurs when uncertainties emerge with the potential of adversely affecting one or more of the project objectives and its performance within the enterprise system (PMI, 2013). Risk occurs in all activities, training, endeavor, and in civil of military operations (Tanner, 1997). The most common cause of risk is that of human error as a result of the inability to systematically identify, assess, and mitigate threats (Chao et al., 2014). The application of risk management in military strategic, tactical, and operational decisions making to achieve competitive advantage is, therefore, an idea that is worth the study (Johnson, 2008).

All risks are not equal, and their importance is based on the probability of occurrence, impact on occurrence, and the level of control the project team can exercise to mitigate it (DeLoach, 2015). In order to categorize project risks, it necessary to divide them into internal and external risks. Internal risks are present in the project as a result of organizational policies and initiatives such as poor culture, ethical, health, and safety issues (Scott, 2010). While external risks are those influenced from outside the organization's control and would include in the kitchen remodeling project availability of skilled labor, labor unions, and external stakeholders (DeLoach, 2015). Risks can also be categorized in terms of the impact it has on the organization. These risks are categorized as: strategic, technical, operational, management, financial, and compliance risks (Krane, Rolstadas, & Olsson, 2010). The review will dwell more on operational risks such as encountered in military operations.

Risk quantification is the evaluation of identified risks that will help in the decisionmaking process. This is done in order to arrange the risks in order of priority. Quantifying risks



takes into consideration the risk probability and the risk impact. The product of the impact and probability gives the quantitative value of the risk (Mahmood, Shevtshenko, Karaulova, & Otto, 2018; DeLoach, 2015). Uncertainty is the probability that the objective function will not reach its planned target value or is an unknown probability of occurrence of an event (Perminova, Gustafsson, & Wikstrom, 2008). This means uncertainty is an event or situation which is not expected to occur regardless of whether it could have been possible to consider it in advance. Risk on the other hand is an event with a probability of occurrence that could have positive or negative impact on project objectives such as time, cost, scope, and quality (PMI, 2013). Although risk can be said to be uncertainty, the two terms are not synonymous, and they can be described as cause and consequences (Perminova et al., 2008). Distinguishing between uncertainty and risk will help explain the influence of these on project performance.

The above definitions translate to risk been events that are subject to known or knowable probability whereas uncertainty refers to events for which specifying numerical probabilities is impossible. All projects have different degrees of uncertainty that can create risks since a project is a unique endeavor. Uncertainties arise from deficiencies in areas of knowledge. Despite well laid out plans, there will be some variables that will deviate from what was planned hence the need to assume some risks in project planning. The key to success in projects is that risks are not just analyzed at a point but continually reviewed in the life of the project (Arrow, 2008). Risks are uncertain activities or events that if allowed to occur may have a positive or negative effect on a project set objectives (PMI, 2013). Without risk there is no reward or progress, but unless risk is managed effectively within an organization the opportunities will not be maximized and the threats minimized (Knight, 2010). Risk is all about uncertainty or more importantly the effect



of Every organization has objectives to achieve and in order to achieve those objectives it must manage any uncertainty that will have an effect on their achievement.

Uncertainty and risk are two terms that are often thought to mean the same thing but are not. A project's uncertainties may relate to fluctuations in the price of construction materials, alterations of resource estimates, changes in weather conditions during construction, or shifts in public and investor perceptions. Risks are the potential losses or negative outcomes due to uncertainty.

## **Complexity of Risk Management**

A complex system is a system that cannot be explained by breaking it down into its component parts because the key element is the interaction between parts (Fortunato, 2011). As a result of these interactions, complex system exhibits emerging risk. The complexity or scope is a factor that is likely to influence the ability to deal with risk issues (Haas, 2009; Thomas & Mengel, 2008). Jensen and Aven (2018) define complexity in relation to risk as the limitations in understanding how risk can be assessed on the basis of the available knowledge of the system elements and the assumptions made about the elements. Dealing effectively with risks in complex projects is difficult and requires management interventions that go beyond simple analytical approaches (Thamhain, 2013). They also argue that complexity describes the extent of competitive variation within an industry. Complexity of risk at its basic form occurs in situations where the management did not fully understand the risks they are taking or the consequences of those risks. As the complexity of a system grows, both the sources and severity of possible disruptions increases (Drâghici, 2017). The author states further that higher levels of complexity could lead to a system that is increasingly fragile and susceptible to collapse.



With the causes of complexity expected to shift over the next two years, businesses leaders face an ever-increasing difficult task of identifying risks arising from complexity and managing that risk within acceptable levels (Mazri, 2017). Given the this rapidly shifting nature of underlying causes of complexity, there is the possibility to discover that the underlying driver of complexity may evolve as new risks to oversee. Increased risks to manage emerged as the greatest challenge posed by complexity (Mazri, 2017). Schieg (2006). stated that complexity creates more risks for organization to manage. Complexity also creates sources of new opportunities, in addition to increasing challenges such as gaining competitive advantages, developing new and better strategies, and making organizations more efficient (Drâghici, 2017). In response to the impact of complexity, businesses have tuned to adapt to the changes, with mixed results (Forteza, Carretero-Gómez, & Sesé, 2017). These efforts include improving information management, increasing resources, changing the configuration of the organization, and hiring the new skills.

Complexity creates increasing challenges that must be addressed by organizations. One the most noteworthy challenges is managing increasing risks due to constant innovation, complicated regulation and government oversight, the abundance of information, and the variability involved in today's world (Park, Zhou, & Choi, 2018). In addition to challenges, sources of opportunities are created by increasing complexity. Organizations should obtain an understanding of the causes and impact of complexity in order to incorporate responses into the organization's strategy to effectively manage the challenges and opportunities presented by complexity (Ramasesh & Browning, 2014).

So much has been written about project complexity because of its contribution towards the failure of major projects in terms of cost and time overruns (Qazi, Quigley, Dickson, &



Kirytopoulos, 2016). Long-term projects involving new product development often result in major delays and cost overruns and bearing in mind the complexity of such projects, it is extremely important to consider interdependency between risks and involve different stakeholders in identifying key risks (Ackermann, Howick, Quigley, Walls, & Houghton, 2014). It is not only important to understand and evaluate project complexity but also necessary to study the interaction between project complexity and complexity induced risks. That will enable the prioritization of critical risks and the selection of optimal risk mitigation strategies. Moreover, these risks must also be linked to the project objectives which in turn will influence the utility of the decision maker concerning the relative importance of each project objective. The standard risk management process of risk identification, analysis, evaluation, mitigation, and monitoring framework does reflect the interdependency between risks and complexity (Schieg, 2006).

## **Risk Management Sustainability**

The United Nation World Commission on Environment and Development defined sustainability as a development that meets the present needs of people without endangering the ability of future generations to meet their own needs. Sustainability was also defined as a process by which individuals or entities seek to integrate and produce a balance among competing objectives in economic, environmental and social factors (Staub, Kaynak, & Gok, 2016). Sustainability offers managers a new way of looking at risk beyond the traditional risk management framework (Udo, Yaroslav, & Kateryna, 2017). It allows organizations to consider emerging risk and look for opportunities presented coupled with traditional risk identification and analysis tools to provide risk managers useful data they need to make informed decisions. The traditional approaches to risk management are not meeting client expectations with regard to emerging risks, including those risks that are becoming more apparent as



businesses expand their global operations (Mazri, 2017). Using sustainability as a platform for risk management, traditional concepts can be expanded to include emerging risk areas that are of growing importance in an increasingly global economy

The concept of sustainability grew out of a debate that began in the early 1970s over the relative merits of economic growth and preservation of the environment and social structures of developing nations (Clark, 2017). A framework and a process for the sustainable management of risk that are applicable to any type of organization has been develop. It does not mandate a one size fits all approach but rather emphasizes the fact that the management of risk must be tailored to the specific needs and structure of the particular organization. For sustainability the organization should adapt the risk management components into its existing management system so as to ensure ownership of the policy and process by management and staff (John & Tom, 2010). The traditional risk management approaches are not currently meeting needs in areas of emerging risks. By using sustainability as a platform for risk management, the analysis can go beyond traditional risk management processes of identifying, assessing, and providing responses (Udo et al., 2017).

The analysis of sustainability risks will involve an expanded view of the risk management process. It also incorporates evolving and future anticipated risks that are not always capable of accurate assessment. These risks cannot be ignored if the organization is to survive and succeed in a changing environment. Sustainability issues have significant, lasting impacts on inventory management, supply chain procurement risk, resource availability, price volatility, and human well-being (John & Tom, 2010). When companies treat the issues in sustainability as part of their strategic context they discover risks and opportunities.



Hofmann et al. (2014) argue that little is known about how sustainability issues manifest themselves as risks and how they create losses for corporations. Without an in-depth understanding of this materialization process, conceptualizations of sustainability risks will remain vague and effective management frameworks cannot be developed. Especially complex this issue arises in terms of its connection to corporate competition. Risk management procedures are intended to protect a company's long-term viability amid dynamic markets and regulatory changes. In today's economy, companies face a rapidly growing challenges and opportunities to expand their businesses and create value. The increasing physical, regulatory, reputational, and financial impacts of sustainability issues, including environmental, social, and governance concerns, are compelling companies to take a broader view when identifying and managing risks (LeBlanc, 2016).

## **Risk Management Foresight**

There are situations where individuals or a group working for an organization may analyze, predict, and foresee potentially detrimental consequences of an intended operation. The action is described as foresight, and it comes from answering challenging questions about how to deal with the future. Rohrbeck & Schwarz (2013) described foresight as the ability to see developments before they become trends and to recognize the patterns that emerge with a view to predict the likely impact. Organizations are now urged to use methods to predict potentially detrimental unintended consequences (Rohrbeck & Schwarz, 2013; Fox, 2006). Future events are complex, uncertain, and difficult to predict what developments will take place (Haebegger, 2010). The decision on future risk not only requires proper attention and analysis but requires preparations for possible execution (Paliokaité, Pačésa, & Sarpong, 2014)).



Durst, Durst, Kolonko, Neef, and Greif (2015) further added that to prepare against such risks, organizations and establishments have to prepare new threat analyses by applying strategic foresight used as a tool to inform of potential future developments and reducing the chances of harmful outcome. Strategic foresight stems from the economic sector but is now been applied areas safety and security (Habegger, 2010). The application of strategic foresight is in three phases: detection and analysis of developments, generation of foresight knowledge, and development of policies to mitigate the threats or obtain optimum benefits in case of opportunities (Habegger, 2010). Schmidt (2015) underscored the importance of foresight by concluding that every organization should have foresight function that is integrated within its existing policy, planning and intelligence functions.

#### **Risk Management and Competitive Advantage**

In a survey of business units, it was discovered that the 80% of the top performing units had implemented a formal risk management process (Cooper, Edgett, Kleinschmidt, 2006). The reasons adduced for this success was that risk management leads to better resource allocation, alignment of projects and overarching business goals, better communication, and higher profitability (Kerzner, 2010). There is evidence that suggests that proper risk management capabilities can lead to competitive advantage for an organization (Elahi, 2013; Porter, 2004).

The desire to implement risk management in any organization can be as a result of the need for improvement in operational efficiency, cost savings or increase in return on investment (Rad & Levin, 2008). In their description of risk management, they stated that it is an effective business practice that can increase significantly the probability of success of a project. They however warn that as good as the above may sound; successful implementation of risk management requires a process of identification, assessment, and mitigation of the project risks.



Risk management focuses on mitigating risk and is applicable to all organizations and all types of projects (Kerzner, 2010). Kerzner (2010) found that risk management biggest benefit was project optimization. Project risk management deals with understanding likely problems that might occur on a project and how they might cause a project to fail. Several research findings indicated that poor risk management was likely to cause a project to fail (Pimchangthong & Boonjing, 2017; De Wet & Visser, 2013).

The main concern of governments and military leaders in armed conflicts have been how to reckon with the effect of casualties on government policy or military strategy and mission accomplishment. Government and military leaders consider battle losses from different perspectives. In every armed conflict, the concerns include: effects of casualties, impact on civilians, damage to the environment, loss of equipment, and public reaction (Gallagher, Mackenzie, Blum, & Boerman, 2016). Counter insurgency operations are complex, dynamic, and fluid and are characterized by uncertainty, ambiguity, and friction. Integrating risk management into mission planning, preparation, and execution is expected to help achieve competitive advantage. Also, by continuously identifying hazards and assessing risks commanders can develop and coordinate control measures they can bring to bear on the operation thereby gaining competitive advantage. Risk management helps in achieving competitive advantage by conserving lives and resources and avoiding unnecessary risks, making an informed decision to follow a course of action, identifying feasible and effective control measures, and providing reasonable alternatives for mission accomplishment.

The current trend of increasing uncertainties which results to increased business risk demands a strategic-level attention to manage the risks. This strategic-level attention rather than



a tactical one is warranted by the fact risk management capabilities can lead to competitive advantage (Elahi, 2013).

## **Risk Management at Tactical Level**

In the military, tactical refers to actions taken to achieve a particular objective (Johnson, 2012). However, in project execution tactical risk is at the project management level and often concerned with achieving a objective. Tactical risk management objective is the successful completion of the project by addressing risk concerns effectively and efficiently. Often tactical risk assessment requires that the organization develops a risk plan that provides the guidelines to identifying, qualifying, quantifying, responding, and controlling the risk. Tactical risks are different from strategic risks. uncertainties that things that could affect tactical and strategic objectives.

## Strategic Risk Management

The risk-based approach to strategy implementation focuses on minimizing the impact of threats in an organization (Sheehan, 2010). The risk-based approach works optimally when the organization allows managers to control opportunities and threats. Strategy defines the vision and business benefits whereas projects, programs and their deliverables describe the tactics by which the strategy is to be achieved (Hillson, 2006). Many projects fail because of a disconnect between strategic vision and tactical project deliverables, often as a result of poorly defined project objectives. Most projects are undertaken in an environment of uncertainty, arising from technical issues and other constraints (Hillson, 1999). Successful businesses however do not seek to avoid risk, rather they try to identify, assess, and mitigate it.

The principal impact of project management on the organization lies in the connection between risk management and strategy (Elonen & Artto, 2003). In an extensive benchmarking of



project management three overarching objectives were found: strategic alignment, maximum return, and strategic balance (Archer & Ghasemzadeh, 1999). Strategic alignment means that the approved project supports the strategy of the organization. Maximum return means that the approved project achieves the best aggregate financial outcomes relative to the aggregate investment required. Strategic balance means that the project has an appropriate mix of activities, considering the multiple objectives and mandates of the organization. Apart from the risk mitigation treatment of risk avoidance, reduction, transfer and retention there is the cautionary and precautionary strategy like containment, the development of substitutes, safety factors, and redundancy safety measures (Aven, 2016).

