DETERMINANTS OF STRATEGIC RISK MANAGEMENT IN PROJECTS: A CASE OF AMREF HEALTH AFRICA

BY

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UNITED STATES INTERNATIONAL UNIVERSITY- AFRICA
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A Project Report Submitted to the School of Business in Partial Fulfillment of the Requirements for the Degree of Masters in Business Administration (MBA)

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STUDENT’S DECLARATION

I, the undersigned, declare that this is my original work and has not been submitted to any other college, institution or university other than the United States International University in Nairobi for academic credit.

Signed ___________________________ Date ___________________________
Solomon Mutwiri (645967)

This project report has been presented for examination with my approval as the appointed supervisor.

Signed ___________________________ Date ___________________________
Dr. Juliana Namada

Signed ___________________________ Date ___________________________
Dean, Chandaria School of Business
ABSTRACT

The purpose of this study was to examine the determinants of strategic risk management in projects at Amref Health Africa. The study was guided by the following research questions: how does strategy formulation process contribute to effective strategic project risk management in Amref Health Africa, how does the allocation of organizational resources contribute to effective strategic project risk management in Amref Health Africa and how do the systemic factors contribute to effective strategic project risk management in Amref Health Africa.

The research design used in this study was descriptive correlational. The target population of the study consisted of Amref Health Africa’s executive committee members, senior management teams, program managers, project managers, operational managers and senior officers across the 7 countries where the organization has presence. A list of management teams was obtained from employee records maintained by the Human Resources Directorate. A census approach was adopted given that the target population for the study is relatively small (N=125). Questionnaires were used to collect data from the selected respondents. Data collected was analyzed using descriptive statistics and inferential statistics. For this study, data analysis tool used was statistical package for social sciences (SPSS) computer software.

The findings revealed that there was a strong positive correlation between strategy formulation process and strategic project risk management in Amref Health Africa. The strongest positive relationship was noted between the consideration of the views of program personnel during strategy formulation and strategic project risk management. There was also a very strong positive correlation between resource allocation and strategic project risk management in Amref Health Africa. Investing in innovative resources to support organizational objectives had the strongest correlation with strategic project risk management. The study revealed that there is a strong positive correlation between systemic factors and strategic project risk management. Most of respondents noted that Amref Health Africa has high focus on the task to be undertaken and has a high focus on people. The organizations focus on key programmatic impact of activities had the strongest relationship with strategic project risk management.
The research concludes that the strategy formulation process, resource allocation and systemic factors have a very strong positive correlation with strategic project risk management. It further concludes that strategy formulation process, resource allocation and systemic factors contribute to effective strategic project risk management in Amref Health Africa.

The research recommends that there is need for the organization to integrate strategy formulation, resource allocation and systemic factors to strategic project risk management. All the three components would be considered key for there to be effective strategic project risk management. Further, the study recommended that Amref Health Africa could consider ensuring that risk management plans are a mandatory program document for all projects within the organization so that key strategic risks that could hinder the achievement of the organizational goals are identified in good time. Strategic project risk management could also be formally included as a responsibility within the project managers’ job descriptions. Investment in an automated system that will present all data regarding project specific strategic risks to management through a dashboard would be a very useful resource. The formal selection of country risk management champions so that the strategic project risk management process is decentralized from the headquarters would also help ensure that there is effective strategic project risk management.
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Above all, I am grateful to God who gave me peace of mind, strength, good health, and financial provision throughout my study.
DEDICATION

This study has been dedicated to my wife, Maryanne Mwiti and children for the support they have provided to me during my course. Your patience and grace over the long nights has been truly phenomenal.

To my parents Jane and Stanley Mutwiri for their support in my childhood years has shaped my character and discipline required for this course.
ABBREVIATIONS AND ACRONYMS

CEO  Chief Executive Officer
CRO  Chief Risk Officer
COSO Committee of Sponsoring Organizations of the Treadway Commission
CVM  Competing Values Model
ERM  Enterprise Risk Management
EY   Ernst & Young
HR   Human Resource
IIA  Institute of Internal Auditors
IRM  Institute of Risk Management
IT   Information technology
NGO  Non-governmental Organization
OECD Organization for Economic Co-operation and Development
PESTLE Political, Economic, Social, Technological, Legal and Environmental
PWC  Pricewaterhouse Coopers
RBV  Resource Based View
RIM  Risk Management Society
RM   Risk Management
SACCO Savings and Cooperative Societies
SMEs Small and Medium Enterprises
SMT  Senior Management Team
SPSS Statistical Package for Social Sciences
SWOT Strengths, Weaknesses, Opportunities and Threats
US   United States
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CHAPTER ONE

1 INTRODUCTION
1.1. Background of the Problem

Risk refers to the likelihood of an event happening that is unexpected (IIA, 2009). Sheehan (2011) described risk as an internal or external event that could affect the organizations financial performance by either increasing the costs or decreasing the revenue. Risk management as a concept commenced after World War II. At the time there were no books on risk management until 1963 and 1964 when Mehr and Hedges and Williams and Heins published the first books (Dionne, 2013). It had mainly been associated with the need to take up insurance covers to protect companies and individuals from losses arising from accidents. This was viewed to be very expensive and not effective in all instances especially on losses arising from financial risks. Risk management instruments such as derivatives and other risk management models were formulated and utilized from 1970s. This implied that risk management had to be integrated into organizations and the position of Chief Risk Officer created (Dionne, 2013). There were also significant scandals that resulted to closure of companies such as the Enron Scandal. A regulation called Sarbanes-Oxley regulation was instituted in the United States in 2002. This regulation and other such as New York Stock Exchange regulations required that companies include risk management practices in their governance procedures (OECD, 2014).

Calandro (2015) noted that strategic risk management is the process of identifying, assessing and economically managing project/enterprise threatening events over time. He further viewed it as a way of mitigating minor threats before they manifest themselves and get out of control. Organizations that take risk without adequate compensation will perform poorly and be probably liquidated. Sheehan (2011) noted that the balance scorecard by Kaplan and Norton (2008) can be used identify the strategic risks in a business. The balance scorecard perspectives could be used in identifying key strategic risks i.e. customer perspective risks, process perceptive risks, process perspective risks, learning and growth perspective risks and the financial perspective risk.

COSO (2004) indicated that risks can be assigned one of the following four generic responses: avoid the risk, transfer the risk, mitigate the risk or accept the risk. Avoiding the
risk is undertaken when there is a high likelihood of occurrence with a high impact on financial position. It entails not undertaking activities that would expose the organization to risk event (Sheehan, 2010). Transferring the risk is undertaken when there is low likelihood of occurrence of risk event but high negative financial impact if it were to occur. Risk can be transferred through purchasing insurance, hedging or outsourcing (Sheehan, 2010). Mitigating risk is undertaken when the likelihood of occurrence of a given risk is high but the financial impact is low. Risks can be mitigated by instituting robust internal controls that provide the necessary checks and balances (Sheehan, 2010). Accepting risk is only a viable option when the benefits resulting from the given risk event outweigh the cost (Sheehan, 2010).

Modigliani and Miller (1958) noted that risk management would not affect the value of a firm assuming that markets remained perfect. This has been subjected to various criticisms given that markets are never perfect. McShane, Nair and Rustambekov (2011) indicated that imperfections in the market cause the materialized risks to impose costs on the organization and hence resulting to decrease in the bottom-line if not managed well. Their research that focused on insurance companies provided a direct relationship between the traditional risk management and the firm value but no effect of enterprise risk management on the firm value. Haney, Church and Cockerill (2013) performed an in-depth analysis of risk management within the healthcare sector in Canada. They analyzed 5 components that enhance a risk management within an organization. Of concern was the finding that risk management has to be linked with strategic planning and decision process for there to be an effective strategic risk management process within healthcare sector.

Non for profit organizations have also experienced significant risk in the recent past resulting to closure of organizations. Academy for Educational Excellence faced a suspension in 2011 from United States Agency for International Development (USAID) resulting to its closure. This was mainly due to evidence of serious misconduct, internal control lapses and mismanagement (Beam, 2011). The Federation Employment and Guidance Service which was the largest social services agency in New York closed in 2014 due to mismanagement. Between 2008 and 2012 a number of non-governmental organizations in the US disclosed that there was significant diversion of assets as a result of internal mismanagement. A data breach resulting to disclosure of critical information such as donor names, addresses, security codes and credit card information resulted to
Utah Food Bank loosing 8% of its donors (Bilich, 2016). This clearly indicates that risk management is a required concept for Non-governmental organizations.

A number of international NGOs have therefore adopted robust risk management frameworks given that a number of them operate in extremely difficult environments such as Afghanistan, Central African Republic, Iraq/Syria region, Somalia, South Sudan, and Yemen (Stoddard, Haver, & Czwarno, 2016). Humanitarian organizations need to balance between the risks they face and the needs of the beneficiaries. Being risk averse could be to the detriment of programming while taking significant risks has been greatly impeded by the regulations set by various countries to protect its citizens such the counter-terrorism laws. Risk management is therefore critical to every NGO that desires to achieve its various objectives. It allows the NGOs remain compliant with key legislation, reduces the exposure to security and health risks, improves efficiency of the organization due to fewer disruptions, builds the confidence of donors/ funders and improves the decision making process due to clearer information (Boas, 2012).

In Kenya strategic risk management is a concept that has been adopted by various organizations in different sectors. Wanyingi (2013) noted that small and medium enterprises entrepreneurs in textile sector within Nairobi have identified the risk factors that could significantly affect their business operations. The risk factors identified are fire, competitions and stiff import regulations. The study further revealed that business owners have actively pursued risk management strategies such as diversification, maintenance of cash reserves and wide branch network to ensure that they remain sustainable. Within the Kenyan banking sector, strategic commercial risk management is considered critical in the credit card industry. Migwa (2012) noted that there were significant strategic risks facing the credit card industry such as exposure to deceptive emails, inadequate controls surrounding credit card transactions, credit card theft and application of credit card with false information. The researcher concluded that risk management has to be a deliberate and planned exercise if the credit card business is to succeed. Risk management has also been seen to be crucial to Savings and Cooperative Societies (SACCOs) in Kenya (Mwandau, 2014). Mwandau (2014) noted that SACCOs face strategic risks and operational risks that require a systematic way of managing them in order to manage and conduct their businesses to their member’s satisfaction. Within the Kenyan oil and gas industry, Okinyi (2013) noted that price, supply and currency risks are the main strategic
risks that would affect an organization in such an industry. Organizations within this sector should adopt more proactive and robust measures in managing risks if they are to remain competitive and successful. (Okinyi, 2013).

Amref Health Africa is a non-governmental organization with its headquarters in Nairobi, Kenya. The organization has offices in 7 countries with project implementation in over 10 countries in Africa. The Amref offices are located in Kenya, Uganda, Tanzania, Ethiopia, South Sudan, Malawi and Senegal. There are also northern offices tasked with fundraising. These include: United States of America, United Kingdom, Austria, Canada, France, Germany, Italy, Monaco, Netherlands, Nordic and Spain. The organization’s vision is to provide lasting health change in Africa. It is committed to improving the health status of Africans through partnerships with communities and health systems strengthening. The key strategic priorities for the organization include maternal health, child health, water and sanitation, fighting diseases, clinical and diagnostic services, advocacy and research (Amref Health Africa, 2016). Amref Health Africa has several departments that include: Programmes unit, Finance & Administration Department, IT department, HR department and Internal Audit Department. The programmes unit is the largest that constitutes of various programmes within the various countries and is headed by Chief Programmes officer. All these departments play a critical role in ensuring that the overall organization mission is achieved. Given the mandate of the organization and its importance within the continent, it was necessary to examine the determinants of strategic risk management in projects. This enables the organization be in a position to identify and manage critical risks that could cause the organization not to achieve its mandate of facilitating a lasting health change in Africa.

1.2. Statement of the Problem

Research on risk management was mainly focused on profit-driven institutions across various sectors such as banking, insurance, airline industry, pharmaceutical industry, construction industry and textile industry. Migwa (2012) focused on credit risk in Barclays Bank of Kenya and concluded that risk management has to be a deliberate and planned exercise if the credit card business is to succeed in Kenya. Wanyingi (2013) focused on small and medium enterprises in textile sector and noted that the entrepreneurs have identified their risk factors and mitigation strategies. Mutiga (2006) focussed on Central
Bank of Kenya (CBK) and concluded that the nature of business affected CBKs strategic risk management; the number of employees in CBK did not affect strategic risk management and that the organizational structure supported the strategic risk management. Petter Krane, Olsson and Rolstad (2012) focussed on how the project owner and project manager interaction influence risk management in construction companies. He concluded that both the risk owner and risk manager focussed on operation risks with little emphasis on strategic risks within the project. He also concluded that the risk owner focused on the few risks that presented to him/her. There have also been studies that have focused on key strategic risk factors that organizations face and the proposed risk management models. Some of the strategic risk factors captured by various scholars include: Reniers and Sorensen (2013) who focused on safety risks; Gemech, Mohan, Reeves, and Struthers (2011) who focused on price risk; Fukukawa, Mock and Wright (2011) who focussed on external client risk and Lin (2011) who focussed on human resource risk. A study conducted by Wilson-Grau (2004) highlighted some of the reasons and benefits NGOs would get from Strategic Risk Management by discussing a case of Netherlands Organization for International Development Co-operation (Novib/Oxfam Netherlands). He went further to discuss how the organization has used strategic risk management in appraising its grantees. Stoddard, Haver and Czwarno (2016) sought to establish the primary risks that humanitarian NGOs view affects their ability to carry out principled humanitarian action. It also sought to establish how the humanitarian organizations interpret, differentiate, prioritize, and manage the risks internally. The report revealed that international NGOs have begun to adopt sophisticated risk management frameworks that cover safety and security risks, fiduciary, legal, reputational, operational and information risks (Stoddard, Haver, & Czwarno, 2016). The 14 international NGOs selected for the study had a global risk register that aids the decision making process. The risks that received most attention from the management and staff were safety and security risks followed by fiduciary risks. There was less emphasis on legal and information risks. The report also indicates that the risk frameworks do not address the social risks of programming unethically or of violating humanitarian principles (Stoddard, Haver, & Czwarno, 2016).

In all the previous researches there had been no research on the determinants of strategic risk management in projects for non-governmental organizations. This study sought to
address this knowledge gap by focusing on the determinants of strategic risk management in projects at Amref Health Africa.

1.3. Purpose of the Study

The purpose of this study was to examine the determinants of strategic risk management in projects at Amref Health Africa.

1.4. Research Questions

The study was guided by the following research questions:

i. How does strategy formulation process contribute to effective strategic project risk management in Amref Health Africa?

ii. How does the allocation of organizational resources contribute to effective strategic project risk management in Amref Health Africa?

iii. How do the systemic factors contribute to effective strategic project risk management in Amref Health Africa?

1.5. Importance of the Study

The findings of this study will benefit the following:

1.5.1. Academicians and Researchers

The study will be an important catalyst for further exploration and research in this area. This is particularly so because the study is suitable for further research by scholars. It will also form the basis of other studies with interest in strategic risk management for Non-governmental organizations.

1.5.2. Government through the Non- governmental organizations’ board

The NGO Board is responsible for regulating and facilitating the work of non-governmental organizations with an aim of enhancing development. The study will allow the NGO board representatives to identify the determinants of strategic risk management
that could be replicated and shared with other NGOs in a bid to improve their efficiency and effectiveness towards achieving their respective mandates.

1.5.3. Senior Management Teams (SMT)

The Senior Management Teams of Amref Health Africa are generally responsible for setting the long-term strategy that will steer the organization towards sustainability and subsequently achieving the vision. This study will allow the SMT to formally establish the determinants of strategic risk management in projects within the organization and what changes need to be made within the organization to improve strategic project risk management. The study will also assist the management to identify pitfalls that could hinder effective strategic risk management in the organization.