# **Risk Management and Military Operations**

The growing complexity of projects, as well as the uncertainty inherent in innovative projects, is making obsolete traditional project management practices and procedures, which are based on the notion that much about a project is known at its start. The current high level of change and complexity confronting organizational leaders and managers requires a new approach to projects so they can be managed flexibly to embrace and exploit change. What once used to be considered extreme uncertainty is now the norm, and managing planned projects is being replaced by managing projects as they evolve. Successfully managing projects in extreme situations, such as military operations shows how to manage successfully projects in today's turbulent environment. Executed under high risk unpredictable conditions, military operations are good sources for learning about how to manage unexpected and unforeseen situations as they occur. Military operations provide case material on how teams coordinate and make use of both individual and collective competencies.



Defense organizations in several nations have turned to risk management for the planning, assessment, analysis, and management risks in several areas (Moon, Whitbread, & Dortmans, 2013). The Department of Defense and other military services, operational planning, training and doctrine, Office of the Undersecretary of Defense for Acquisition Technology and Logistics advocate for risk management thinking at strategic level. Many of these organizations use various risk matrices I to measure uncertainty using probability (Cox, 2008). However, Hubbard (2009) is of the opinion that the use of these risk matrices would not be accurate as risk usually relies on an individual's subjective opinion.

The framework by Levine (2005) provided a very comprehensive outline for the adoption and implementation of risk management to military operations as follows:

- Understand the linkage between the military operation's objectives and organizational strategy so as to focus resources where they will make the most impact.
- Use a structured decision process to support difficult choices.
- Monitor operation's tasks using proven tools and practices.
- Constrain tasks proliferation to keep resources focused on strategy.

This is corroborated by Rankins (2006) who reported that military operations objectives are sometimes set without adequate reference to the means of achieving them and identified four ingredients for successful risk management of military operations as follows:

- Establish very realistic goals in terms of objectives and time frames.
- Alignment of tasks and objectives.
- Ensuring appropriate superior authority participation in the decision process.
- Communicate mission and purpose to the troops.



## **Insurgency and Risk management**

Insurgency and terrorism have become troubling phenomenon in most parts of the world today. Some of these groups have in the past been credited for their contributions in the fight for independence especially in most African and Asian countries. Due to poor resettlement of the group members they carried forward their activities and ended up antagonizing the very governments they were fighting to establish. The reason for this can be understood from different perspectives though, only some of these insurgent actions have certain level of justification. Insurgency, as we know it, is a kind of active rebellion by a group of people against the government or authority, usually through revolutions and guerilla warfare. Counter-insurgency, therefore, is the comprehensive and tactical efforts made by both civilians and the military in order to bring down insurgents, and the same time contain or control the impacts of insurgency.

To counter insurgency, governments have been applying different strategies and tactics for quick resolution of disagreements. Some of these strategies have included, but not limited to the use application of modern technology. However, the draw back in this strategy is that insurgents are also having access to technology and able to counter that of the government and its agencies (Zekulić, Žužić, & Piškulic, 2014). The result is a high casualty rate on government troops and civilians. Other strategies include intelligence gathering on the disposition of the insurgents to enable surprise attacks in their harbor areas and overwhelming mass attacks. However, these strategies of recent have not yield the best result resulting in very high casualty. It is therefore necessary to develop other strategies that will safe guard life and property. The present anti-insurgency tactics used by some military are accompanied by very dangerous and high risks. Recent research and developments are geared towards the mitigation of risk through proper risk management. Risk management in counter-insurgency operations is aimed at



reducing the effort and resources used in mitigating a problem, while effectively reducing the time needed to respond to that occurrence.

The use of risk management has been very effective in corporate organizations and remains a strategy for sustainable development (Zolkos, 2012). The same can be applied to military operations as a competitive strategy. In military operations it may be relatively easier to achieve success using risk management since here it is exclusively aimed at improving military safety and not covering all military activities as in the case with businesses. In the application of risk management to military operations the management team puts their best efforts and emphasis in assessing the likelihood and consequences of potential hazards before making strategic, tactical and operation decisions (US Army DOA, 1995). For example, the British Army spends substantial amounts of resources in risk assessment to guide both tactical planning and force protection. All these efforts are aimed at reducing risk associated with military operations and improving general safety.

#### **Risk Management in Counter Insurgency Operations**

Insurgency is the organized use of subversion and violence to seize, nullify or challenge political control of a region (Johnson, 2012). As such, it is more of a political struggle, in which both sides use arms to achieve their political, economic, and influence to be effective. Insurgency does not always start with a military command structure, but may eventually evolve into a complex matrix of different actors with different aims, all connected in networks. Counterinsurgency (COIN) is the blend of civilian and military efforts designed to contain insurgency by addressing its root causes. Non-military efforts are often more effective in addressing insurgency all though military forces well applied plays an enabling role.



Today's Army is challenged by a wide range of threats and operating environments. These challenges, plus new technologies, require our leaders to use creative measures to provide positive protection to our soldiers and equipment. This calls for the implementation of a risk management process that will help protect soldiers. There cannot be zero loss in any operation and the objective of risk management should never be to remove all risks, but to eliminate unnecessary losses.

#### **Conflict Resolution and Risk Management**

The insatiable want of man for life necessities has often pitted him in conflict with himself and with his neighbors. This situation is further worsened by the inadequacy of all life's needs. Consequently, man had lived with conflicts since ancient times. Conflicts usually occur primarily as a result of clash of interests in the contest between parties, groups or states that are pursuing common but opposing or incompatible goals (António, 2016; Rus, 2014).

In the aftermath of the Cold War, Africa has had its share of conflicts resulting from various forms of disagreements. Some of these conflicts were localized while some transcend international boundaries. An example was the crises in Liberia which started as an internal problem but quickly extended beyond its borders into contiguous states of Guinea and Sierra-Leone (Nmoma, 1997). Similarly, the Burundi genocide between the Tutsi and Hutus flowed over to neighboring Rwanda thereby eliciting the fact that conflicts, once started may not be easy to restrict to a specific place.

Like in other places, conflicts in Nigeria have their origins in interactions within or between two or more people, or groups. These interactions include, economic, social, religious, political, ethnic, communal, gender, racial, sectarian, or professional issues. The conflicts include the protracted clashes within the ancient town of Warri among three ethnic groups, the crises in



Ondo State between two ethnic groups (Ebiede, 2017). Irrespective of the cause, conflicts exhibit similar characteristics of loss of lives, properties, and dislocation in governance. Of recent the actors in conflicts in Nigeria started threatening nation's security. This necessitates an effective conflict management process.

In Nigeria when the police are unable to cope with the management of crises, the military is called in to complement and restore normalcy. In addition to the police and armed forces, there are other security agencies of government that also play complementary roles in conflict management.

Section 217(2) of the 1999 Constitution of Nigeria gives legal backing for the use of the military in conflict management in Nigeria. This aspect of the statute informed the use of the military in past crises and conflict resolution in Nigeria. The military's involvement in containing civil conflicts, have, in the past exhibited professional competence which contributed in bringing these conflicts to an expeditious end. However, in recent times the outcomes of such interventions have resulted in huge losses in both military and civilian lives and properties (Dabkana, Bunu, Na'ay, Tela, & Adamu, 2015). The results of the military operations in these operations were trailed by controversies that were hinged on human rights, rules of engagement and their legality. This in part informed this purpose of this study.

Since Nigeria became a sovereign state, it has experienced a civil war, insurgencies, revolts, strikes, religious and ethnic conflicts (Jegede, 2016). These conflicts which involved the use of arms and ammunitions have all taken their toll on the social well-being of the nation. The current trend world over is for relatively weaker groups to resort to asymmetric means to press home their demands and this presents serious cause for concern. The Nigerian Army has been involved professionally in handling conflict situations since its establishment and still involved.



There are however, several issues and limitations concerning the use of the military instrument in civil conflict management that must be addressed.

In spite of their professional handling of conflicts in Nigeria, the outcomes of the events in some of the insurgencies which resulted into high casualties in the military drew a lot of reactions from the public and the military higher echelon. It revealed serious inadequacies in the management of risks in conflicts by the Nigerian Army. This is another point by the researcher to seek strategies to gain competitive advantage in future operations.

#### **Concept of Conflict Resolution**

The management of conflict involves exercising control over or manipulating an incident so that it does not escalate in its scale of destruction and loss of human life. Managing such will involve knowing exactly what to do and getting it resolved quickly and at little cost. Some authors have given different models of what conflict management should be. For example, Ajakaiye (2005) suggested a four-level conflict management approach that includes conflict prevention, conflict avoidance, conflict settlement and conflict resolution. The combination of conflict prevention and conflict avoidance may well be the early stage of conflict management.

Although conflict resolution refers to the management of conflict processes, it may not result in ultimate resolution because resolution of deep rooted conflicts is often hard to attain. However, conflicts can be managed to make them less destructive and more productive. Conflict resolution is most times used when the conflict entails reducing incompatibilities as much as possible through the use of non-violent or political means. Often times when conflict resolution through political means fails then it escalates to violence Michael Lund (2001) in his suggestion of 'The Life Cycle of International Conflict Management' seven stages of conflict management as routine diplomacy, conflict prevention, crisis diplomacy, peacemaking, peace enforcement,



peace keeping and post conflict peace building. The Lund bell curve of international conflict management is all embracing but because of the localized nature of internal conflicts in Nigeria, the military conflict management efforts occupy the unstable peace and crisis left hand region of the curve.

In a similar vein, Imobighe suggests the Integrated Conflict Management Circle as a more practical process of African conflict management. While Lund's conflict management stages are more universal the Imobighe's conflict management processes are more relevant to African countries, conflicts in Nigeria are more localized and peculiar to Nigeria.

## **Case Study of Indian Military in Conflict Resolution**

The partitioning of the Republic of India into two on 15 August 1947 brought along with it, deep religious violence occasioned by the population shift of Hindus, Muslims and Sikhs. India is a diverse country with six major religions, fourteen officially recognized languages and over eight hundred and fifty living dialects. Some of the trouble spots in India are Assam where the state is demanding autonomy, Punjab where the Sikhs are demanding separation, Kashmir with its heterogeneously divided population, Nagaland where they also are demanding independence from the central government. Khalistan in the region of Punjab also demanded autonomy. There had been and still exist inter-religious conflicts between the Hindu nationalists and Moslems, the greatest of which culminated in the so called Ayodha Conflict in 1984. The Indian Army has been the principal instrument of the Indian government in countering secessionist challenges since independence.

However, like it is the practice in civilized societies, the immediate response of governments to internal strives is to call in the police to restore law and order and when this fails the Army is called out. The Indian Army uses different strategy and tactics for all conflicts in



different parts of the country. In Nagaland for example, the army physically dominated each and every village to combat the insurgency by using the grid system. In this system, the whole terrain was divided into a grid. Each node of grid had a platoon of soldiers in quick reaction teams that reinforced one another with fire support and adequate logistics. In the Wanni jungles of Sri-Lanka, the Indian Army used attack helicopters and artillery to release heavy firepower to support troops in addition to the grid system.

# Case Study of the Pakistani Military in Conflict Resolution

Pakistan is a multicultural and multiethnic Islamic state which got her independence from the British in 1947. Since independence, the new Islamic Republic of Pakistan has had to contend with additional problems of economic deterioration, political independence, ethnic and religious extremism and control of resources. To contend with the several internal conflicts, the government established a special forces outfit called, Pakistan Rangers (PR) with the task of eliminating the extremists and terrorists. Among their tasks are assisting the police in prevention of and detection of crimes in border areas and reinforcing the police for the maintenance of law and order whenever it is necessary.

The general mode of the PR in conflict resolution is by patrols, large scale search and sweep operations, and deploying at random. They engaged terrorists and extremists in the full glare of the citizens to deter others. Nigeria, like India and Pakistan share many things in common. The three countries were former colonies of Britain. The British disregarded ethnic identities and groupings in granting independence to the three nations. This manifested in myriad of problems for the new nations. The military of each of the three nations are modeled after the British military. For Nigeria and Pakistan in particular, both countries have experienced military rule and are still experiencing conflicts arising from natural resources sharing.



Although civil police establishments exist in India and Pakistan, they are unable to contain their internal crises. The militaries of the two nations could not be used to solve their internal crises so as not to detract them from their primary role of defense of their nations against external aggression. The aforementioned reason necessitated the formation and use of an alternative force. The Indian and Pakistani experiences have shown that Special Forces were needed to contain their internal conflicts. Internal conflicts in Nigeria have continued to sprout in spite of military interventions in some instances. Perhaps the Nigerian military need to review its current conflict management practice with a view to evolving a more effective solution. Furthermore, the review could consider the improvement of the existing civil-military relationship. The following chapter examines efforts of the Nigerian military at conflict management.

## **Overview of Conflicts in Nigeria**

The roots of conflicts in Nigeria lie in her recent past history when the British colonial masters after partitioning the geographic entity that was later to become Nigeria into the Northern and Southern Protectorates amalgamated them with little concern for the ethnic groupings. The partitioning consequently encouraged separate developments for constituent ethnic units. The arrangement was simply to suit the colonialists. They failed to pay due attention to the regional, cultural and political differences and inequalities but rather employed the principle of `divide and rule` to their advantage. Even their idea of formation of the security agencies including the armed forces was to have a standing military force that would protect the interests of the colonial trading companies.

Successive indigenous governments after independence did not however perform much better in spite of concerted nationalist efforts by some of them to propagate the doctrine of `unity



in diversity'. Tribalism, nepotism and financial recklessness became the trademark of these governments. The elitist political class that evolved was so parochial that national issues were pushed to the background for tribal and regional interests. Disagreement in the Federal House and brazen disregard for the unity of the nation by the political class provided an opportunity for some military officers to take over power from the First Republic politicians in 1966.

The entry of the military into the polity of Nigeria rather than solve the problem opened another phase of conflict as negative intent were read into the actions of then head of the military, Aguiyi Ironsi. Aguiyi Ironsi had tried to legislate against the divisive tendencies in the country because of the slow pace of federal constituency framework in bringing about the expected national unity in the First Republic. Aguiyi Ironsi was killed and a series of combined political, economic and ethnic factors led to the Nigeria-Biafra war which was the first conflictual challenge to the nation.

Since the end of the Biafran war, Nigeria has experienced many other conflicts of varying proportions and origins. Apart from those inter-ethnic and intra-ethnic based conflicts, there had been and are still existing conflicts based on religious differences. Examples include the Kano riot of 19 October 2001, the Kaduna riot of February 2002, political conflicts like the one that trailed the 2003 elections and the economic/unequal distribution of resources in the Niger Delta or the self-determination issue like the Ogoni conflict (Omoro, 2010). It is noted that ethnic and regional tensions often overlap with religious differences making it difficult to differentiate amongst them. The role of the military since independence has been to intervene when ethnic conflicts and tensions threaten the unity of Nigeria. However, the intervention of the military in each of the civil conflicts was undertaken within the existing legal framework established in Nigerian Statutes.