1.5.4. Programme/ Project Managers

Programme/Project managers are responsible for the day to day implementation of project activities. This study will be used by the various programme/ project managers to actively identify the indicators that could hinder effective strategic project risk management and subsequently result to non-achievement of project objectives. It will also allow them be able to actively identify and participate in managing risks that could affect the achievement of the project goals and objectives.

1.5.5. Donors

Donors are critical stakeholders in NGOs given that they are the funders of key projects implemented by the NGOs. The donors will utilize the results of this study to identify critical steps that the organization has undertaken to ensure effective strategic project risk management. This information could be useful in identifying areas that they can support either technically or financially so as to enhance the effectiveness of strategic project risk management.

1.6. Scope of the Study

The study focused on Amref Health Africa and primary data was obtained from executive committee members, senior management teams, program managers, project managers, operational managers and senior officers across the organization. The study was based on
the existing projects in Kenya, Uganda, Tanzania, Malawi, South Africa, South Sudan, Ethiopia and Senegal.

1.7. Definition of Terms

1.7.1. Nongovernmental Organization (NGO)

Non-governmental organizations are entities/corporations that are self-governing, private, not for profit that are geared towards serving particular social interests at local or global level (Schwenger, Straub, & Borzillo, 2014)

1.7.2. Risk

The possibility of an event occurring that will impact the achievement of the project objectives. The measurement is in terms of likelihood and impact (IIA, 2009).

1.7.3. Risk Register

This is a data report that outlines the risks, risk elements, impact and likelihood rating, existing controls and mitigation plans of a given organization (Petter Krane, Olsson, & Rolstadas, 2012).

1.7.4. Strategy

Bryson defines strategy as, “a pattern of purposes, policies, programs, actions, decisions, or resource allocations that define what an organization is, what it does, and why it does it,” (Bryson, 2004).

1.7.5. Strategic Risk

The possibility of an event occurring that will result to strategic failure. It tends to adopt a long-term view and normally requires a key strategic decision by the senior management (Haney, Church, & Cockerill, 2013).

1.7.6. Strategic Risk Management

This is the process of identifying, assessing and economically managing project/ enterprise threatening events over time. It is further viewed as a way of mitigating minor threats before they manifest themselves and get out of control (Calandro, 2015).
1.8. Chapter Summary

This chapter has discussed the background of the study, problem statement, purpose of the study, research questions, importance of the study, scope and the definition of key terms used in the research. Chapter two of the research project will cover the literature review and Chapter 3 outlines the research methodology followed in the study. Chapter four presents the findings of this study while chapter five provides a discussion, conclusion and recommendations of the study.
CHAPTER TWO

2 LITERATURE REVIEW

2.1 Introduction

This chapter examined the literature that related to the determinants of strategic risk management done by other scholars. It is structured based on the specific research questions and mainly focused on how strategy formulation process, resource allocation, human factors and systemic factors contribute to effectiveness of strategic risk management.

2.2 Strategy Formulation and Strategic Risk Management

Strategy formulation is a concept that has existed for a number of years and has been used by various organizations across the globe. Strategic gurus such as Drucker (1985) defines strategy as “the continuous process of making present entrepreneurial (risk-taking) decisions systematically and with the greatest knowledge of their futurity; organizing systematically the efforts needed to carry out these decisions; and measuring the results of these decisions against the expectations through organized, systematic feedback.” Minzberg (1998) in his book, Strategy Safari, states that strategy is a plan, pattern, position, perspective and ploy adopted by a given organization. It has also been defined as the process of determining all future measure that an organization is to implement to achieve its overall goals taking into consideration its internal strengths and weaknesses as well as the external threats and opportunities (Nordic Society of Public Health, 2014).

Strategic risk has been defined as uncertain events and untapped opportunities found within the organizations strategic intent (Mohammed & Sykes, 2016). They are normally external to the business. How the organization responds to the given uncertainties and untapped opportunities is what is referred to as Strategic Risk Management. RIMS (2016) views strategic risk management as a business discipline whereby organizations take deliberate steps and actions regarding any uncertain events or opportunities yet to be tapped that could affect the organizations strategy as well as its execution. Strategic risk management is also viewed as the process where an organization identifies, assesses and manages potentially enterprise threatening events that need to be addressed before they get
out of control (Calandro, 2015). He goes further to indicate that the organizations should strive to ensure that the business model integrity is maintained. The subject of strategic risk management has been of concern to a number of organizations boards. Internal auditors in many organizations are mandated to have a clear understanding of risk and strategy so that they can support the governance body of organizations which is mainly concerned with strategic risk (Byrne, 2014). The governance body would appreciate an independent review of the strategy formulation and implementation process. This will ensure that they have a clear oversight of the risks that could affect the organizations ability to achieve its strategy. OECD (2014) review finds that, risk-taking is a fundamental driving force in business and entrepreneurship but the cost of risk management failures can be grave. The cost of failure has often been underestimated in terms of management time needed to rectify the situation. Corporate governance should therefore ensure that risks are understood, managed, and, when appropriate, communicated (OECD, 2014). COSO (2004) developed a process flow that details how strategic and operational risks can be assessed. These entails identification of risks by category (i.e. strategic, financial, operational, compliance); development of assessment criteria in terms of impact and likelihood; assess the risks which entails the assigning values using the defined criteria; assess the risk interactions; risk prioritization and risk response.

Integration of strategy formulation and strategic risk management is vital to organizations. Dealing with risk is a big challenge for many organizations leaders and key to strategic management (Boholm, Corvellec, & Karlsson, 2012). There are several uncertainties in many decisions that managers in organizations make. Lalonde and Boiral (2012) noted that with the new technological and environmental risks in place, organizations can no longer stick to the formal strategy formulation approach on risk management whereby strategy is viewed as a document an organization has. Rather organizations have to move to reflective strategic praxis in field of risk management whereby strategy is viewed as what an organization does. Boholm, Corvellec and Karlsson (2012) went further to indicate that governance of risk is not seen as an activity in itself but is integrated in all organizational activities from strategizing, budgeting operations management, branding and organizations learning.

Strategy formulation and risk management in many companies has been viewed as distinct processes that are handled independently. O’Brien (2011) indicated that the tools most
regularly used in the strategy process were project management and financial analysis tools. These include cost benefit analysis, forecasting, risk analysis and statistical analysis tools. Scenario planning, simulation and SWOT analysis also featured at the top. These tools are however used by people from various departments. The departments have more often than not operated in siloes (Furstenberg, 2014). Company management that fails to integrate strategic planning into risk management activities are not able to identify pockets of risk that may arise as a result of adopting a particular growth strategy. Failure to incorporate risk management into strategy formulation and strategy implementation also results to lost opportunities for optimum allocation of resources (DHG, 2014). Creating a symbiotic relationship between strategic planning and risk management is critical (Furstenberg, 2014).

Some organizations’ management have indicated that they have made risk considerations as part of the process of developing the organizations strategy. RIM (2016) indicated that this is not enough given that it assumes that the risks identified will be handled in the subsequent operational strategy execution planning process. They further note that the risks identified at the onset of strategy setting as well strategy execution need to be managed accordingly and this can only be done through the adoption of proper strategic risk management framework. Strategic risk management can be implemented as a focused discipline in strategic planning. Economist Intelligence Unit (2010) noted that after conducting a survey of almost 500 executives across the globe, strategic risk management remains an immature activity in many companies with only 35% of the respondents indicating that their companies were effective in anticipating and measuring emerging risks. The report also notes that only 46% of the respondents think that their company is effective at linking risk management with overall corporate strategy. Other key findings from this report were that only a minority of companies have involved risk function of their organizations in making key strategic decisions; many companies have no appetite to invest in the risk function of the organization; the risk expertise at the board level was limited and risk managers spend quite a bit of their time in designing controls and monitoring rather than helping the business managers to achieve their objectives (Economist Intelligence Unit, 2010). It is important for organizations to integrate risk management into strategy formulation. A systematic assessment of risk assists the management in the formation of organizations strategy (COSO, 2004). Enterprise risk management has been described as a process employed while developing the organizations
strategy (COSO, 2004). Moreover, the enterprise risk management guidance, provided by
the private Committee of Sponsoring Organisations of the Treadway Commission,
suggests that organizations can ignore very complex contests like that of company’s
responsibility to society and environment by calling for risk management that addresses
risks to the strategy or objective of the organization (Schiller & Prpich, 2014).

Some of the benefits of integrating strategy formulation and strategic risk management are
highlighted by various scholars and risk management professionals. EY (2014) noted that
through integration of risk management into strategic planning processes the organization
is able to optimize various strategies such as those on investment, capital allocations and
opportunities identification. The new view on risk management is that it is meant to move
away from the traditional compliance and informational function to one that focusing on
taking advantage of uncertainties. Institute of Risk Management (2010) indicated that the
benefits of risk management include assurance, compliance and enhanced decision making.
The organization will also realize efficacy of the strategy, effectiveness of tactics and
efficiency of operations. IRM (2010) further note that there will be reduced cost of capital,
increased accuracy in financial reporting, competitive advantage, reputation and perception
improvement and for government/ public agencies enhanced political and community
support. Schiller and Prpich (2014) noted that governments, after several high profile
crises, employed enterprise risk management which improved the handling of key strategic
risks by aligning the strategy formulation with the concept of rational precaution. This in
effect allowed the key stakeholders to develop robust strategies but at the same time taking
the required precaution given that the government has responsibility to protect the society.
However, Schiller and Prpich (2014) criticised the COSO enterprise risk management
framework for not considering the differences between organizations and their diverse
institutional contexts.

Wallis (2014) noted that integration of strategic risk management to strategy formulation
can provide strategic and operational opportunities by focusing organizational management
on activities that are critical to its success. He also noted that value is created by focusing
on opportunities for process improvement; controlling the risks that can hurt the
organization most, breaking down silos, and helping the organization achieve its
objectives. Chapman (2011) noted that intergration of strategic risk management and
strategy formulation increases the likelihood of business realising its objectives; builds
confidence in stakeholders and investment community; enables a business to comply with the relevant legal and regulatory requirements; ensures that the strategy is aligned to the risk appetite; builds the organization's resilience in a turbulent environment; enhances the effectiveness and efficiency of the governance body and ensures that the resource allocation is optimized.

According to Ribeiro et al. (2016) integration of strategic risk management into strategy formulation could prevent the selection of a mistaken strategy or avoid the non-selection of an important strategy that leads to business success. Lam (2015) noted that most popular tools for strategic planning fail to consider the risks which have eventually resulted to big corporate failures. Lin, Wen, and Yu (2012) in a study focusing on the insurance sector noted that by integrating risk management into all aspects of an organization through enterprise risk management, the firms are able to explore the natural hedging among different classes of risks. The researchers also noted that through the integration of risk management in strategy formulation the firms are better able to allocate their efforts in risk management and decision making. McGonagle (2015) noted that by integrating strategic risk management and strategic planning, there is a high possibility for an organization to know more about its risks than its competitors. This allows the organization to go offensive having considered the upside and downside of each risk. An organization that knows more than its competitors about key strategic risks within a given shared industry will be able to spot adversity in the horizon faster than the competition. Subsequently the organization will be able to make changes faster to address the risk identified. This will provide a competitive advantage having factored in all the industry factors ahead of the competition (Porter, 1980).

2.2.1 Strategy Planning Process and Strategic Risk Management Frameworks

Various scholars have developed strategic planning models that are used to describe the strategic planning process. Kotler and Keller (2013) in their book, Marketing Management, outlined a 7 step process to strategic planning. Given that they were marketers, they believed that strategic planning was a process of developing and maintaining strategic fit between the organization’s goals and capabilities and its changing marketing opportunities. The steps included in their model were Mission formation, SWOT analysis, Goal formulation, Strategy Formulation, Program Formulation, Implementation, Feedback and
Control. The figure 2.1 depicted below is from 2013 edition of their book which provides a pictorial representation of the strategic planning process.

Source: Kotler and Keller (2013, p.70)

**Figure 2.1: Strategic Planning Process**

For nonprofit organizations strategic planning normally takes a slightly different approach. Chikati (2009) in his book, Strategic Planning for Non-Profit Organizations outlined the following strategic planning steps: Agree on the strategic planning (i.e. considered as consensus building); Conduct an environmental scan; Identify key issues, questions and choices to be addressed as part of the strategic planning effort; Define the organization’s values, community vision and mission; Develop a shared vision for the organization; Develop a series of goals or organizational status statement which describe the organization in a specified number of years assuming it is successful in addressing its mission; Agree upon key strategies to reach the goals and address key issues identified through the environmental scan; Develop an action plan that addresses goals and specifies objectives and work plans on an annual basis; Finalize on the strategic plan that summarizes the results and decisions of the process; Build procedures for monitoring and for modifying strategies based on changes in the external environment or the organization. From this analysis it is clear that strategy formulation is a component of strategic planning. Hill (2013) identified the main components of the strategic planning as strategy formulation, strategy implementation and strategy evaluation and control. Strategy formulation entails selecting the relevant strategies after outlining the mission vision, analyzing the external and internal environments (Haberberg & Rieple, 2008).

A robust risk management framework should have the ability to provide the necessary information to the key decision makers to minimize the risk of selecting inappropriate
strategies (Ribeiro, Maia, Montgomery, & Chaves, 2016). Further many common strategic planning tools factor risks. The scholars further developed a framework for integration of risk management into strategic planning. The framework has 2 phases i.e. the pre-strategy risk phase and the post-strategy risk phase as illustrated figure 2.2 below:

![Risk Management Integration Framework](image)

Source: Ribeiro, Maia, Montgomery, & Chaves (2016, p.6)

**Figure 2.2: Risk Management Integration Framework**

Ribeiro et al. (2016) also developed a tool called the decision matrix that enables the users to measure the risk level for each strategic action. The strategic action should then be prioritized based on the action that contributes most to achievement of organizations objectives.

KPMG (2010) developed another framework in a bid to integrate the strategic risk management into strategic planning for corporations. In this framework risk identification and assessment is to be done after the Board of Directors and Senior Management have defined the supporting objectives for the strategic direction of the Organization and identification of existing action plans required to meet supporting objectives. Once the risk assessment is completed the senior management is then required to develop additional action plans and define the performance reporting matrix. EY (2014) developed the integration framework called the risk enabled organization that applies risk insights within business processes. The framework begins by determining the sources of uncertainty, either internally or externally that could affect the businesses processes of an organization.
such as strategic oversight and planning, business level planning and budgeting, operational execution and control and compliance monitoring and assurance. The organizational characteristics are then aligned to the risk appetite, resource allocations, done as per risk planning, businesses processes aligned to technologies and risk activities linked to financial statements. Anticipated result would then be improved business outcomes based on growth, protection of organizations brand and optimization of resources.

2.2.2 Environmental Analysis and Risk Management

Pearce and Robinson (2013) broadly classify an organizations environment as either internal and external environment. Internal analysis focuses on within the organization with an emphasis on employee interaction, stakeholder interaction, internal capabilities, brand awareness and organizational structure. The tool used while conducting an internal analysis is SWOT which seeks to identify the strengths and weaknesses of an organization against the opportunities and threats that exist (Kotler & Keller, 2013). External analysis on the other hand focuses on the firms external environment that comprises of the remote environment, industry environment and the operating environment (Pearce & Robinson, 2013). The remote environment focuses on the economic, social, political, technological and ecological factors that go beyond a single operating situation. Porter (2008) noted that the industry environment focuses on the 5 forces which include: entry barriers, supplier power, buyer power, substitute availability and competitive rivalry. The operating environment focuses on the competitor positioning and customer profiling based on the demographic, geographic, psychographic factors and buyer behavior. It also focuses on supplier, creditor profiling and human resource practices (Pearce & Robinson, 2013).