## **Nigerian Army Procedure for Conflict Management**

The procedure for conflict management is derived from the DHQ procedure for crisis management which is all-embracing. The Chief of Defence Staff (CDS) who heads the Defence Headquarters meets with the Service Chiefs to discuss the situation. The CDS then directs the Chief of Training and Operations (CTOP) to hold a meeting of the Emergency Operations Committee (EOPC) with the various Services` Chief of Operations and the Chief of Logistics in the Defence Headquarters. The meeting develops an operational directive and suggests the composition of a force or forces to be used in the operation including the appointment of the force commander. Such a force commander will be responsible to the CDS.

Before the military is finally committed to either support the civil police or take over from the police or any other organisation involved in the management of the conflict, a thorough appraisal is made especially at the State level to determine the need to involve the military as a result of total breakdown of law and order. Presently, the countrywide structure and disposition of the various formations and units of the military have been deliberately arranged to meet the requirements for crisis management operations.

The provisions of Section 217(2)c notwithstanding, the military would only be involved in the suppression of any insurrection when such insurrection becomes overwhelming and unbearable for the police to handle. At this stage, the State Executive would make a formal request to the President and Commander-in-Chief of the Armed Forces for the military to intervene in such insurrection or general unrest. When the President has approved the use of military forces, a formal hand over/take over between the Police and the military is conducted.

The military, after taking over from the police will operate by the tasked military unit's SOP that spell out the rules of engagement and use of minimum force required to bring the



conflict to a stop before handing over back to the police. While the military operation is ongoing, the police are always on standby to complement the efforts of the military when required. The success of the military in any conflict intervention is dependent on some basic principles that are necessary to allay the fears, apprehensions or repulsion of the civil populace, who are wary of military presence in a civil conflict environment.

Paradoxically, it is the same military that the civil populace run to for refuge when conflicts become so hot and unsafe for civilians to stay in their houses. The principles guiding the successful intervention of the military include joint training on regular basis and the period preceding the conflict management operation among the Services, objectivity and neutrality, use of minimum force, understanding and adherence to legal obligations, good recording of evidence and safeguarding the lives of loyal citizens. Currently, there are no special forces dedicated to conflict management in Nigeria as it is in India or Pakistan. Within the period of this study, the Nigeria military were called to intervene in some large-scale conflicts. The following examples illustrate how the military managed some of the conflicts with a view to appraising their efforts and challenges.

## Assessment of Military Involvement in Conflicts Management

A comparative study of the aforementioned three conflicts reveals that the Kaduna riots were primarily religious in origin, the Jos crisis was of ethno-religious origin while the Warri crisis was ethno-political cum economic based. The intervention of the military was considered necessary since it achieved the desired goals of stopping the conflict and restoring law and order temporarily. The military achieved this by deploying troops around trouble areas, enforcing curfews when imposed, conducting cordon and search operations, arresting miscreants and handing them over to the civil police. On few occasions when the disputing groups used



firearms, the military responded in self-defence. In the process, both civilians and military personnel were killed. The loss of civilian lives always stirred up negative reactions from the populace who believed the military misused their capability.

Current trends however show that the process of conflict management goes beyond merely stopping the violence but extends to post-conflict peace building; a task that is considered as purely non-military (Enaikele & Adeoye, 2017). Non-military agencies including the police, humanitarian agencies, development agencies and others.

#### **Challenges to Conflict Management by The Military**

Despite the successes recorded by the military in quelling riots and stopping civil unrests and destruction, there were daunting challenges and constraints which ought to be addressed to enhance future management of conflicts by the Nigerian military. The inevitability and imperative of conflicts in a society demand that better strategies be evolved to manage all manners of conflicts within that society. Current thoughts in conflict management especially from the military are considering the use of technology as a tool for conflict prevention, particularly in providing early warning. This will be achieved by the use of satellites and other monitoring technologies to detect environmental degradation and resource depletion in areas prone to ethnic or resource-based conflict like the Niger Delta. Current efforts of the Nigerian Government at addressing problems of internal conflicts in the form of establishment of institutes of peace and conflict studies and the recently established Presidential Implementation Committee on Strategic Conflict Assessment are insufficient.

Currently, government preparation for conflict management is inadequate and unless she becomes more proactive in her response to conflicts, she will always resort to ad-hoc solutions. The regular resort to the use of the military when the police are unable to contain the conflicts



brought to the fore, the inadequacies of the military also. The challenges and constraints experienced by the military could be addressed through the use of non-violent strategies (Thoresen, 2009). Koktsidis (2013) proposed the use and practice of non-military coercion.

# Lessons Learnt in Risk Management of Military Operations

The study of risk management has helped fields like sociology and criminology to conceptualize and deal with new policy challenges. It has also impacted on strategic studies in the light of new case studies of recent Anglo-American military campaigns in Kosovo, Afghanistan and Iraq (McDonagh, & Heng, n.d). Risk management is now a key defining feature of our globalized era planning, encompassing issues of financial meltdown, terrorism, infectious diseases, and environmental degradation.

## Military Force in Insurgency

The declared war on terrorism has forced the military to evolve rapidly to meet the challenges (Harding, 2014). This follows the emerging fact that classic military practices cannot handle the evolving threat of insurgency (Dunlap, 2016). The military way of responding to insurgencies has been to deploy a special force to induce terror (Cook & Lourdes Melo Zurita, 2016). The use of military force in the management in insurgencies is conditioned by the appropriate operational environment through the force and its commanders (Kapstein, 2017).

The degree of commitment of the military, the elements to engage with and the terms in which the mandate allows them to act are always spelt out. According to Ramos-Horta (2015) insurgency threats should be addressed with the appropriate use of force, ranging from deterrence to containment, through intimidation and coercion to direct confrontation. Nic and Spily (2013) also stated that military force should be used accurately, proportionately and



appropriately within the principle of minimum force necessary to achieve the desired effect, while at the same.

#### **Nigerian Army in Counter Insurgency Operations**

Since May 1999, Nigeria has been confronted with diverse threats in its security environment from COIN and other forms of asymmetric warfare leaving thousands of dead, injured and homeless. More often the military rather than the police have been called in to curtail the conflict. There are however tough challenges facing the military in COIN operations in Nigeria. The persistence of COIN in the country despite all efforts by government to contain them poses serious challenges to a democratic Nigeria and justifies the need to urgently address the challenges facing the military.

There are several challenges confronting the Nigerian military in COIN operations. These challenges also affect the Nigeria Police that is traditionally charged with the containment therefore incapable of dealing with COIN, hence the involvement of the Armed Forces. One major challenge is the inability of the Nigerian Military to fight irregular enemies with no operational structures and territories (Etim-Bassey, 2011). In addition to this, there is the challenge of the operational failures due to inability to gather intelligence, forecast threats, and prepare contingency plans; and tactical challenges because the Army is poorly trained and equipped.

Another challenge of COIN is that of keeping personnel in long protracted conflicts. They manifest anger, stress, and depression which over extended periods lead to mental health problems (Sharma & Sharma, 2012). Controlling anger, stress, and depression will ensure alertness, endurance, and strength necessary to achieve victory. The summary of these major challenges includes inadequacy of logistic support, inadequacy of operational doctrine,



proliferation of small arms, poor civil-military cooperation, overstretched commitment of the Nigerian Army and poor intelligence gathering and sharing among others. The evaluation of these and implementation of the findings will improve the outcome of COIN.

# **Summary**

The theme of the literature review was the application of risk management as a strategy to gain competitive advantage in military operations with particular reference to COIN operations. One of the several strategies available to civil organizations to gain the competitive advantage is risk management and there are many publications on the added value to corporate organizations that risk management had been used to achieve. In the course of the literature review many of the benefits, challenges, and factors relevant to making effective decisions on the implementation of risk management as a strategy were highlighted. However, there is little information on its application in military operations. Some studies showed that risk management in military operations had been implemented by some militaries in different parts of the world. The implementation followed the same process framework of the PMI used by corporate organizations in project management. However, some authors stated that the conduct of project risk management in civil and corporate organizations have no direct link to how risk management is conducted for military operations. In order to make recommendations for management implementation of risk management, in military operations it was important to understand the process and framework that will improve the effective application of risk management.

The literature review provided a starting point and initial framework to support the case. The ability to implement risk management in a government organization such as the military is potentially impacted by several key factors. However, one fact is clear from the review and that



is that the implementation of risk management can provide structured approaches for dealing with uncertainty and improve operations performance. Risk occurs in all activities whether civil or military because of human error because of the inability to systematically identify, assess, and mitigate threats. Many theoretical and conceptual frameworks have been propounded on how risk is managed in different organizations. Operational risks such as that encountered in military operations and referred to as decision making under risk was the focus of the review. The review narrowed down on the use of prospect theory applied in businesses for formulation of a general military risk management framework that will help in gaining a competitive advantage in counter insurgency operations.

In the review risk management was explained from the view point of the prospect theory. The military applications of risk management have significant similarities with civilian use and consists of the iterative phases of risk identification, analysis, response, monitoring, and control. The review covered risk-based approach to strategy with focus on minimizing the impact of threats in an organization. Some of these strategies included, but not limited to the use and application of modern technology. Finally risk management was discussed in relationship to leadership. Teamwork, foresight, sustainability, complexity, and nature of planning for risk.



#### **Chapter 3: Research Method**

The problem addressed by this study was that of the low success rate in counterinsurgency operations of the Nigerian Army. Specifically, the problem of the low success rate of operations, and the need to determine if, through the application of risk management, an increase in success rate is possible. The critical barriers to the adoption of principles of risk management in COIN operations are currently unknown, yet several challenges are confronting the Nigerian military in counterinsurgency operations. First is the inability of the Nigerian Army to fight irregular enemies with no operational structures (Etim-Bassey, 2011). Secondly, there is the challenge of operational failures due to the inability to gather intelligence, forecast threats, and prepare contingency plans. Finally, there is the tactical challenge due to the Nigerian Army's use of the current order of battle, which is not suitable for counterinsurgency operations.

Insurgency has been on the rise in different parts of Nigeria affecting the civil populace, industries, governments at all levels, and especially members of the military. Several lives and properties have been lost while trying to counter such insurgencies. In other to address the problem, the study was aimed at using the perspectives, knowledge, and opinions of key figures in counterinsurgency planning in the Nigerian Army for assessment and mitigation of the risk. There are also several pieces of research on the benefits of risk management in business organizations, but few on the application of risk management to military operations. Johnson (2012) opined that military operations start with limited knowledge about the enemy; therefore, the use of risk management like in civil organizations will not suffice. It is essential to find out if risk management was useful in other project types.

Risk management principles are not currently applied in the Nigerian Army operations and therefore, its application into counterinsurgency operations as a strategy remains



unexploited. Some authors have opined that military discipline and training, coupled with risk management, would help in achieving competitive advantage (Liwang et al., 2014 & Edmunds, 2012). Others stated that corporate risk management techniques would not take care of the risks in military operations (Johnson, 2007). These contradictions and inconsistencies leave a gap in the study that needs to be researched.

The purpose of this qualitative case study was to explore how the application of risk management as a strategy may help to achieve a competitive advantage in counterinsurgency operations of the Nigerian Army. Levine (2005) stated that risk management applies to all types of organizations and all types of projects. Due to the large number of stakeholders in military operations, a multiple objective approach using risk management process may significantly improve the success rate (Garanovich et al., 2013). The approach may involve a combination of data collection methods, such as interviews, review of manuals and journals, and visiting areas to understand the participants own perspectives. The interviews will be structured to investigate the benefit of the application of risk management as a strategy to achieve sustainable competitive advantage in counterinsurgency operations of the Nigerian Army. Key figures in the strategic planning offices and higher echelons of the Nigerian Army will be interviewed. The study will involve interviewing eight key personnel to include the two General Officers Commanding (GOC) the Infantry Divisions and six Brigade Commanders of the combat and support arms involved in the North-East Operation. Using such credible participants will help the study results reach data saturation (Fusch & Ness, 2015). The interview of key personnel will also help to achieve rich and quality data. Finally, additional data from counterinsurgency manuals and other expert opinions were examined and analyzed to triangulate data received from the interviews and to identify how risk management was conducted or applied. The study was conducted in two



locations in Nigeria. First is the North-Eastern part where presently an insurgent group known as Boko Haram is fighting against the Nigerian Army and in the Niger Delta where another militant group is carrying out another insurgency against the government.

In this chapter, a detailed description and rationale for the selection of the research methodology and design that was used in carrying out the study were discussed. The basis of how the research participants would be selected; with details on how the selected design would align with the selected research procedure and time frame available for the study was also examined. An effort was also made to describe how the research instrument was designed, how it was pre-tested and administered, and the role that was played by the researcher throughout these stages. In the later parts of the chapter, the explanations of the method of data collection and analysis were examined. Finally, the assumptions, limitations, delimitations, and ethical issues related to the study was discussed.

## **Research Methodology and Design**

Research was defined as an inquiry that goes beyond basic general available knowledge to obtain in-depth, focused, and specialized information by eliciting and a thorough analysis of the data acquired (Johnson, 1994). In this research, the aim is to determine if applying risk management as a strategy to achieve a competitive advantage in a military operation such as counterinsurgency may be productive in increasing the success rate. In other to achieve the aim, key decisions of a research methodology and appropriate research design were made. Naoum (2007) described a research methodology as the philosophical assumptions and rationale that brings about a particular study, while research design refers to the procedure, process, or medium that is used to collect, measure and analyze research data; and the strategy used to integrate the different components of the study to effectively address the research problem. Qualitative



research methodology which focuses on the descriptions, experiences, and attitudes of participants in the observed field and a case study design was used for the study.

The study was undertaken as a qualitative research effort which aimed to secure the perception of study participants through a means of subjective, generalized questioning followed by text analysis for overt and covert patterns, themes, or meanings (Adams & van Manen, 2017). The study was not designed for statistical validation of risk management but to capture the perception, feelings, and values of those with lived experiences of counterinsurgency; to elicit the information for the improvement of the Nigerian Army COIN operations. The research was concerned with the impact of risk management, and a qualitative method will deliver more pertinent information and allow the researcher opportunities to explore and identify what the participants express. A qualitative approach was best suited when exploring subjects for which little is known or when trying to find motives, meanings, patterns not readily available in other methods. Ingleton and Seymour (2001) explanation of qualitative research as a detailed and systematic account that plausibly and credibly explain events or phenomena aptly describes the need in this research. The use of a qualitative method in this research was underpinned by the fact that the reality of a situation can only be that experienced by participants in that situation.