Some of the tools employed in conducting environmental analysis are also used in risk management. Charity Commission for England and Wales (2016) noted that the PESTLE analysis is useful when assessing the risk arising from the impact of external factors on charity while working internationally. Nitank and Trivedi (2016) noted that the PESTLE analysis and SWOT analysis helps in identifying critical external and internal risks respectively that could impede the achievement of construction project objectives. The Porters 5 forces model could also be adopted in strategic risk management while conducting external enviorment analysis. The five force model constitutes of 5 external
forces which include: threat of substitutes, bargaining power of suppliers, threat of new entrants, bargaining power of suppliers and intensity of rivalry (Porter, 1980). Rice (2010) noted that the 5 force model can be adopted in risk management by replacing the industry factors with the following risk forces: internal organization, industry, information, infrastructure and influences. He called this model Risk Management 5 (RM5). Internal organization risks include: task sharing, staff loads, cross training and assignment duration. The industry risks include: technology, product support and contractual matters. Information risks include: information system back-up, network security, software availability and functionality. Infrastructure risks include: physical security, safety, events recovery and communications network. Influences include: leadership support, policy mandates and external demands. The RM5 model was practically used in assessing the risk in the U.S. Army’s Reconnaissance Helicopter after experts in the field brainstormed and identified all the risks based on the RM5 model factors (Rice, 2010). Value Chain analysis propagated by Porter (1985) was also a tool that describes the activities within and around the organization and compares them to competitive strength of the organization. The specific activities are summarized in the following model:

Source: Porter (1985, p.37)

**Figure 2.3: Values Chain Analysis**
Performing the particular activities in an efficient and effective manner will create competitive advantage for any particular organization. Risk management could also be integrated within the value chain so as to ensure that the organizations activities facilitate the achievement of its objectives. Calatayud and Ketterer (2016) noted that public sector
within Latin America and Caribbean countries could have a more effective role in enhancing value chain access and performance by embracing an integrated risk management approach to value chains. The approach will ensure that risks that affect various value chains are identified, measured accordingly and mitigated through cost effective combination of financial and non-financial instruments.

2.3 Resource Allocation and Strategic Risk Management

Resource allocation needs to be placed in the comprehensive theoretical framework called the Resource Based View (RBV). Barney (1991) was the first contributor to strategic management that elaborated widely on firm’s resources. He noted that firm’s resources and capabilities are heterogeneously distributed among firms and that they are immovable. This will ensure that the organization is able to attain competitive advantage. Barney defined resources as assets, capabilities, organizational processes, firms’ attributes, information and knowledge that used to complete an activity that allows the organization to achieve its overall objectives. Resources are broadly categorized into three: physical capital resources that include plant and equipment, geographical location and raw material access; human capital resource that includes training, experience, judgment, intelligence; organizational capital resources that includes internal controls systems, formal and informal planning. Brahma and Chakraborty (2011) in their study, From Industry to Firm Resources, concluded that sustainability of any given organization is a factor of the firms critical resources and the immobility of the resource factors. They also go further to note that resource based view is not a substitute for other strategic analysis tools such as five-forces analysis by Porter but rather it is meant to complement them. Kraaijenbrink, Spender and Groen (2011) noted that the Resource based view community had relied inappropriately relied on narrow neoclassical economic rationality and therefore the theory has not progressed much in the last few years. They suggest that there is need to incorporate time, space and uncertainty (i.e. risk) into the RBV framework if the organization is to attain a sustainable competitive advantage. Barney, Ketchen and Wright (2011) note that the resource based view requires that an organization have dynamic capabilities, incorporate environmental sustainability and focus on possessing capabilities and resources that address the needs of the base-of-the pyramid in society. MC Williams and Siegel (2011) indicate that firms can capture value by adopting corporate social responsibility strategies.
This indicates that there are many uncertainties that could arise from the need of different capabilities to create value and thereafter sustainable competitive advantage.

A study that sought to examine resource allocation behaviors of US and Taiwanese managers revealed that national culture and the degree of project completion affect the resource allocation model adopted. Other factors such as risk were not included in the study (Chang, 2016). The organizations management should focus on all risks within the organization but this can only be effectively achieved through risk prioritization. Risk prioritization is considered to be one of the key steps of risk management. Risks are mainly prioritized on the basis of cost, time, plan and quality in objectives (Sohrabinejad & Rahimi, 2015). The risk matrix is a useful tool that has been developed that can assist management to rank various risks using four color codes i.e. red, yellow, amber and green zones based on the likelihood of occurrence and impact of given risk. Table 2.1 below is a representation of a simple risk matrix.

Table 2.1 Impact-Likelihood Matrix

<table>
<thead>
<tr>
<th>LIKELIHOOD</th>
<th>IMPACT</th>
<th>Insignificant</th>
<th>Minor</th>
<th>Moderate</th>
<th>Major</th>
<th>Catastrophic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rare</td>
<td>Low</td>
<td>Low</td>
<td>Moderate</td>
<td>High</td>
<td>High</td>
<td></td>
</tr>
<tr>
<td>Unlikely</td>
<td>Low</td>
<td>Low</td>
<td>Moderate</td>
<td>High</td>
<td>Very High</td>
<td></td>
</tr>
<tr>
<td>Possible</td>
<td>Low</td>
<td>Moderate</td>
<td>High</td>
<td>Very High</td>
<td>Very High</td>
<td></td>
</tr>
<tr>
<td>Likely</td>
<td>Moderate</td>
<td>High</td>
<td>High</td>
<td>Very High</td>
<td>Extreme</td>
<td></td>
</tr>
<tr>
<td>Almost Certain</td>
<td>Moderate</td>
<td>High</td>
<td>Very High</td>
<td>Extreme</td>
<td>Extreme</td>
<td></td>
</tr>
</tbody>
</table>

Source: Berg (2010, p.86)

The management of any given organization should therefore seek to ensure that resource allocation is based on the risks prioritization. High risk areas are allocated more resources i.e. financial resources, human capital resources and organizational capital resources. Pat'e-Cornell and Cox Jr. (2014) outline some foundations for effective strategic risk management. One of the foundations noted is putting the right people in the right place
with the right knowledge, incentives and resources. Risk analysis is the best tool currently available that recognizes the imperfections in the market place, imperfect understanding and helps organizations prioritize the work before them (Orloff, 2011).

Basu, Bose and Ghosh (2013) noted that it is imperative that management addresses 4 major issues in event planning. These are: operations planning and strategy, multi-stakeholder management, project management and resource allocation. Basu et al. (2013) further note that project management alongside risk management is essential during the planning and execution phases of any major events as it provides the management with a clear understanding of the activities to be implemented, risks that will be faced, resources needed and cost implications. Many organizations experience difficulty in planning, scheduling and allocating resources between concurrent projects. Such organizations must quickly and carefully reform their prior strategies and adopt relevant risk management frameworks in order to address growing and changing pressures and demands for existing resources that block the guarantee of successful mega-event. Relating this to strategic risk management, the intended objectives and activities need to be well defined so as to ensure that risks are adequately established and resources allocated prudently. EY (2014) developed the risk-enabled organizations framework that applied risk insights within the business processes with a key emphasis on the need to have the capital and resource allocations risk-adjusted. The summary of the framework highlighting risk management integration with various processes e.g. strategic planning, business level planning and budgeting, operational execution, control and compliance monitoring and assurance is indicated in Figure 2.3 below. The budgeting process entails the allocation of organizations resources and once the uncertainties are identified it is critical to ensure that the resource allocation is risk-adjusted.
2.3.1 Tangible and Intangible Resources

Strategic competitiveness and above average returns only occurs when there is a proper fit between the internal organization and external environment (Szabo, 2013). Organizations that are able to leverage on their resources and capabilities are able to create significant value for their entities. Organizational resources are viewed as the source of a firm’s capability. Tangible resources are those that have matter and can be touched, seen and quantified. Szabo (2013) identifies the various types of tangible resources that could be within an organization such as: financial resources; reporting structures; physical resources that includes sophistication and location of a firm’s plant and equipment, distribution facilities, product inventory; technological resources such as trade secrets, copyrights and patents. Following the financial crisis in 2008 a number of high net worth individuals decided to diversify their investments by choosing to retain some of their wealth in tangible form (Jennings, 2014). He further noted that risk management frameworks have not been adequately developed for the movable tangible assets that a number of investors are moving to following the poor performance of the stock exchange market. Teng (2000) highlights that the management of the critical resources within a strategic alliance such as the financial, technological and physical resources are key to ensuring that the two major risks i.e. relational risk and performance risk are well managed.
Intangible resources are those on the other hand that cannot be touched or seen. They include human resources such as skills, knowledge trust; innovation resources and reputational resources such as the brand name. Varadarajan (2016) noted that unauthorized use by an organization of another entity’s intangible assets could result to serious damages. He further noted that the highest form of risk in today’s business environment is the stealing of intellectual property. This risk is normally managed by instituting a clause in various contracts to protect the entity. Reese and Kossovsky (2011) highlighted three changes that require to be made to managing intangible assets so that organizations are able to attain maximum benefits. These are: establishing a foundational understanding of how intangible assets create value and risk; implement organizational wide practices that increase, protect, restore intangible assets and reputational value; ensure that there is sufficient board oversight for the organizations intangible assets. The Board of directors of any given organization should be aware of the key business processes that drive intangible assets and reputational value and build systems to protect them (Reese & Kossovsky, 2011). They go further to indicate that these systems ought to be benchmarked against best practice within the industry, be stress tested to ensure that value creation is not affected significantly before detection, raise red flags on threats that could impede intangible assets performance and communicate to the relevant stakeholders. This will ensure that any risks that could affect intangible assets performance are identified and mitigated in good time. Information has also been viewed as a key intangible resource and needs to be guarded to ensure that there is business continuity (Gerber & Solms, 2005). They also go further to indicate that since IT resources are critical to the operation of any given organization, there is need to move away from only focusing on the risk affecting the IT tangible assets but focus on the entire IT environment.

2.3.2 Strategic Risks and Resource Allocation Implication

Reniers and Sorensen (2013) note that safety risks that are considered strategic risk exist in a number of organizations. Such risks could lead to loss of life that could greatly impede the success of the organization in achieving its objectives. They note that it is imperative for companies to reduce safety risks in a cost-efficient way through risk reduction policies and prevention measures. This prevention measures or reduction policies can only be determined by measuring the cost and benefits of each measure. Once this is measured
then the organization is able to allocate the resources adequately. Risk analysis within the security sector has also been a key tool in resource allocation. Levine and Waters (2012) described the risk analysis used at the Tucson Sector of the U.S Border Patrol. The Border patrol main objective is to detect, apprehend and detect smugglers of humans and other contrabands. The scholars developed a risk management framework that guided the resource allocation decisions for the US Border Patrol. Some of the resources that needed to be efficiently and effectively allocated include: patrol agents, fencing, surveillance equipment. The detailed findings of this journal were not discussed given the sensitive nature of security.

Gemech, Mohan, Reeves and Struthers (2011), indicate that coffee producers face a significant strategic risk which is price risk. Coffee is mainly produced in the developing countries and traded in the developed countries. It is considered a top foreign exchange earner for developing countries. Significant fluctuations have been experienced in the world coffee market prices which is a threat to producers who solely rely on this specific commodity. Attempts were made to liberalize the market so that more revenue gets to the producer but this has not been as effective. The focus has shifted to price risk management and International Task Force on Commodity Risk Management in Developing Countries was constituted. Gemech, Mohan, Reeves and Struthers (2011) conclude that prices risk can be managed by hedging in the international futures market of coffee and more importantly by efficient allocation of resources in the production of coffee.

Lin (2011) focuses on construction industry and emphasizes the construction companies, decision makers, ought to conduct a thorough risk assessment prior to commencing any international operations to ensure that country level and market level risks are controllable. After a tender is won in a foreign country strategic project risk set in and therefore a feasible human resource strategy has to be developed to ensure that the project is successful. The human resource allocation strategies adopted affect the project expenses as well as the strategic and operational risks of project. If an organization chooses to send its home base staff to the remote location then project expenses increase as a result of the costs paid to expatriate staff but if strategy adopted is one of recruiting the local people then there is a risk of poor management decisions as a result of the lack of expertise in the way the company operates. Lin (2011) went further to establish a decision-making model for construction human resource allocation in remote projects to address the specific project
related risks. This is a clear indication that resource allocation has a clear role to play in strategic risk management.

Marshall (2014) an air force specialist developed the concept of safety margin from the risk management framework which he described using the following mathematical representation:

\[
\text{Safety Margin} = \text{Identify} + \text{Assess} + \text{Mitigate} + \text{Implement} + \text{Observe}
\]

The speed of risk identification, accuracy of risk assessment determine the effectiveness of the mitigation action plans developed. The more resources can be applied effectively to implement risk mitigation strategies the higher the likelihood of success in actual reduction of the risks and increased safety margin. The implementation process has to remain observable so that any adjustments can be made on time and subsequently increase the safety margin. Marshall (2014) emphasized that each of the steps required resources which he categorized into two: those associated with choosing and implementation of the strategies and those associated with maintaining a well trained personnel with the ability to identify, assess and observe risks. He further notes that investing in staff is the cheapest and most effective way of dealing with risk management.

Fukukawa, Mock and Wright (2011) note audit firms have also demonstrated that the audit resource allocations are based on client risk factors. The quality of the auditors output, audited financial statements, is based on the quality of audit planning. The key resource allocation for audit firms is the consultant hours charged to a specific audit engagement. The research revealed that key strategic client risk factors have an impact on the amount of hours allocated by various levels of audit personnel while undertaking a given audit assignment. Strategic client risk factors such as ‘change in internal environment’ and ‘management compensation’ have an impact on partner hours allocated. The ‘aggressiveness and change in external environment’ factor affects the amount of manager hours allocated. The ‘internal control risk’ and ‘financial performance risk’ factors affect the amount of staff hours allocated. This resource allocation is normally done before the commencement of audit assignments based on a preliminary understanding of the client. Allocation of resources in this way also helps to ensure that the auditors do not miss-out on
any key strategic risks that could eventually cause them not to deliver effectively on mandate (EY 2014).

Another great resource to organizations is the Board of directors. After the 2008 financial crisis, there has been an increased pressure on the members of various boards to be more engaged in the affairs of various companies. A survey conducted distinguished between low impact and high impact boards. High impact boards analyze what drives value, debate alternative strategies, and allocate the resources accordingly. They also spend approximately 40 days a year conducting their functions such as strategy setting, compliance, performance management and risk management. This differs from the low impact boards that spend 19 days conducting board functions (Bhagat, Chinta, Kehoe, & Conor, 2014). This critical resource is very relevant in managing key strategic organizational risks.

Information Technology has also been identified as another resource that has an effect on risk management. Otim, Dow, Grover and Wong (2012) examined different types of IT investments and its effect on downside risk. Downside risk has been defined as the likelihood that a loss would occur relative to some reference point. The reference point is the benchmark (i.e. industry average). The results of the study reveal that there is a reduction in downside risk following the announcement of strategic IT investments when the investments lead their industry IT strategic role. This study however does not indicate the specific industries where the study was conducted. Farell, Gebre, Hudspeth and Sellgren (2013) in a McKinsey report, Risk-based resource allocation, developed a model for government that has scarce resources and has broad risk exposures in terms of their monitoring role. It proposed a four step framework to be used by government which entails defining the risk, measuring the exposure, setting strategy that entails how to allocate resources and executing and leaning.