There are other research methods, such as the quantitative research method that focuses on using specific questioning and unbiased analysis using numerical measurements (Neuman, 2006). The quantitative method could be used for the proposed research. Also, a mixed method which combines the qualitative and quantitative methods could be used. However, there are reasons why other methods would not be better suited for the study. The quantitative method, for example, will be less desirable for the study of the advantage of risk management in counterinsurgency operations due to the small sample population that will be involved in the



study (Charoenruk, n.d.). The research is, therefore, better suited for qualitative methodological which has two key characteristics of small sample sizes and methods that allow for direct engagement between the researcher and the research participants (Ingleton & Seymour, 2001). Not much is known about the application of risk management to counterinsurgency operations (Heng, 2006). Also, a quantitative method which is not suited for exploring a subject about which little was known would not be suitable. A mixed methods research was also not appropriate for the study as only qualitative data was required.

In terms of the hierarchy of research activities, qualitative research is often placed lower because of the problems of sample size and possibly the type of evidence obtained. However, Costain Schou and Hewison (1999) argued compellingly that small-scale work could provide a richness and depth that cannot be found in quantitative research. The issues at hand in this study are to explore the application of risk management as a strategy to achieve competitive advantage in COIN. The issue is such that cannot be explored in such richness and depth using quantitative methods.

The research design for the study is a descriptive case study which was used to obtain the in-depth experience of participants through direct observation or interaction with subjects (Yin, 2012). Simons (2012), defined a case study as an in-depth exploration from multiple perspectives of the complex and unique nature of a project or real-life situation. In using the case study design, the researcher collected extensive narrative non-numerical data using several variables from the participants lived experiences over an extended period. The purpose was to create an in-depth understanding of the real-life situation of the insurgency. Helena, Melanie, Richard, and Jane (2017), agreed that the case study design would be suitable for data collection of the real world lived experiences of participants in COIN operations using non-structured interviews.


Case studies require the collection and use of data from multiple sources (Yin, 2013). In this study, the collection of data was from sources such as interviews, manuals and journals, and observations from site visits to create opportunities for triangulation of the data. The case study design will use the in-depth participants' narrative of their lived experiences for analysis that will lead to feasible solutions to the problems of COIN operations of the Nigerian Army. Holmberg et al. (2015) stated aptly that lived experiences of individuals are more important than estimating probabilities in making informed decisions.

There are other research designs considered for the study, such as phenomenology, grounded theory, and narrative design. However, the case study was selected above the phenomenological study because the research required three data sources for triangulation to explore perception and not just the lived experiences of the participants (Yin, 2013). A grounded theory design was also not suitable because the study was not conducted to establish any alternative treatment theories or methods (Gredler, 2009). A narrative research design was not suitable as the purpose was not to tell a story of the insurgency in Nigeria. These reasons make the case study more appropriate for use as the research design.

#### **Population and Sample**

In qualitative research, it is apt to select a sample that will increase the scope or range of data that will be collected. The participants of the research were drawn from experienced military personnel that are commanding or have commanded units in counterinsurgency operations and other professionals. It meant that the sample for the study was not randomly drawn from the Nigerian Army but based on the experience of involvement in COIN or other low-intensity conflicts. Participants who have the requisite experience of the subject of the study will be selected. Participants in this study comprised of eight key personnel of the higher echelon



of the Nigerian Army. Specifically, they included the two General Officers Commanding (GOC) of the two operational Divisions in the Northeast operation. Others include the six Brigade Commanders of the combat arms involved in the COIN operation and some battalion commanding officers. Also, independent experts' opinions on COIN was reviewed.

The validity of the research could be hampered by the quality and quantity of data used. Fush & Ness (2015), stated that failure to reach data saturation impacts on the quality of research. Data saturation is reached when enough information to replicate the study can be gotten from the number of participants (Guest, et al., 2006, cited in Fush & Ness, 2015). Data saturation is not about the number of participants but the balance between the quality and quantity of the data obtained. One method of reaching data saturation is through interviews (Fush & Ness, 2015). It can be achieved by asking the participants the same questions (Bernard, 2012, cited in Fush & Ness, 2015). The authors also added that interviewing different categories of people will also enhance data saturation. In a qualitative study, a sample of six to 20 participants with adequate knowledge about the problem of the study is enough to reach data saturation (Palinkas et al., 2015). In this study, the data was collected using interviews, and there was the right mix of participants. Therefore the data saturation was achieved.

#### Materials/Instrumentation

The focus and aim of the research project are to explore the impact of the application of risk management as a strategy to achieve competitive advantage in counterinsurgency operations of the Nigerian Army. The instrument for the study was interviews to elicit participants lived experiences on the subject matter. A clear understanding of participant responses required that open-ended interviews and follow-up questions were asked. The interview with each participant



lasted for approximately one hour. In the course of the interview, the following research questions were asked to elicit responses:

Q1. What is the level of understanding of risk management among officers responsible for counterinsurgency COIN planning in the Nigerian Army?

Q2. What will the officers and men engaged in COIN perceive as barriers in the application of risk management as a strategy?

Q3. What is the interface between risk management and military operations strategy?

Q4. How will the experience of stakeholders optimize the application of risk management to COIN operations in the Nigerian Army?

With the permission of the participants, all interviews were recorded, and the tapes played back at the end of the interview for the participant to confirm and make additional inputs where necessary. The report did not carry the names of the participants, and only the researcher has access to the data. Also, to get the participants relaxed, the interviews were conducted in their locations.

## **Study Procedures**

The study risk is minimal to participants the basis of which the Institution Review Board (IRB) approval was granted before the commencement of data collection. The approval was hinged on the facts that data collection will only involve interviews, observations, and journal reviews. No data will be collected from a vulnerable population. Also, the disclosure of any data collected must not place any participant at any risk both criminal and financial. Finally, there was no video recording of the participants.

It is vital to maintain a procedure in the conduct of the interview in order to maintain a definite focus that will provide maximum benefit to the proposed research study. McNamara



(2009) eight principles to interviewing would be applied in the procedure. The primary location for the interviews was the Northeast where, presently, an insurgency is ongoing. Also, interviews were conducted in the Niger Delta region of the Country where a similar insurgency took place. The purpose is for triangulating the data since the COIN operation in the Niger Delta was also conducted by the Nigerian Army. The interviews were conducted in the participants' offices to reduce distraction. The interviews started with an explanation of the purpose of the interview to the participant and also addressed the issue of confidentiality. After that, the format of the interview was discussed and how long the interview will likely last. Each participant was interviewed separately after a brief lecture on introduction to risk and understanding risk management and concluded on the importance of the study.

The information from participants was obtained using one-to-one non-structured interviews. This method has many advantages but particularly enabling the researcher to explore the many experiences of the participants. Themes were then extrapolated from the data, and from these themes, commonalities and differences were discerned, leading to a discussion as to the effects on the personnel and their needs. With the permission of the participants, all interviews were recorded to make analysis easier and more accurate. It was agreed by the researcher, and the participants that anything said when the recorder is not running will be off the record and not used as part of the research.

#### **Data Collection and Analysis**

A sample by definition refers to a small part of the population that the researcher has adopted to use for the study (Bennett, Briggs, & Triola, 2014). The adoption of samples when carrying out researches stems from the fact that researchers are limited in time and resources required to get the opinion of the entire population. Moreover, the argument that the opinion



expressed by a representative sample will reflect the opinion of the entire population, hence inferences can be drawn from the small sample, and generalization can be made about the population. In this study, the sample comprised of selected officers and men of 7<sup>th</sup> and 8<sup>th</sup> Combat Divisions of the Nigerian Army engaged in the Northeast operation to represent the population. It is on these selected respondents that the research instrument was administered, and their responses were used to answer the research questions.

The data collection process consists of one-to-one interviews with the participants who are different unit commanders. The research questions answer were to meet the research purposes outlined above. The plan was that eight operations commanders would be selected to take part in the interviews, and a similar number of professionals with vast knowledge and academic work on the insurgency. The questions prompt and probes that were used during the interviews covered areas such as the impact of insurgency, management of risk, assessment of risk, and types of mitigation. The interviews all took place within the barracks environment in the individual offices of the commanders, to allow for a more relaxed atmosphere. The inclusion of experts' opinions was to allow for the acquisition of data and insights that would add new angles to the study. The experts were all persons of different grades to allow for more views and diverse mix that generated richer data.

There is no single method of analyzing qualitative data. The reason being that qualitative data analyzes is inductive, which means the researcher has to categorize the data to create patterns and relationships. Yin (2012) proposes five different data analysis techniques: compiling the data, disassembling the data, reassembling the data, interpreting the meaning of the data, and concluding the data. In this study, the analysis started from the time of the interviews and pattern-matching that enabled comparison with empirically based pattern with earlier collected



data was used. During the interviews, a record of concepts that are likely to help to develop a relationship was noted. After that, the data analysis involved coding of the data to identify patterns and structures.

Triangulation is the use of multiple data sources to investigate an activity or phenomenon to get a greater understanding of it (Bekhet & Zauszniewski, 2012). There are different types of triangulation, but in this study, methods triangulation involving data from three different sources were used to increase validity. The procedure started from taking data from the interview of the military commanders and other professionals, data from relevant manuals and journals, and observations from site visits and triangulating them to look for patterns or contradictions.

## Assumptions

An assumption is a realistic expectation of something known to be true and needed to provide a basis to conduct research (Nkwake, 2013). Therefore, managing assumptions is an essential aspect of research (Ritchie, Lewis, Nicholls, & Ormston, 2013). One crucial assumption in a research study is that of population sample that will produce desired outcomes that are both useful and meaningful for the more extensive application. In this study, it was also assumed that the chosen sample is appropriate and that the participants have all experienced low-intensity conflicts or COIN. Oral history has not been the best method of transferring records of past happenings as persons tend to add or subtract from events witnessed. It is therefore assumed that the participants recruited to represent the population will give honest and truthful answers to the interview questions. All the participants volunteered to participate, so it was assumed that participants would have a sincere interest in proffering honest opinion that will give a competitive advantage to the Nigerian Army at the end of the study.



# Limitations

Limitations are usually shortcomings, conditions, or influences over which the researcher cannot control, thereby placing restrictions either on the methodology or conclusion of the study (Price & Murnan, 2004). Some typical limitations are usually sample size, methodology constraints, length of the study, and response rate from the survey or interviews. For example, there may be unknown conditions at the site, such as an attack by insurgents that could bias the responses of the participants or possibly stop the interview. Another limitation is the possibility of some participant being unable to recall specific events accurately bringing to question the results of the study. The number of participants may not be enough from which to conclude adequately. For a qualitative study, it is crucial that the number of participants reach es a level at which saturation of the data is achieved, meaning no new data could add any discovery (Yin, 2012).

## **Delimitations**

The purpose of this qualitative case study is to explore how the application of risk management as a strategy will help to achieve a competitive advantage in counterinsurgency operations of the Nigerian Army. The scope of the study did not include the risk management of conventional warfare. The researcher had the option of using a questionnaire survey but chose to use interviews as a means of eliciting the information from the participant. According to Marshall and Rossman (2016), a semistructured interview is one of the most widely used data collections processes used by qualitative researchers. Interviews are considered one of the best methods for collecting data as they enable a two-way exchange of information.



## **Ethical Assurances**

Ethics in research assign areas of responsibility to participants, colleagues, professional associations, sponsoring agencies, public, and society as a whole (Gillespie, n.d.). The ethical principles of the American Psychological Association (2003) will guide this research. The purpose of the principles is to enable researchers, individuals, associations, and government to take steps to minimize the risks encountered in research (Foo & Wilson, 2012). Achieving the purpose required that the risks benefit ratio is assessed, consent is required, procedures are designed to minimize harm occurring, participants are screened, diagnostic studies are conducted, and proposals reviewed (Alahmad, Al-Jumah, & Dierickx, 2012). In the intended topic of research which is "Risk Management as Strategy for Gaining Competitive Advantage in Counter Insurgency Operations for the Nigerian Army," the above-outlined risk may not all apply as the study will be based on focused interviews. The expected benefits to the Nigerian Army and the public in general in achieving success in counterinsurgency, which will save lives exceeds any expected risks and justifies to an extent the study as ethical.

The informed consent of the Nigerian Army authority, soldiers, and civilians that will be participating in the study was sought after they have been made aware of the design and procedures, and that participation was voluntary. The research design and procedures were constructed in such a way as to protect the identity of the participants while still achieving the research goals. The screening will be carried out for selected officers who have participated in counterinsurgency operations only.

Ethics in research are hinged on three principles conveyed in the Belmont Report, cited (US Department of Health and Human Services, n.d.). The principles are respect for persons which means providing adequate information about the research and possible risks, beneficence



which is designing research to maximize benefits and minimize risks, and justice meaning the research must not exploit and must be fair to all. These ethics and principles will guide the proposed research.

## **Summary**

Several challenges are presently confronting the Nigerian military in counterinsurgency operations. A significant challenge is the inability of the Nigerian Army to fight irregular enemies with no operational structures and territories using the conventional order of battle (Etim-Bassey, 2011). There was, therefore, the need to find alternative strategies or tactics to deal with the problem. The research is intended to find an alternative strategy that will help in achieving sustainable competitive advantage in counterinsurgency military operations. The study seeks to study the application of the risk management process as a strategy using a qualitative case study design.

A qualitative case study research design will be used to investigate the implications of the application of risk management and achieving competitive advantage. The research will use unstructured interviews to elicit the perception and lived experiences of participants, some of whom have participated actively in COIN. The main essence of the study is to show how the use of risk management will help achieve competitive advantage in military operations in the Nigerian Army. Inputs to the design will include background, past development, current conditions, and interaction with individuals, groups, communities, or institutions. All these will be used to analyze for patterns.



## **Chapter 4: Findings**

The approach to risk management in the Nigerian Army has been ad hoc often depending on individual method or experience. In military operations where there is very high probability of adverse events occurring it is necessary to have a well-defined process of managing such risks occurrence. Risk management must therefore be integrated into the planning and execution of all operations and not left to individual reactions. Despite the application of risk management to construction and other projects in the Nigerian Army; risk management has not been applied to operations such as COIN. The Army has relied on the Order of Battle and Standing Operating Procedures (SOP) used for conventional wars. However, COIN operations unlike conventional war is more complex as it adds political and religious angles hence the call for the application of a risk management process. Military operations involve hazards that arise because of limited knowledge and information about the enemy. Johnson (2012) opined that since the consequences of failure in a military operation are different from that of a civil organization the application of civilian risk management approaches to military operation will not suffice. There is, therefore, the need to find an approach that will be better suited.

The purpose of this qualitative case study was to explore how the application of risk management as a strategy will help to achieve competitive advantage in counterinsurgency operations of the Nigerian Army. Nigerian Army troops are exposed to high levels of risk associated with the threat from Improvised Explosive Devices (IEDs) in many areas of the North East of Nigeria. This risk is high because they are likely to encounter these devices and the increasing sophistication of their design has also increased the damage caused by IEDs. In such circumstances, action must be taken to mitigate the risks. This can be done by reducing the



likelihood of a hazard, for example be denying opportunities to plant IEDs, or by reducing the impact of the hazard, for instance by protecting troops in hardened vehicles.