2.4 Systemic Factors and Strategic Risk Management

Systems approach in strategic management is based on the idea that an organization is a system consisting of various interdependent parts functioning as a whole (Barnat 2014). This parts work collectively to ensure that the overall organizational goals are met.
Bertalanffy (1950), the originator of systems theory, highlighted the five components of a system are the inputs, transformation process, outputs, feedback and the environment. He further noted that there are two types of system; closed and open systems. Organizations however have open systems given that they interact with the environment by importing elements from the environment and transforming those elements to some output that is then exported back to the environment (Barnat 2014). The systems theory however mainly focused on routine events that were predictable to assist in organizational functioning and not non-routine events. Morgeson (2015) developed the events system theory that focuses on how events command attention and impact organizational behaviors, features, and subsequent events across levels and time. Systems theory can also be used to create business systems analyze them and diagnose their problems (Roach, 2016). He further went to identify three components of the system being the organization, public and its goals. Systems theory has also been used in a non-profit making organization as a conflict management tool (Gallicano, 2013). The researcher went further to note that capacity building can be used to measure the ability of an organization to perform in its system and that detoxification of various inputs within an organization such as employees that create negative energy could assist the organization achieve its goals and objectives. Senge (1990) applied systems theory in his contribution of the learning organization. He noted that systems’ thinking was the cornerstone of the learning organization. It links the other dimensions of learning organization: personal mastery, mental models, building shared vision and team learning. A further and better understanding of the systems within an organization will lead to more appropriate action. Systems’ thinking also enables an organization to have a long term view while making critical decision as a result of the feedback loop that is present as one of the components. This was well encapsulated by Peter Senge when he stated, “we learn best from our experience, but we never directly experience the consequences of many of our most important decisions.” (Senge, 2006)

McKinsey (2008) noted that the 7s model was a tool that outlines the organizational design by focusing on the following elements: strategy, structure, systems, shared values, style staff and skills. The focus is whether these key elements are effectively aligned to facilitate the achievement of the organizational objectives. The model was also broadly categorized into the ‘Soft Ss’ that emphasize mainly emphasized on the human elements such as style, staff, skills and shared values while the ‘hard Ss’ focus on the strategy, structure and the systems. Haines Centre for Strategic Management (2013) noted that
systems are components within an organization that work together in an aim of achieving the overall goals of the organization. According to Mc Kinsey 7 s model, systems are, “processes and procedures of the company which reveal business daily activities and how decisions are made.” Nave (2007) noted that systems constitutes a network of interconnected parts working towards the achievement of specific goals. Within the context of project management, several writers have outlined several critical success factors for the achievement of the project objectives. These critical success factors are either human factors or systemic factors. The human factors include the relationship that exists between the project owner and project manager, the level of interest that the project owner has on the project, the skills set of both the project owner and project manager and attitude of both project manager and project owner. The systemic factors include objective and strategies agreed to by the various stakeholders, communication system in place within the organization, flexibility of the structure that allows the project manager to deal with unforeseen circumstances (Jugdev & Muller, 2005). Nave (2007) noted that an organization is a system working together towards a common purpose. Therefore there is need to manage the interactions between the various system components. The only way to ensure that there is long-term sustainable improvement is by improving the system. There is need to consider minimimizing the rewards, ranking, incentive pay within an organization so as to minimize the competition that tends to play within the various function of the organization that could result to great losses due to selfish competition between functions (Nave, 2007). There is bound to be conflict that could impact staff morale as well negated performance of components within the system. He further acknowledged the need to ensure that risks are identified as well as tangible and intangible benefits for any proposed changes of the various components.

Smith (1998) contends that all organizational assets i.e. financial assets, tangible and intangible assets must be managed as a system if maximum benefit is to be achieved within the organization. He further proposed the systemic knowledge management approach that harmonizes the organizational factors that play a key role in asset management. Hillson and Murray-Webster (2017) highlighted systemic factors such as organizational policies, standards, previous experience, systems, procedures, structure and culture that influence organizations performance. These similar factors tend to influence the risk attitudes and commitment that greatly affects the risk management process (IRM, 2012).
2.4.1 Organizational culture and Strategic Risk

Hofstede (1991), a strategic management guru, noted that culture is, “the collective programming of the mind which distinguishes the members of one group or category of people from another.” It is management’s responsibility to introduce the organizational culture to its organization that will assist the employees to get familiar with the system of organization. Organisational culture could also be viewed as displaying the values and behaviours of a firm through its business decisions and actions (Group of Thirty, 2012). IRM (2012) noted that repeated behaviours of a group is a subset of the organizations culture. The culture also influences the beahaviour and attitude of group. Organization culture and risk culture are intertwined given that risk culture is inherently part of the organizational culture (Althonayan, Killackey, & Keith, 2012). They further note that culture is measurable and there are elements that clearly depict a robust risk culture.

IRM (2012) outlines several models that outlines the elements that an organization can evaluate to determine its risk culture. Some of the models include Risk Culture Aspects Model, Sociability Vs Solidarity Model and Cultural Theory of Risks Model. The Risk Culture Model focuses on 4 elements i.e. Tone at the top, Governance, Competency, Competency and Decision Making. Sociability Vs Solidarity Model outlines 4 types of organizational culture. These are: networked culture whereby there is high focus on both people and tasks; communal culture where there is high focus on people and low focus on tasks; mercenary culture where there is low focus on people and high focus on task; fragmented culture whereby there is low focus on people and task. The networked and communal culture drive strong sociability. This enhances cohesion and common purpose within the organization. The mercenary and fragmented culture drive strong solidarity which ensures that risk management plans are developed. The model further propagates the need to strengthen both the sociability and solidarity ratings inorder to implement risk management effectively. Hillson and Murray-Webster (2017) noted that organizations also tend to have their own unique corporate risk culture that could have been influenced by organizations history, reputational experiences, stakeholder expectations, leadership style adopted, industry sector characteristics, current international and national economic and environmental factors amongst others. Organizations that have established a corporate culture of continuous renewal and innovations are able to remain responsive to any emerging risks. (Teece, Peteraf, & Leih, 2016).
Asenova, Bailey and McCann (2015) focuses on the risk management culture in UK government. There being a decline in public funding spending due to austerity measures being put in place social risks have arisen. The scholars advocate for the need to have a shift in the risk management culture from defensive institutional risk management practices to a more proactive social dimension. Some of the social risks that could arise as a result of the austerity measures include inequalities in women, children, young and disabled people. The organizational culture even in public sector institutions is therefore key in determination of the strategic risk management strategies to be adopted. Stare (2012) sought to establish the level of project organizational culture in Slovenian enterprises (mainly production, service, engineering and constructions, public administration and IT companies) and the impact of that culture on motivation of the team in project execution to ensure that the project is completed on time and within budget. Failure to complete projects on time and within budget is a key strategic risk for any given project. Some of the problems that were raised in the research was that project plans were normally made in haste without proper risk management, internal rules of project management were not being followed and there was no reward for staff that executed the projects well. The researchers concluded that the most influential factors of project performance were the top management attitude and projects having clear priorities. Further low project organizational culture could result to project failure which implies that project organizational culture strong influences the level of project performance. There was also a weak correlation between the renumeration to the various project personnel and project performance.

Brettel, Chomik and Flatten (2015) outlined how organizational culture influences innovativeness, proactiveness and risk-taking with a focus on entrepreneurial orientation in SMES. Kwan and Walker (2004) outlined the theoretical framework of the competing values model that describes the culture of an organization which distinguishes one organization from another. The CVM model is outlined below:
Group culture focuses on flexibility and development of close personal relations within the organization (Iivari & Huisman 2007). Core values are belonging, trust and participation. Hierarchical culture focuses on stability, efficiency, security and routinization within organizations. Iivari and Huisman (2007) also noted that rational culture emphasizes on stability and external focus with productivity, efficiency and goal achievement as its core value. There is a high level of competitiveness within the organization and organization seeks to have competitive advantage. Developmental culture focuses on change, creativity, innovation and growth (Iivari & Huisman 2007). The study of the 298 enterprises in Germany revealed that the developmental, group and rational culture are positively associated with risk-taking while hierarchical culture is negatively related to risk-taking for small and medium enterprises.