The study was undertaken as a qualitative research to secure the perceptions of study participants through a means of subjective, generalized questioning followed by text analysis for overt and covert patterns, themes, or meanings (Adams & van Manen, 2017). The study is not designed for statistical validation of risk management but to capture the perception, feelings, and values of those with lived experiences of counter insurgency; with the aim of eliciting the information for improvement of the Nigerian Army COIN operations. This chapter is divided into three major sections; Results presentation, Evaluation of Findings, and Summary. The descriptive statements were based on the NVivo analysis of 17 interviews conducted with commanders of units participating in the North East COIN operation based on their lived experiences.

## **Trustworthiness of the Data**

Qualitative researches have four aspects of trustworthiness namely credibility, dependability, transferability, and confirmability. These four aspects must be established for a research to be taken as trustworthy (Gill, Gill, & Roulet, 2018). This qualitative research methodology was based on an established exploratory approach that addressed trustworthiness through the reliability and transferability of the data.

Credibility is one criterion for establishing trustworthiness and involves establishing that the results of qualitative research are credible or believable from the perspective of the participants in the research (Connelly, 2016). The researcher needs to clearly link the research findings with reality to demonstrate the reality of the research study's findings (Gill et al., 2018). Credibility has to do with understanding the phenomena of interest from the participant's eyes,



the participants are the only ones who can legitimately judge the credibility of the results. There are many techniques available to establish credibility. Lincoln and Guba (1985) aptly described credibility as first, carrying out the study in a way that enhances the believability of the findings, and then taking steps to demonstrate it to external readers. To achieve the first step only personnel who have participated and commanded in insurgency operations were selected to relieve their experiences. Secondly triangulating with other sources will prove that the findings can be applied generally.

Transferability is the extent to which the findings of one study can be applied to other similar situations (Burchett, Mayhew, Lavis, & Dobrow, 2013). In the context of this research it is the degree to which the results of this qualitative study of the application of risk management to counter insurgency operations of the Nigerian Army in the Northeast of the country can be generalized or transferred to other contexts or settings in other parts of the country. From a qualitative perspective transferability is primarily the responsibility of the one doing the generalizing (Shento, 2004). However, the qualitative researcher can improve transferability by doing a good job of describing the research context and the assumptions that were used in the research (Burchett et al., 2013). It is now left to the person transferring the result to a different context. To assess the extent to which findings may be transferred to other insurgency operations in other parts of the country similar studies employing the same methods but conducted in different environments could prove the transferability of the study.

Dependability emphasizes the need for the researcher to account for the ever-changing context within which the research occurs (Connelly, 2016). The researcher is responsible for describing the changes that occur in the setting and how these changes affected the way the researcher approached the study. In order to address the dependability issue in this study, the



processes within the study was reported in detail to enable a future researcher to repeat the work, even if the same results were not gotten.

Confirmability refers to the degree to which the results could be confirmed or corroborated by others (Connelly, 2016). In qualitative study, the researcher tends to bring in new perspective to the study. There are a number of ways to enhance confirmability. In this study, confirmability was achieved by documenting the procedures for checking and rechecking the data throughout the study. Steps were taken to help ensure that the work's findings are the result of the lived experiences and ideas of the participants only by comparing the responses of the participants in the same theater of operation. Findings from peer reviewed documents were also used in triangulation analysis in the study and it helped in promoting confirmability.

# Results

The main aim of this chapter is to illustrate the findings of the study. The findings are majorly based on the participants' responses, in addition to other sources from published researches and manuals. The main data collection source was from semistructured interviews while manuals, journals, and observations from site visits was used to create opportunities for triangulation of the data. In the process, the study focused on four main research questions developed based on the objectives of the study, although there were other probing questions asked to gain in-depth information from the participants throughout the interview sessions. The following are the four main question of focus in the research study:

Q1. What is the level of understanding of risk management among officers responsible for counterinsurgency COIN planning in the Nigerian Army?

Q2. What will the officers and men engaged in COIN perceive as barriers in the application of risk management as a strategy?



- Q3. What is the interface between risk management and military operations strategy?
- Q4. How will the experience of stakeholders optimize the application of risk management to COIN operations in the Nigerian Army?

In this chapter, a presentation of qualitative data from 17 participants who signed the informed consent form to participate in the interviews that will be analysed to explore risk management as an instrument for achieving sustainable competitive advantage in counter insurgency operations (COIN) of the Nigerian Army was analysed. There are several factors that affect sample size in a qualitative study; while saturation determines most of the qualitative sample size, there are other factors that can dictate how quickly or slowly this is achieved in a qualitative study Charmaz (2006). These include scope of the study, nature of the topic, quality of the data, and the study design. Saturation in this study was based on the suggestion by Glaser and Strauss (1967) when the collection of new data does not shed any further light on the issue under investigation then saturation is reached. This point was very evident when the data collected was analyzed and the participants were not adding new insights other than that gotten already.

Data of this study were manually recorded by reporting the verbatim transcripts, during which key information related to the study topic were given a priority. The study data fit the proposals by Roberts (2007) that whenever more than one participant gave similar answers to the same question, only the most relevant responses that represented the best answer to that particular question should be selected. Ideally, this technique was adopted because it would be time-consuming and hectic to report every participant's verbatim statements in each interview question, especially when they are similar answers to one question. In short, this technique was adopted to eliminate unnecessary repetition. Nonetheless, the use of verbatim quotations was



adopted based on Spencer et al.'s (2003) argument that verbatim quotations are material in the development of evidence-based conclusions; as well as their role in assuring the validity, credibility, and reliability of the study.

To obtain a detailed exploration of the research questions, the analysis produced special parent nodes (otherwise termed as themes) from each research question using NVivo version 12. The researcher then used the interview texts to conduct a content analysis using the various search query features of NVivo 12 (i.e. word frequency search query, word tree, and coding query), while analysing the data based on the software's contextual linkages capabilities. This process led to the development of various parent nodes (key themes) and child nodes (sub-themes) that were later presented graphically as will be shown herein.

Bearing in mind that data presentation is a key aspect in determining the credibility of the study, the author adhered to a step-wise analysis of data and presented the data as they appeared in the NVivo 12 software without any form of data distortion. So, the analysis process basically involved identification of major themes (derived from each research question) as well as sub-themes, which are also termed as parent nodes and child nodes respectively. In the following section, it is necessary to do a detailed analysis of each research questions and their respective themes and sub-themes.

# 1. What is the level of understanding of risk management among officers responsible for counterinsurgency COIN planning in the Nigerian Army?

**Risk Management**. The theme here was risk management and it was basically to find out the participant's understanding of risk management. Risk management was explored through contextual and textual analysis in NVivo 12. The analysis yielded 487 instances or references of the word 'risk' with 7.41% coverage of the entire textual depth as illustrated in Table 2. While



264 instances or references of the word 'management' yielded 4.20% coverage of the entire textual depth.

Table 2. Contextual and Textual Analysis of Risk Management

			Weighted
			Percentage
Word	Length	Count	(%)
Risk	4	487	7.41
Management	10	264	4.02

Nonetheless, the interview results revealed that the participants generally understood risk management as the process of identifying and mitigating any unexpected outcome that may hinder the achievement of the operation's objectives. This is evidenced by the appearance of 40 textual instances of the word 'mitigate' and 61 instances of the word 'identify' as illustrated in Table 3.



# Table 2.

# Participants Understanding of Risk Management

			Weighted
			Percentage
Word	Length	Count	(%)
Identify	8	61	0.93
Mitigate	8	40	0.61

Qualitative data is best understood within a particular context. Against this background, I developed a graphical representation of the most frequently used word by the participants as they defined the term 'risk management', and conducted a further contextual analysis of specific words to understand how these words were contextually used by the participants: This is presented in Figure 1.





Figure 1. Represents the generated word cloud

A generated word cloud using NVivo 12 revealed that the words 'identifying', 'mitigating' and 'process' were some of the bigger words, meaning that they were the most frequently used words in conceptualizing risk management. For instance, a deeper look at the word 'process' revealed 140 references to the word, even though out of the 140 references to the word 'process', only two references were contextually related to the participant's definition of risk management as illustrated Table 4.



## Table 3.

### NVivo 12 Word Frequency Query

			Weighted
			Percentage
Word	Length	Count	(%)
Process	7	140	0.95
Action	6	17	0.1

The text frequency query search also revealed action as a major phrase used by the participants in the conceptualization of risk management. Particularly, the query revealed 17 references of the word 'action' two of them used in the definition of risk management as in Table 4 above. Hence, some participants understood risk management as a process or procedures that comprises of different activities within an operation. Below are some of the participants' answers to how they understood risk management:

Participant 1: Risk management is the act of preparing against any eventuality that may occur during a military operation. I cited military operation because it's like we are talking more about counter insurgency. It is a set of actions or procedures carried out to mitigate against a hazard in order to reduce the impact of such hazard on military personnel, equipment or operations.

Participant 5: *Risk management to my understanding is how to mitigate risk to reduce uncertain things. To apply it in operations where usually is a form of war in how to reduce those things you are not clear about so you can have a smoother operation.* 



Participant 6: Risk management to me is actually one's ability to identify that which can militate against achieving set goal. Coming up with a plan or an action that will reduce the effect of it.

However, our results also revealed that some participants confused risk management with risk, only until they were prompted to differentiate the two concepts as illustrated below:

Participant 17: Risk management to the best of my knowledge has to do with situations that you don't really plan for but you know they constitute risk, you don't really plan for it or is not as if you envisage it but somehow it comes as a challenge in the course of your operation.

Interviewer: So, that is risk; what then is the management?

Participant 17: The word management now is how to mitigate it, is to mitigate those risk or to manage the risks.

# 2. What is the process of risk management adopted in COIN operation?

The theme here was risk process and refers to the various activities and procedures employed by Nigerian Soldiers in implementing risk management. The NVivo 12 analysis revealed 1 parent node (i.e. the process of risk management), 6 child nodes and 62 references as illustrated Table 5.



# Table 4.

## Analysis of Theme Risk Process

Theme	Codes	References	Remarks
Risk Process	6	62	

A Review of the interview responses revealed that Nigerian military use six major processes or strategies to manage risk during COIN operations. The first process is the development of an elaborate plan or procedure as mentioned by several participants in the interview. In fact, upon running a stemmed word frequency query in NVIVO 12, we found that the word 'plan' with its affiliated phases was the third most frequent word used by the participants as illustrated Table 6 below:



# Table 5.

NVivo 12 Word Frequency Analysis
----------------------------------

			Weighted
			Percentage
Word	Length	Count	(%)
Risk(s)	4	19	3.86
Operate, Operation(s),			
Operational	10	14	2.85
Know, Knowing	4	9	1.83
Management	10	8	1.63
Plan(s), Planned,			
Planning	4	8	1.63

All in all, as illustrated, the participants generally plan and analyse the risks before setting out to go for war, as well as when at war. The plans mostly involve identifying some of the most appropriate responses to ambush and ensuring that everybody is prepared for them.



Figure 2. Text search query of the word planning.



Another sub-theme that emerged from the theme of risk management process is education or being informed. A few participants revealed that a major part risk management process was education or being informed of any possible risk that they might encounter during the operation. In fact, part of the information process was surveillance and reconnaissance conducted by the soldiers before participating in the actual counter insurgency war. Surveillance and reconnaissance were of particular mentioned by participants to be useful in enabling the soldiers to be proactive to ambush and attack rather than be reactive. The following figure is a graphical representation of the word frequency query in NVivo 12 which revealed the words surveillance, reconnaissance and proactive as child nodes emerging from the sub theme of information.



# Figure 3. Graphical representation of NVivo 12 word query.

In order to understand this data from a contextual point of view, we conducted a further textual analysis of the words reconnaissance, surveillance and proactive and revealed the following word trees in Figure 4, 5, and 6.





Figure 4. Text query of the word surveillance.



Figure 5. Text query of the word proactive.



Figure 6. Text query of the word reconnaissance.

Another important child node revealed by the interviewers is hard-hoc response, which they also identified as part of the risk management process. In this regard, participants noted that they did not use any specific process or strategy to manage risk but rather responded to risk as they emerged. For instance, the following are chat transcripts from the interview: Interviewer: *Is there no defined process of following up with risk?* 

Participant 7: There is no defined process. But as a commander you must find a means.

Interviewer: So, when it happens you just find a solution?



- Participant 7: When it comes at time, you have to take your time to make decision to avoid this risk.
- Interviewer: So, in the counter insurgency operation you participated in, what was the process of risk management you adopted?
- Participant 8: In the major operation I have participated in, there were lots of risk I encountered. As a Commanding Officer I have men under me, so I try to educate them while trying to put in structures just to mitigate also, though it depended on the kind of risk we are talking about. So, trying to be specific no risk management technics was used.
- Interviewer: What is the process of risk management you adopted in counter insurgency operation you've participated in?
- Participant 9: Really, we have not been adopting risk management. To my own understanding it is based on merely laid out plan. Most of the time we react to the risks, its ad hoc so we don't plan for them. I thought you are asking what the risk management adopted in the operations not our own. In the normal operation it is embedded in the plan, but we react to it.
- Interviewer: So, did you apply any risk management technics to the risk you encountered, terrain, ambushes? Is there any risk management process you adopted to counter this risk?
- Participant 9: Most of them are sort of improvise, in a way if anything happen this is what to do, have an eye in the air.

So, basically, participants highlighted that ad hoc risk management process entails being reactive, defensive or responsive to any risk that emerges, including making quick decisions



before making such responses. When a text search query on NVivo 12 was performed, the word defensive emerged to be common among four (i.e. 4 textual references) participants as shown in Table 6.

Table 6.

# Text Search Query of the Word Defense

	In		
Name	Folder	Reference	Coverage
Question 2	Files	4	0.17

Moreover, when we developed a word tree to understand the context within which the word was used, the following results in Figure 7 were obtained:



Figure 7. Text search query of the word defensive.

To summarise the findings on this research question, the study interviews reveal that some of the most common risk management processes employed by Nigerian soldiers include being educated and informed, developing ad hoc procedures, being defensive, developing an elaborate plan, and being ready with necessary equipment such as MRAP.

3. What will the officers and men engaged in COIN perceive as barriers in the application of risk management as a strategy?



Further evaluation of the interview results using NVivo 12 revealed another theme of perceived barriers to implementation of risk management process by Nigerian soldiers in COIN operations. Specifically, NVIVO produced one node of perceived barriers, 4 child node and 18 references to participants' perceived barriers as illustrated in Table 7.

# Table 7.

# Evaluation of Barriers to Application of Risk Management

Name	Codes	Reference	Remarks
Question 3	4	10	

One major barrier that was identified by most of the participants is lack of education and knowledge in risk management. In fact, there were ten textual references to education and knowledge as a barrier to implementation of risk management process as illustrated in Table 8. Table 8.

# Analysis of Barriers to Risk Management

Name	Codes	Reference	Remarks
Knowledge in Risk			
Management	1	10	

Specifically, the participants noted that a lack of knowledge in risk management would be a barrier to the implementation of risk management process because of the its elaborate



nature. Below are some of the answers given by the participants regarding lack of knowledge as a barrier to risk management:

- Interviewer: So, if the Army today wants to adopt risk management process based on the 5 stages which you were lectured on, what do you think will be the barrier that will hinder the proper implementation of this process.
- Participant 3: There shouldn't be any barrier per say but I'll look at it as a constraint, limitation and I'll relate that to timing. The issue of risk management is not what most personnel are aware of. If we have to introduce risk management and how to manage it, you need to get the expertise to train personnel and that is time consuming and for you to do that you have to organize a training. You have to factor time, in order to introduce it.
- Interviewer: What of understanding? Will the average soldier be able to understand the process?
- Participant 4: Another challenge is understanding, personnel have to understand and be taught this process. You will face challenge in terms of educating the personnel before making it work.

Further analysis of the data on lack of knowledge and education revealed the following word cloud and word tree in Figure 8, 9 and 10 respectively:





Figure 8. Analysis of the phrase lack of knowledge and the word education.



Figure 9. Text search query of the word understanding.



# Figure 10. Text search query of the word enlightenment.

Another child node that emerged from the theme of perceived barriers is that of

maintaining military discipline, law and order See Figure 11 below:



- Interviewer: What will the officers and men engaged in counter insurgency perceive as barriers in the application of risk management?
- Participant 1: Well because in most cases counter insurgency operations are usually as a result of an internal national crisis, the officers and men involved in such operations usually have a mindset that they are dealing with nationals of their country and therefore be tempted to be lackadaisical in their operations by dealing with the insurgents with kid gloves. This might be misleading and a major barrier to the application of risk management. Some other barriers that the officers and men will be confronted with in the application of risk management will border on military discipline, laws and orders. Communication is usually a major barrier as the officers and men must be able to pass on clear information to one another.
- Interviewer: What do the officers and men engaged in counter insurgency perceive as barriers in the application of risk management process of identification, analysis, evaluation, mitigate, monitor, and review?
- Participant 1: Some of the barriers that will be perceived by the officers and men in the process of applying the risk management process will border on maintaining military discipline in the face of exposure to risks, maintain law and order. Being able to keep the lines of communication as the officers and men must be able to pass on clear information and instructions to one another.



Figure 11. Text search query of the word law.



Another child node emerging from the interviews is the nature of the operation. The participants noted that sometimes the nature of the operation is too unbearable or uncertain to implement any risk management process. For instance:

Interviewer: What do you see as hindrance to the application of the process – which is identification, analysis, evaluation, mitigate, monitor, and review?

Participant 1: Well the main barrier I see to the application of risk management is that military operations are very fluid and are sudden. Therefore, there may not be adequate time to follow through the risk management processes. However, in my opinion it will be wise to at least identify and assess the risk before embarking on finding solutions.

Lastly, some other participants mentioned that poor communication is also a major barrier to application of risk management process, especially because most risk management processes require constant and effective communication. This is illustrated by the findings below:

Interviewer: What will the officers and men engaged in counter insurgency perceive as barriers in the application of risk management?

Participant 1: Well because in most case counter insurgency operations are usually as a result of an internal national crisis, the officers and men involved in such operations usually have a mindset that they are dealing with nationals of their country and therefore be tempted to be lackadaisical in their operations by dealing with the insurgents with kid gloves. This might be misleading and a major barrier to the application of risk management. Some other barriers that the officers and men will be confronted with in the application of risk management will border on



military discipline, laws and orders. Communication is usually a major barrier as the officers and men must be able to pass on clear information to one another.

Figure 12 illustrates a word tree from the text search query done using NVivo 12.



Figure 12. Text search query of the word communication.

# 4. What is the interface between risk management and military operations strategy?

An analysis of interview participants' answers to this question revealed 4 child nodes and 12

references as illustrated in Table 10 below:

Table 9.

Analysis of Participants Answers

Name	Codes	Reference	Remarks
Question 4	4	12	

Participants were keen to identify several interfaces between risk management and military operations, with some of the responses highlighted below:

Interviewer: So, can you identify an interface between risk management process as outlined here and Military operation planning. Is there any similarity?

Participant 2: Yes Sir. As I earlier said. The whole battle is a risk. Without taking any risk, you can't win a battle. You have to identify the risk first, then find a way of motivating men in order for them to take the risk.



Interviewer: That means, in normal military operation planning, there is risk management. Participant 2: Yes, there is.

- Interviewer: Now you know what risk management process is. Can you identify an interface, that is relationship and similarity between risk management as outlined and military operation planning?
- Participant 3: Yes, Sir. To start with. I'll start from the higher level or the strategic level coming down to the operational to the tactical level. Most of the orders are implemented at the tactical level. At strategic level, you start with campaign design. And during the campaign design, you will be able to identify those risk, you can either terminate it or transfer as the case may be. In terminating, that is how you always go back to the higher commander and discuss. In your own level, it cannot be treated, you'll now take your complain up. Coming down to the tactical level, if the campaign is done it translate to operational plan, is expected that by the time the operational plan is ready, you can bring it down to the tactical level commander to implement, some of those risk could have been identified and managed accordingly. I think campaign design is the interface between military strategies and risk management.

An overview analysis of the interview participants with NVivo 12 showed that a majority of the participants identified the estimate process as the popular interface between risk management and military operations. This is evidenced by the way the words 'estimate' and 'process' appeared frequently when I conducted a NVivo 12 word frequency query as shown in the word cloud in Figure 13 below:





Figure 13. Word cloud search of the phrase estimate process.

When we conducted a further analysis of the phrase 'estimate process' by running a text search

query, the following results in Figure 14 emerged:



Figure 14. Text search query of the word estimate.



# 5. How will the experience of stakeholders optimize the application of risk

# management to COIN operations in the Nigerian Army?

Many of the participants believed that the use of risk management process will contribute to a competitive advantage in COIN operations. The NVivo 12 analysis produced two child nodes and 13 references under this question as illustrated in Table 11 below:

Table 10.

# Analysis of use of Risk Management

Name	Codes	Reference	Remarks
Question 5	2	13	

The first child node derived from the analysis is the role of in guiding soldiers to evade risk. In this regard, one participant indicated that the risk management process would guide in evading risk by providing a strategic understanding, at the operation level, of how the soldiers can use their tools and equipment to evade risk of insurgency, as illustrated below:

Interviewer: From your experience, would the application of this frame work give the Nigerian Army competitive advantage in insurgency operation? If yes how?

Participant 6: Yes, if it is applied from the strategic operation down to the tactical operation level. It will help. It will reduce, poor deployment of troop and lack of equipment would be reduced. It will reduce a lot of risks.



Interviewer: From your experience how would the application of risk management framework give the Nigerian Army competitive advantage?

Participant 8: It will give us an edge so to say, in the sense that when we understand the risk and we are able to manage it as you are proposing. It will incorporate in our plans when we are planning operation and with that, we will stand a better chance of succeeding.

In fact, when a word frequency query on NVivo 12 was run, the word 'help' a synonym of guide, appeared as one of the 'big' words, indicating how frequent it was mentioned by the participants. See Figure 15 and 16 below:



Figure 15. Word frequency query of the word help.


A further analysis also revealed that within a contextual framework, the word 'help' was used by participants to illustrate how risk management would assist in minimizing risk, as a competitive advantage to the COIN operation:



# Figure 16. Text search query of the word help.

Another child node that emerged from the analysis is the role of risk management in boosting the soldiers' confidence and morale, as a competitive advantage to the COIN operation. The following are some of the remarks made by the participants:

- Interviewer: From your experience how will the application of a risk management framework give the Nigerian Army competitive advantage in counter insurgency operations?
- Participant 1: It will boost the confidence of the officers and men and make them more confident in the face of counter insurgency operations knowing fully well that the risk factors involved in the counter insurgency operations had been evaluated and analyzed with a view to mitigating the impact on them. The risks they will be exposed to will be strategically mitigated through good planning and provision of a superior intelligence after due assessment and analysis of the risk.

A word frequency query in NVivo 12 revealed moral as one of the 'big words' in the word cloud as illustrated Figure 17 below:





Figure 17. Word frequency query of the word moral.

Figure 17. Word frequency query of the word moral.

A further analysis by running a text search query on the words 'moral' and confidence revealed

the following word trees in Figure 18 and 19:









Figure 19. Text Search query of the word confidence.

### **Evaluation of Findings**

The data analysis revealed that military personnel has different conceptualizations of risk management in the context of COIN. Risk management was generally understood as a process that involves the identification and mitigation of unexpected outcomes that may pose a hindrance to the objectives of the operation. These findings corroborate with the literature by other scholars that have attempted to define risk management in the context of counter-insurgency wars. For instance, Johnson's (2007) insights on risk management in army operations defined it as the activity of conducting "operational estimates that take into account the hazards to the forces as well as considering opposition vulnerabilities." Similar remarks are made by US Department of Defence (2010) that risk management is an iterative process which entails the elimination of risk and or reducing them to an acceptable level within the constraints of time, costs, sustainability, and operational effectiveness. Liwang (2017) defined risk management as a decision-support process that is vital for military planning and operations decision-making. Today, several nations utilize risk-based approaches to analyze the level of security in military operations (Lathrop & Ezell, 2017). Hence, findings from interviews agree with existing pieces of literature that risk management in military operations entails taking considerations into any hazards that may arise and developing effective strategies to mitigate these hazards as and when they arise. Moreover, in his works on military risk in counter-insurgency operations, Johnson (2012) conceptualizes risk management as the attempts to improve the operational effectiveness of the counter-



insurgency mission by considering the likelihood of any adverse events or potential hazards and developing strategies to mitigate these hazards. Of recent, Sipra (2018) explained risk management as making the right decisions by keeping all anticipated risks in view, especially when stakes are high, and consequences matter.

The data analysis also revealed that from the perspective of the participants, risk management is conceptualized as a process that entails various activities and actions that are all aimed at mitigating risk. It showed that risk is understood as a set of activities within the COIN operation that seek to improve the operation's effectiveness and reduce any form of mishap that may arise thereon (Gallagher, 2014). However, literature in other scholastic work such as Johnson (2004) indicated that the idealization of risk management as a process that contains various activities emerges from the fact that counterinsurgency operations experience more complex hazards than other military operations; compounded by the fact that the operations have to be completed within strict deadlines. Consequently, the risk management process must be elaborate, tactical and strategic. Moreover, Johnson (2008) explained the complexity of risk management in COIN operations emanates from the climatic and meteorological factors, all which add to the overall risks that are likely to be encountered during COIN operations. The research results also indicated that risk management is conceptualized as a planning process coupled with various actions aimed at mitigating risk. This finding corroborates with Coleman's (n.d.) conceptualization of risk management planning as an elaborate strategy meant to foresee hazards, estimate its potential damages or impacts, and establish various responses to the hazards. Nonetheless, the participant's conceptualization of risk management, as indicated in the study, could be subjective and may be exposed to some level of bias.



From the collected data it was found that Nigerian soldiers adopt some process when implementing risk management during COIN operations. The majority of participants noted that the first activity in the process of risk management is to develop an elaborate plan of activities that would enable them to mitigate any risk that may arise during their operations. Some of the participants revealed that the plan involves an identification of the responses to uncertainties such as ambushes so that adequate preparation is put in place. The aspect of planning as part of the risk management process adopted by Nigerian military in COIN operations is echoed by Johnson (2008) who asserts that during counterinsurgency operations, military planners prefer to deploy military technologies before their maturity so as to gain an edge over the insurgents, thereby reducing the risk of their forces in the battlefield. This strategy was also suggested by Simpson (2015) to reduce losses to the military which will draw much criticism from the public.

Another aspect of risk management process highlighted by the participants is in education and information. According to the data collected, soldiers involved in the counterinsurgency are exposed to some education or sessions of information meant to give them knowledgeable of any risk they might encounter during the operations. As such, the majority of the participants talked about surveillance and reconnaissance as two significant aspects of the risk management process that came under the theme of education. The term risk surveillance theoretically means an evaluation of levels of risk and the effectiveness of risk management strategies (US Marine Corps, 2018). Further probing of the participants revealed that they interpreted surveillance to mean going into the war zone before the operation to identify, beforehand, any hazards that might emerge during the operation, and establishing the necessary mitigation strategies for these hazards. So, 'surveillance' here should be interpreted as a prior identification of any inherent risk for purposes of informed decisions during the risk management planning process.



The idea of risk identification (also termed as risk assessment), as part of the risk management process in military operations, is not peculiar to the findings in this study because other scholars have also written more about it. For instance, Johnson (2008), while narrating a case study involving an operation to retrieve an unmanned airborne vehicle (UAV) that had come down during a counter-insurgency war in Afghanistan, noted that part of the difficulties the British Army faced was lack of information on the Taliban insurgents' activity within the area of recovery of the UAV. Otherwise, they would have been sure of the level of preparation or equipment they needed for the recovery operation. From this example, it is possible to extrapolate that 'surveillance,' as construed by the research participants to mean risk assessment, is an integral part of the military risk management process during counter-insurgency operations.

The analysis of qualitative data regarding risk management process adopted for COIN by the Nigerian Army goes together with reconnaissance and proactivity – two aspects that were identified by the participants during the interviews. Notably, some participants noted that as part of the risk management process, they conducted a reconnaissance of the area of operation before launching an attack, just to become familiar with the terrain and identify any aspect hazard that might hurt the operation. The participants noted that reconnaissance enabled them to be proactive rather than reactive during the operation. This finding corroborates with the literature by Johnson (2008), whereby he acknowledges that during the recovery of the British UAV in Afghanistan, the British Army eventually chose a crossing point of a river (Helmand River) as their route to the recovery area – a route earlier been monitored by a Dessert Hawk and found to be safe. It helped them chose a shorter route to the mission rather than a longer route that could have given the insurgents a chance to get prepared for the attack at the crash site. Thus, it is possible to



argue that risk assessment and reconnaissance are some of the components of the risk management process adopted by the Nigerian Army for COIN operations.

The data analysis further revealed that COIN operations in the Nigerian Army follow an ad hoc response rather than an elaborate risk management process during their operations. Most participants noted that as opposed to an elaborate risk management process, the Army managed risk as and when it occurred – by adopting ad hoc responses. According to the participants, ad hoc strategies included making reactive decisions whenever the risk occurred and using any strategy that can help avert it; or 'just finding a solution' – as expressed by other participants in the study. The basic idea that emerged from the analysis is that sometimes, the NA COIN operation has to abandon an elaborate risk management process and adopt a reactive, defensive or responsive mechanism to mitigate the risk. This ad hoc approach to COIN risk management was highlighted by other reviewed literature such as Johnson (2008). The author narrated that during the UAV retrieval operation by the British Army in Afghanistan, the rescue team came under attack by insurgents and when instructions were sought from the officer in charge of the operation, they received an instruction to 'Stand on' and face the insurgents. The nature of ad hoc risk management entails being reactive to hazards and making quick decisions as and when the risk occurs. However, reports by Johnson (2008) revealed that the ad hoc response technique of risk management applied by the British Army during the UAV retrieval mission was marred by several challenges and general confusion, a phenomenon that contributed to the loss of life of one general who succumbed to bullet injury to the head. The effectiveness of ad hoc risk management technique in counterinsurgency operations can therefore not be compared to that of an elaborate risk management process within the same context of counterinsurgency war. Therefore, the suggestion that more research is needed on the aspect of ad hoc risk management



in counter-insurgency operations to determine its effectiveness and the situations and circumstances where it is most appropriate is apt.

Results on perceived barriers to risk management in COIN operations revealed exciting insights that are worth studying. For instance, one significant barrier to risk management that was identified by the participants is a lack of knowledge or education in military risk management. Mainly, the lack of knowledge and experience in risk management was a significant barrier due to the complex nature of the risk management process in operation, which requires a tactical approach. This finding corroborates with the writings of Johnson (2008) who was keen to note that during the UAV retrieval mission by the British Army in Afghanistan, a significant cause of loss of life during the operation was lack of knowledge among the troops regarding their roles; as well as lack of experience in counter-insurgency operations that made them take wrong decisions regarding various risk management aspects of the operation. There is, therefore, a need for further research on training and education as a practical approach to ensuring that counterinsurgency troops have better knowledge and experience in risk management during such operations.

It was also found that the nature of COIN operations also presented a barrier to risk management during such operations. Notably, as narrated by some participants the nature of the operations is sometimes so fluid and dynamic to implement any risk management plan or action, thereby creating a hindrance to the application of the risk management process. Some participants complained that the operations are most times sudden and random and confusing to develop a risk management plan or conduct a risk assessment for purposes of developing risk mitigation strategies. This finding corroborates with the assertions of Johnson (2008) that risk management processes during counter-insurgency operations are constrained by time pressures



that complicated the risk assessment procedures. Moreover, according to the US Marine Corps (2018) and UK Ministry of Defence (2008), sometimes there is a need to deploy the troops into the operation with a lot of haste, thereby not providing an opportunity for proper planning, briefing and arrangement of the necessary equipment to counter any risk of attack by the insurgents.

Other barriers to risk management during COIN operations raised in the study is a lack of effective communication among the troops, coupled with the need to maintain military discipline, as well as their obligation to adhere to the law. This finding triangulates with the teachings in the manual for counterinsurgency published in the US Marine Corps (2018) and the literature by Johnson (2008) regarding the UAV rescue mission that was marred with a lot of risks, partly because they failed to define a standard operating procedure that could have defined various communication modalities as well as weapons system for the mission. The data on military discipline and the need to maintain law and order during COIN operations also triangulates with the literature by Coleman (n.d) regarding the ethical considerations during counter-insurgency wars. Particularly, Coleman asserts that during counterinsurgency warfare, troops must initiate combat but with special consideration to the law of armed conflict as well as ethical considerations bordering proportionality and discrimination. Ideally, according to Coleman, these laws are often defined in the rules of engagement issued to the troops while departing for the mission. Paul and Joseph (2017) examined various best practices in counterinsurgency warfare; one important best practice that they point out is the adherence to the rule of law throughout the operation.

Moreover, in the context of risk management, Paul and Joseph (2017) asserted that developing an elaborate counter-insurgent force structure enables the military to have adequate



resources and human resources that is people-centric and whose main aim is to fight against the insurgents albeit within the rule of law. However, Paul and Joseph (2017) noted that the most critical aspect of the structure is that it must be organized to operate within the recommended use of force, and this may sometimes constrain various risk management strategies during the operations. It can be extrapolated from this triangulated data that rules of engagement, backed by the need to adhere to the rule of law, is sometimes an impediment to the implementation of risk management strategies during counter-insurgency operations.

The evaluation also revealed that there are several interfaces between risk management and military operations during military counterinsurgency operations. For instance, participants were keen to note that risk management is inherent in COIN operations simply because such operations always involve some form of risks. Some participants asserted that it is difficult to win any battle without the management risk, and therefore risk management is at the core of COIN operations. This finding corroborates with several pieces of literature that hold the same opinion that risk management is inherent in counterinsurgency operations due to the risky nature of such operations. For instance, Johnson (2012) asserted that whereas all human activities have some element of risk, the risk that is involved in military operations is greater than that experienced in other operations, and therefore risk management is an integral part of any military operation. Ideally, according to the UK Ministry of Defence (2006), the interface between military operations and risk management informed the establishment of a joint risk management policy by the UK's Ministry of defence. Besides, Johnson (2004), in another academic work, asserted that the inherent risk in a counter-insurgency operation in Afghanistan created the need for tactical and strategic operational decision-making during counter-insurgency operations run by the British Army in the area. Coleman (n.d.) also asserted that the degree of risk in



counterinsurgency operations is compounded by the need to separate innocent civilians from insurgents during the operations and therefore such operations are characterized by sophisticated risk management strategies to avoid the death of civilians. It can be deduced that there is an interface between risk management and military operation planning because, from the triangulated data, we find that every step of a counterinsurgency operation is characterized by some level of risk that must be planned for in order to achieve the operations' success. Indeed, this was highlighted by some of the participants who asserted that the relationship between risk management and counterinsurgency operations is evident both at the strategic and tactical level. The participants further suggested that at the strategic level, risk management is included in the campaign design where all the possible risks are identified, and a decision is made whether to transfer them or terminate them. At the tactical level, the participants suggested that risk management should be considered in developing the operational plan, that should be shared with the commanders in charge for purposes of implementation. Particularly, the similarity between risk management and military operation planning was identified in the 'estimate processes' taught in the Nigerian Army. According to the US Department of Army (2000), the estimate process is a pre-determined decision-making process adhered to in military decision-making to ensure that operations achieve high –level success. It entails seven fundamental questions that must be answered by the combat commander in order to develop an effective plan for achieving the success of the mission. To explain further, Drury et al. (2006) asserted that the core elements of the estimate process entail a mission analysis, the application of schematics and graphical techniques, use of sophisticated tools to overcome the enemy at the battlefield. Ideally, these elements exude some similarity with risk management because they form part of the plan to mitigate any hazards ones the troops are at the battlefield.



It was also established that the application of risk management contributes to various competitive advantages in COIN operations. The first advantage of a risk management plan is that it acts as guidance to evading or mitigating risk because it enables the soldiers to understand how they can strategically use the weapons, tools, and equipment in evading risks from the insurgents. Similar remarks were made by Johnson (2012) who asserted that military risk management provides a competitive advantage to COIN operations because it helps in identifying and mitigating risk associated with the insurgents' military actions and makes it possible to develop tactical and strategic plans that are more advanced than those adopted by the insurgents. Consequently, the troops develop the ability to identify and mitigate the insurgents' plans of ambush proactively. Works by US Marine Corps (2018) also indicated that at the fundamental level, risk management creates a competitive advantage for the COIN operations because it involves identifying what the enemy can do to defeat the counterinsurgency operation force and help in developing proactive measures to prevent the identified actions. Literature from US Marine Corps (2018) also indicated that risk management creates a competitive advantage in the context of battlefield terrain because, during risk assessment, the army can identify any aspects of terrain and weather that the insurgents might use to their advantage, and mitigating this risk by either changing the route (to avoid the terrain) or the timing to avoid adverse weather conditions. Apart from issues of terrain and weather, risk management is also depicted by existing literature to be useful in developing prior knowledge regarding the insurgent's capabilities, their weaknesses and probable courses of actions, and establishing effective plans for mitigating these actions (US Marine Corps, 2018).

One last competitive advantage that risk management bestows to COIN operations is: it boosts the confidence and morale of the soldiers. The study findings revealed that upon



establishing an effective risk management plan, the soldiers go to the counterinsurgency operations feeling more confident, especially having known the hazards to expect and the techniques to use in mitigating those hazards. However, the subjective nature of this data affects its generalizability; therefore, it cannot be assumed that all counterinsurgency soldiers developed confidence in facing the insurgents upon establishing risk management plans. However, the role of risk management in boosting the confidence of troops in counter-insurgency operations was well established in this study and as stated in most of the peer-reviewed articles used in the triangulation analysis.

# **Summary**

The purpose of this qualitative study was to explore the lived experiences of the officers and soldiers of the Nigerian Army (NA) in counter-insurgency operation with a view to finding the possibility of the application of risk management to achieve competitive advantage. The NA has been involved in several counterinsurgency (COIN) operations and other internal security operations. However, in recent operations, the heavy casualties suffered necessitated the need for a search for alternative strategies to mitigate such losses. The application of the risk management process in corporate organizations has indeed resulted in tremendous gains, and this study is intended to generalize this success to achieve military advantage especially in COIN operations.

In the study, the author used semistructured interviews of military commanders who have participated in COIN operations to relieve their experiences while answering questions related to the management of risk during such operations. The analysis of the interview data using NVivo 12 clearly showed that risk management is presently not well understood in the Nigerian Army. However, further analysis revealed that the use of the risk management process would increase the competitive advantage of the NA troops when implemented. When these findings were



triangulated with data from other established researches on risk management there was a clear agreement.

#### **Chapter 5: Implications, Recommendations, and Conclusions**

The Nigerian Army had suffered several operational failures due to the inability to gather intelligence, forecast risks, and prepare plans to mitigate such risks. In recent times the problem has been brought to the fore with several losses of human and material resources. One such area is in counterinsurgency operations that have risen in several parts of the country. The key challenges confronting the Nigerian military in counter insurgency operations are the inability of the Army to fight irregular enemies with no operational structures and the problem of the Army's use of the current order of battle that is not suitable for counterinsurgency operations (Cancian, 2017 & Fritz, 2013). The purpose of this qualitative case study was to explore how the application of risk management as a strategy will help to achieve a competitive advantage in counterinsurgency operations of the Nigerian Army.

A qualitative research methodology was adopted in the study, while the research design was a descriptive case study. The research design was selected to enable the researcher to obtain the in-depth experience of participants through direct observation or interaction with subjects (Yin, 2012). In using the case study design, the researcher was able to collect extensive narrative non-numerical data using several variables from the participants lived experience over an extended period. The data collection process consisted of one-to-one interviews with the participants who are unit commanders at various levels as well a few manuals with historical records of insurgencies. The questions used during the interviews covered the following areas:



the impact of insurgency, management of risk, assessment of risk, and types of mitigation. The interviews took place within the barracks environment in the individual offices of the commanders.

Some typical limitations in the study were the sample size, length of the study, and the response rate for interviews. Another limitation was that of some participants being unable to recall specific events precisely due to the long period of the actual event. The chapter started with an overview of the study and after that discussed the implications of the study findings from the research questions answered by participants. Recommendations on how to apply the findings to practice were also discussed. Finally, recommendations for future research on the findings were suggested. The analysis of the primary and secondary data collected enabled the deduction of research findings. The data collection planning was in line with the research objectives derived from the research questions. This chapter is a conclusion of the research findings on each research objective and the contribution of such findings to the existing knowledge on the use of risk management strategies during military counterinsurgency operations.

#### Implications

The findings of this study have many implications for the Nigerian Army, in particular, the Armed Forces, and several paramilitary organizations involved in counterinsurgency operations in Nigeria. The study is significant because the opinions and perspectives of stakeholders in COIN strategic and tactical planning within the Nigerian Army regarding their application of risk management as a strategy were reviewed. Also significant was how such strategy accords them the competitive advantage they need in reducing the present high casualty rate suffered by the Nigerian Army in such operations. Competitive advantage was of specific interest to the present study because it was a useful element during the operations planning



processes. One new thing the present study aimed to achieve was to uncover new strategies for COIN operations that need exploration. In so doing a new theory or framework for COIN operations may be developed. The development of a new approach would contribute to the validity of the National Institute of Standards and Technology (2014) risk management framework (RMF) which provides a process that integrates risk management processes and security activities of an organization.

The study was organized to achieve answers to five main objectives stated as questions. The first was to investigate the level of understanding of risk management among officers engaged in counterinsurgency planning and execution in the Nigerian Army. The second question was to identify the factors that officers involved in COIN operations perceive as barriers to the implementation of risk management strategies. Thirdly, it was to identify any existing interface between risk management and military operations strategy. The penultimate question of the study was to identify the risk management processes adopted in the COIN operations, while the last question was to investigate whether the application of risk management as a strategy will contribute to gaining competitive advantage in COIN operations.

**RQ1**. What is the level of understanding of risk management among officers responsible for counterinsurgency (COIN) planning in the Nigerian Army? The first question of the study was to determine the level at which officers responsible for counterinsurgency COIN planning understood the concept of risk management. The answer was derived from the data collected in the interview conducted. Based on the interview results, it is safe to conclude that officers of the Nigerian Army involved in counterinsurgency operations understand the concept of risk management as the process of identifying and mitigating any unexpected outcomes that may prevent the achievement of the operations' objectives. All counterinsurgency operations



have specific risks associated with it. Therefore, it is not only crucial for the Army to identify these risks but also to assess and mitigate them. Risk management is the appropriate tool for the mitigation of such risks. The answers given to this question in the study confirmed the findings of previous studies that, risk management involves the process of predicting any uncertainty during operation and taking into account any measures to mitigate such risks for the success of the action (Erdeniz, 2016) and (Scibiorek, 2017).

From the responses given, the Nigerian Army officers also understood risk management as a process that comprises of a series of actions and activities aimed at mitigating risk. The interview results analysis revealed that the participants generally understood risk management as the process of identifying and mitigating any unexpected outcome that may hinder the achievement of the operation's objectives. The appearance of 40 textual instances of the word 'mitigate' and 61 instances of the word 'identify' as illustrated in Table 3 was evidence of the understanding of the risk management process. It is essential to note the concept of risk management in counterinsurgency operations as a process that incorporates the element of timing, costs, sustainability, and operational effectiveness (HM Treasury, 2004). From these findings, it is possible to conclude that risk management is understood as a process that assists in the improvement of operational efficiency of military operations by considering the likeliness of an adverse event occurring and developing the necessary strategies for mitigating these uncertainties. By comparing the findings from the interview participants and secondary data, it is safe to conclude that the application of risk management in counterinsurgency operations would be a useful strategy for ensuring that risks in military operations are mitigated.

**RQ2**. What will the officers and men engaged in COIN perceive as barriers in the application of risk management as a strategy? From the analysis of the research data, there are



several barriers to the implementation of risk management in counterinsurgency operations. One barrier that was consistently mentioned by most of the participants was the lack of knowledge and understanding of the risk management process. Knowledge and understanding have to do with the literacy level of the personnel engaged in operations. The fundamental barrier to the application of risk management is, therefore, that of education. The issue of education includes the ability first to read and write; then the ability to understand the process. Findings from the participants' responses indicated that most officers are aware of countermeasures when risk is encountered but require adequate knowledge regarding the risk management process to adopt. Education is an essential segment of risk management in counterinsurgency operations to be able to equip the personnel with at least, basic knowledge about the uncertainties they are likely to encounter. The above corroborates with Johnson (2008) who stated that during the UAV retrieval mission by the British Army in Afghanistan, a significant cause of loss of life during the operation was lack of knowledge among the troops regarding their roles.

Lack of knowledge as opined by some participants would be a significant barrier to the implementation of the risk management process as observed from mock trials during rehearsals. Most of the commanders did not exhibit real confidence as a result of poor understanding of the process. It can safely be concluded from the findings that lack of knowledge on risk management process would be a barrier to its application. The conclusion agrees with other researches reviewed that the lack of knowledge, skills, and experience in risk management could lead to poor decision making (Abubakar, Elrehail, Alatailat, & Elçi, 2017). Followed closely to the barrier of knowledge is that of communication. Most of the newly recruited junior ranks are barely literate, and it will be near impossible to get them to understand the risk management process. Most of the participants suggested that the barrier of education could be surmounted by



introducing the teaching of risk management from the rudimentary level in the various junior and senior training schools.

Another barrier to the application of risk management could be the complex nature of COIN operations, which makes it very difficult to implement step by step process. From findings from the study, it is sometimes difficult to conduct a risk assessment first before developing an elaborate risk management plan due to the sudden nature of some of the operations. The absence of risk assessment will make it difficult to proceed further in the development of the risk management plan. When troops are deployed to the operation in haste, the opportunity for adequate briefing, risk assessment, and proper planning to mitigate any risk that they might encounter is usually lost.

Finally, findings from this study also revealed that the need to adhere to ethics, law, and military discipline could create some level of barrier to the implementation of the risk management process. The Nigerian Army has been an established military and has some historical methods of doing certain things. For example, there are some established standard operating procedures and rules of engagement. Troops have been known to resist change to new processes until it has been tried severally. Despite the overwhelming acceptance of risk management process by most of the participants, it is expected that some will resist the implementation of the new process either due to the perceived difficulty in understanding the risk management process or the fear that it might not work well in practice.

**RQ3**. What is the interface between risk management and military operations strategy? In other to establish an understanding of the risk management process, participants were asked to explain whether there is a meeting point or a relationship between standard military operation strategy and the risk management process. The question created very divergent views and



answers. However, from the analysis of the responses, it will be correct to state that some of the participants did not understand the meaning of the word interface and gave answers not related to the question. A few others who understood described some likely interface with existing operating procedures of the Nigerian Army.

The interface referred to by most participants is the present teaching in the Nigerian Army for operations called the estimate process. The estimate process involves asking a series of questions in a bid to address an issue. The framework of the estimate process ends with risk assessment and mitigation. Most of the participants consider the risk assessment in the estimate process as an interface between the proposed risk management process and the estimate process. However, the estimate process is more applicable at the strategic level rather than the operational or tactical level. One noticeable importance of this interface was that the participants were able to relate to the concept of the risk management process. The preceding agrees with Schultz (1997) that risk management is embedded in a more extensive decision process called the estimate process that considers the technical and social aspects of the risk situation.

**RQ4**. How will the experience of stakeholders optimize the application of risk management to COIN operations in the Nigerian Army? The interview data revealed that officers of the Nigerian Army adopt different approaches during COIN operations. It is a fact that most personnel of the Nigerian Army are not familiar with the PMI's risk management process explained to them. Most of the participants indicated that the process of risk management they apply starts with the development of a risk plan that acts as a roadmap towards carrying out mitigation of perceived risks. It can be concluded, therefore that a risk management process is not a primary input in the Nigerian Army military operation planning. Observation showed that there was no well-defined risk management process laid out like a standing operational



procedure. Instead from the review, the process outlined by the participants in their operations showed an ad hoc arrangement based on the situation on the ground.

In military counterinsurgency operations, it is sometimes not possible to create an elaborate risk management plan, and therefore, officers of the Nigerian Army have most times adopted to ad hoc responses to uncertainties. It involves making reactive rather than proactive decisions or processes to avert a risk quickly. Findings from other studies revealed that sometimes when the military gets attacked at the battlefield, they are instead advised to adopt ad hoc responses to such attacks by standing on and facing the enemy rather than retracting to develop an elaborate plan for engaging the enemy. From the analysis of the participants answers to the question, it can be stated that the Nigerian Army has not developed any risks management process for tackling counterinsurgency operations.

Apart from tact and proactivity, it was established that the use of risk management strategies is especially advantageous if the risk assessment has been carried out (Maziol, 2009). The reason is that risk assessment enables the officers to identify and become familiar with the battle field's terrain, as well as predict other aspects such as the weather. Findings from the study also revealed that the application of risk management as a strategy would contribute to competitive advantage in counterinsurgency operation by boosting the confidence and morale of officers. Notably, in this study, it was established that Nigerian Army feels more confident and ready to participate in counterinsurgency operations when they go to the battlefield with a risk management plan rather than when they do not have a plan. This finding is especially important, considering the significant role that confidence among army officers plays in ensuring the success of military operations.



## **Recommendations for Practice**

Many organizations continue to misunderstand the opportunities that are derived from implementing a good risk management process in all activities with uncertainties. By establishing a process for managing risk, organizations can improve the predictability of their business success (Maziol, 2009). In the Nigerian military, the ability to provide a comprehensive and consistent risk management process or model for all levels of command is highly favored as derived from the suggestions in the study. The objective of a model risk framework is to set out the roles and responsibilities of the various levels of command. The acceptance of the need for a risk framework is one of the crucial steps in the development of a robust model risk management process. The risk appetite should be articulated in the form of statements of risk tolerance limits; to reduce exposure to risks and ensure that military units continuously operate within the boundaries of its risk appetite, model risk mitigation measures are to be also prescribed (Johnson, 2012). Proper implementation of risk mitigation measures should primarily be under the responsibility of unit commanders. However, appropriate checks should be carried out by other higher commanders as appropriate. It is therefore recommended that the Nigerian Army should integrate risk management into the planning of all operations and not the ad hoc way of reacting to risks presently practiced.

The Nigerian Army has the ultimate responsibility for the model risk management process for use in any military operation. It is therefore essential that information on risk provided from the field should be accurate to enable effective oversight of that risk. One finding of this study revealed that there are different understanding and applications of risk management. Majority of the participants understood risk as a process of identifying and mitigating uncertainties that could hinder the achievement of the mission's objectives. However, the idea of



122

risk management as taught in the estimate process is still rudimentary and will not produce the dynamic solution required in a fast-paced operation such as experienced in counterinsurgency. A possible implication of this will be the resultant poor performance by units.

Contrary to what has been portrayed by the participants in the current study, risk management, particularly in the context of military operations, should have a more in-depth and broader scope. For instance, in the literature by Johnson (2012), risk management was defined as an embodiment of operational and tactical decision-making. The definition goes beyond what the risk management process stated. It is therefore recommended that the key to the successful implementation of risk management in operations of the Nigerian Army should include educating the personnel in both the theoretical and practical processes of risk management.

### **Recommendations for Future Research**

The revelation from the current study is that there is a lack of an adequate research inquiry into risk management techniques in counterinsurgency military operations. There are several studies on risk assessment and analysis in several fields of endeavor but very little when it comes to military operations. Military operations consist of tasks that go with very high risk. Despite the increased budget spending in defense in different countries studies to mitigate the risks which could reduce spending have not been conducted. Consequently, it is recommended that more research be done in the area of risk management as a tactical tool for military operations.

Communication breakdown and failure emerged as a significant barrier to the implementation of effective risk management strategies. It is also recommended that more research is required in the area of communication and communication systems as it affects military counterinsurgency operations. Specifically, there is a need to develop more knowledge



on the role of effective communication techniques and methods in the prevention and management of risk in counterinsurgency operations.

The study was conducted to determine if the application of risk management will give the Nigerian Army combat units competitive advantage in the use of risk management as a strategy. Based on findings derived from the responses from participants, it was agreed that the risk management process would give the required advantage. It is therefore recommended that future research should concentrate on developing military risk management process that is peculiar to the military.

# Conclusion

The Nigerian Army tactics and strategy in military operations other than war has hardly changed over the years (Nigerian Army, 2011). While there is the growing sophistication of the militias and insurgents operating within the country; which had resulted in the massive loss of men and materials of the military when called to quell rebellion or other internal conflicts. There is an intersection between prospect theory and military strategy. White (2017) stated that a commander's willingness to stop decreases if he suffers a high casualty. The higher echelon overvalues losses when compared to losses inflicted on the enemy. Hence the call for a better strategy to deal with the increased loss of men and material resources. The problem addressed in this qualitative case study was that of achieving sustainable competitive advantage in counterinsurgency operations of the Nigerian Army through the application of risk management. The interview survey conducted resulted in several findings that will help the Nigerian Army if they are correctly implemented. The implications of the findings were discussed with recommendations for the future conduct of operations that will achieve a competitive advantage.



It is necessary to state that the implementation of risk management will not remove the necessity for standard drills, tactics, techniques, and procedures presently practiced by the Nigerian Army.

The first finding of the study was that the implementation of risk management into counterinsurgency operations of the Nigerian Army would give a competitive advantage. The participants agreed that the risk management process should be applied before embarking on any operation. Most of the participants agreed that it would be difficult to win any operation without first managing the risk. The finding was supported by the Federal Aviation Authority (2000) that stated that systematically identifying risks before an operation will help determine the best course of action to adopt in any given situation as risk management is pre-emptive and not reactive. The process is designed to minimize risks, reduce mishaps, preserve and safeguard human resources and materials. The US Marine Corps Institute (2002) underscores the importance by stating that risk management must be an integral part of all military decision taking.

The second finding was that there were several barriers to the successful implementation of risk management. First is the low level of literacy of the junior personnel of the Nigerian military. The participants who are commanders at different levels opined that most junior staff would not be able to comprehend the process as they are not educated enough to understand the process. The participants also stated that with the dynamic nature of counterinsurgency operations, there is little time available for a commander to delay in implementing the process and therefore there should be a proper understanding of the procedure first. Other barriers which are also related to education is poor communication and discipline. As recommended earlier, it will be necessary to introduce the subject of risk management to all schools of the Nigerian Army. Implementing the recommendation will start the awareness and proper understanding of



the process so that when at the level of command, it will be applied to the understanding of the men under command.

The third finding is that there is an interface between risk management and military operation planning, referred to as the order of battle. Some participants stated that some level of risk management is included in campaign planning before execution. The participants cited the Nigerian Army use of the estimate process, which is a predetermined decision process which provides for risk assessment in mitigation a hazard in the battlefield. The participants advocated for the full implementation of the risk management process to boost the confidence and morale of the troops. The participants reasoned that when all risks have been assessed and plan made to mitigate them, it reduces the uncertainty in operation.

Recommendations were made based on the analysis of data collected from the qualitative case study interviews. The essence of the study was to improve on the success level of the Nigerian Army in counterinsurgency operations. The findings and recommendations aptly covered the opinion of the commanders who participated or presently in the theatre of operation.



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## Appendix A: Introduction to Risk management: Understanding Military Risk Management

A risk is an event whose occurrence is uncertain and occurs in the future. It usually causes a delay or hazard to a unit or its achievement of set objectives or goal. What then is risk management? Risk management as defined earlier is the series of actions taken to identify, assess, and control risks arising from operational activities. The aim is to take decisions that will balance risk costs with mission benefits (US Army DOA, 1998). Why do you need risk management in military operations? The answer is to promote good management of limited resources of men and material. Risk is a fundamental part of all military operations and success will to a large extent depend on deliberate risk assessment and management (Tanner, 1998). Risk when identified must be assessed for acceptability or otherwise. When accepted, effective controls must be put in place to reduce the risk. A commander must be willing to accept some level of risk as most decisions in an operation are made from a position of uncertainty. The increasing risk in COIN operations requires that commanders at all levels understand risk management.

Risk management is the identification, assessment, and control leading to taking decisions to mitigate the risk (PMI, 2013). Risk management has been used successfully to manage project risks in civil organizations. It is fundamental to an organization's strategic plan and is used to address risk attached to the organizations activities with the aim of adding sustainable value. Risk management is usually a continuous process and must be integrated into and organization's culture. Good risk management will translate strategy to operational and tactical attainment of objectives. It must therefore be backed by senior management for effective implementation.



140

The approach to risk management in the Nigerian Army has been ad hoc often depending on individual method or experience. In military operations where there is very high probability of adverse events occurring it is necessary to have a well-defined process of managing such risks occurrence. Risk management must therefore be integrated into the planning and execution of all operations and not left to individual reactions. Despite the application of risk management to construction and other projects in the Nigerian Army; risk management has not been applied to operations such as COIN. The Army has relied on the Order of Battle and Standing Operating Procedures (SOP) used for conventional wars. However, COIN operations unlike conventional war is more complex as it adds political and religious angles hence the call for the application of a risk management process. Military operations involve hazards that arise because of limited knowledge and information about the enemy. Johnson, (2012) opined that since the consequences of failure in a military operation are different from that of a civil organization the application of civilian risk management approaches to military operation will not suffice. There is therefore, the need to find an approach that will be better suited. Table 1 compares some military risk management process to the civil risk management process.



## Table 11.

Comparison of Civil and Military Risk Management Processes

US Army 6-Step Process	US Navy 5-Step Process	PMI 5-Step Process
1. Identify the hazard	1. Identify the hazard	1. Identify the risk
2. Assess the risk	2. Assess hazards to determine risks	2. Analyze the risk
3. Analyze risk control measures	3. Develop controls make risk decision	3. Evaluate the risk
4. Make control decisions	4. Implement controls	4. Treat the risk
5. Implement risk controls	5. Supervise and evaluate	5. Monitor and review the risk
6. Supervise and review		

## Appendix B: List of Questions for the Interview of Participants

In the course of the interview, the following interview questions would be asked and also form the basis for further probes on the understanding and possible impact of risk management in COIN operations:

- 1. What do you understand as risk management?
- 2. What is the process of risk management adopted in COIN operation?
- 3. What will the officers and men engaged in COIN perceive as barriers in the application of risk management?
- 4. Can you identify any interface between risk management and military operations strategy?
- 5. From your experience how will the application of a risk management framework give the Nigerian Army competitive advantage in COIN operations?