IRM (2010) noted that organizations update their risk management policies every year. Within these policies, their should be a statement of the attitude of the organization to risk. Risk attitude has been defined as a notion that indicates the mental state or readiness to take risk while making certain business decisions. These attitudes over a period of time form part of the organizational culture especially when it comes to making decisions. The organization through its key decision makers could either be risk seeker, risk averse or risk neutral (Concina, 2014). Ingram and Thompson (2012) noted that there are four types of attitudes to risk. These are Pragmatists, Conservators, Maximizers and Managers. The pragmatist believe that the world is very unpredictable; there is a high level of uncertainty. The conservators believe that the world is very risky and dangerous. The maximizers view
the world as less risky and that corrects itself. Managers view the world as moderately risky and that organizations need to be guided properly. Wallis (2014) noted that it is imperative that the strategies developed to mitigate various risks are provide reasonable assurance that the likely loss to be borne by an organization from a specific risk event falls within the risk attitude in existence. Organizations should also strive to ensure that risk-balanced teams are formulated such that the weaknesses of risk averse individuals are mitigated by the strengths of risk takers (Hillson & Murray-Webster, 2017).

Cagliano, Grimaldi and Rafele (2014) developed a theoretical framework that explains the various factors that come into play when determining the risk management techniques. The factors include: phase of the risk management process, phase of the project lifecycle and corporate maturity towards risk. Corporate maturity is highly dependent on the organizational culture and top management attitude to risk. There are four stages of maturity propagated in the research paper; Naïve stage whereby the organization does not see the need for managing risk and does not adopt a structured approach of dealing with risk; Novice stage whereby the organization recognizes the benefit of managing risk and adopts some form of risk governance; Normalised stage whereby there is formalised risk process included in routine business activities and benefits not achieved consistently in project; Natural stage whereby the organization is fully aware of risk and proactively manages the threats and opportunities arising. This is a clear indication that the maturity level of an organization is to some extent determined by the organizations culture.

2.4.2 Organizational structure and Strategic Risk

Organizational structure has been defined as the inner order and relations within the various organizational parts that facilitate the achievement of organizational goals (Tran & Tian, 2013). Organizational structure has also been defined as the configuration of various parts of an organization with reference to the allocation of tasks, responsibility and authority (Greenberg, 2011). Chandler (1962) noted that strategy follows structure after study of large American companies. This theory has been used broadly by various organizations while developing their most suitable organizational structures. Mintzberg (1992) developed 5 broad types of organizational structures that have still been adopted in the current business environment. These include: simple structure, machine bureaucracy, professional bureaucracy, divisionalized form and adhocracy. Dynamic environments are
considered to have flatter structure with high level of decentralization while stable environments have taller hierarchical structures with a high level of centralization (Lunenburg, 2012).

The organizational vision, mission, objectives and strategies are a reflection of the interests of the top leadership (Diefenbach, 2009). Wieczorek-Kosmala (2014) distinguished strategic risk management from traditional risk management. Traditional risk management focused on the negative impact of risk and consequently is based on assessing the probability of the loss frequency and impact. Risk avoidance, risk transfer, risk prevention and risk acceptance are tools that could be used to mitigate the risks identified. Strategic risk management on the hand focuses on the downside and upside of risk. It is wholistic and intergrated unlike the traditional approach. He further noted that at the highest levels of strategic risk management maturity has a very high board level commitment. This was mainly displayed in the Polish companies that formed his target group. The commitment is displayed through the development of a risk management culture to be cascaded down to the entire organization, risk management strategy and framework that is continuously reviewed and updated and a robust organizational structure that ensures there is a dedicated risk executive in a senior level who champions risk management (Wieczorek-Kosmala, 2014).

Martin and Halachmi (2012) studied on the public-private partnerships (PPP) in global health addressing issues of public accountability, risk management and governance. PPP has been recently outspoken for its ability to enhance effectiveness, transfer or share risk, promoted coordination and expanded resources for attainment of goals that are in the public interest. Key strategic risks were identified in these PPPs in global health. These include risk associated with lack of accountability stemming from unclear roles, limited oversight, clashing values and responsibility fragmentation. Other strategic risks identified include partner selection risk, IT risk, vaccine development risks (Martin & Halachmi, 2012). They go further to indicate that these risks can be addressed if there is well structured way of dealing with the partners as well as commitment from the partners to ensure that there are strategies in place for risk sharing. OECD (2014) emphasize that those charged with corporate governance i.e. the Board of Directors should place emphasis on ex ante identification of risks. Focus should be both on financial and non-financial risks and risk management should include both strategic and operational risks (OECD, 2014).
Organizational structures are very relevant to effective strategic risk management. Aksel (2014) noted that for there to be effective enterprise risk management the organization should establish an independent risk unit rather than adopting a fragmented approach whereby each risk is managed independently by separate units without focus of integrating them. He goes further to propose the best structure for an organization, specifically a financial institution, which is the all-risk model that is consultative. An appointed Chief Risk Officer is in-charge of all risks in the organization. ERM (2005) recommended that the risk management function remains independent and should report to the Chief Executive Officer (CEO). An appropriate organizational culture ensures that the organization has a sharp focus on risk management and an appropriate compliance and ethics structure within the organization will facilitate the efficient incubation of compliance and ethics risk management activities within the compliance and ethics function (PWC, 2016). The mitigation measures adopted will be done in an efficient and effective way. Gorvett and Nambiar (2006) noted that for their to be effective strategic risk management within the organization, there has to be suitable governance and reporting relationships. They further noted that there is need for an independent assurance process in place to evaluate the risk management unit. Functional and administrative reporting relationships for the risk management unit ought to be the CEO and governing body.

COSO (2004) proposed that the Chief Risk Officer of the organization should report directly to the Chief Finance Officer. This is unlike Gorvett and Nambiar (2006) who propose a different structure whereby the Chief Risk Officer of the organization reports to the Risk Management Committee of the Board and the Chief Executive Officer. This to them will ensure that the unit has a high-level sponsor that will ensure that the management and organization buy into the idea of strategic risk management. Oster (2016) acknowledged that a properly defined organizational structure will facilitate effective risk assessment procedures. However he also noted that following too much structure is likely to bog down risk assessment processed such that there ends up being rigidity rather than flexibility within the risk assessment process.

Chia-Ling, Lai and Lee (2013) in their focus of the United States property casualty insurance industry noted that organizational structure and board-composition has an effect on the risk-taking behaviour of various companies. They noted that mutual insurers,
whose ownership mainly constitutes policyholders, have a lower total risk, underwriting risk and investment risk than their stock insurers, whose ownership is held by outsiders. Following the materialization of risks arising from natural disasters like earthquakes, floods, drought, it was found that organizations with pre-existing collaboration networks were better able to organize and support themselves (Van der Vegt, Essens, Wahlström, & George, 2015). Van der Vegt et al (2015) also noted that organizations ought to focus on increasing resilience which entails focusing on capabilities and capacities that retain firm resources in a malleable, flexible and convertibel manner that allows the organization to effectively deal with the unexpected. Risks require organizations to be able to adopt decentralized decision-making structures rather than rely on hierarchy and centralized authority. Highly bureaucratic organizations impede creativity and highly employee adaptive behaviours required in today's risky environment (McManus, Seville, Vargo, & Brunsdon, 2008). Multidivisional organizational structures facilitate an organization's responsiveness to various uncertainties given that they allow for significant levels of decentralization (Teece, Peteraf, & Leih, 2016).

2.5 Chapter Summary

In this chapter, an introduction of the literature review was given. This included the understanding of the various determinants of strategic risk management. This chapter has explored the various determinants of strategic risk management, strategic risk management strategies and how various organizations in various sectors have adopted them and benefited.

In previous studies discussed in this Chapter, strategy formulation process, resource allocation and systemic factors integration to strategic risk management have been deemed to be effective determinants. The literature covered in determinants of effective strategic project risk management appears to be a grey area especially within Non-governmental organizations in Kenya. This research endeavored to establish the determinants of effective risk management for Amref Health Africa which is an NGO in Kenya. Chapter 3 covers the methodology followed in the study.
CHAPTER THREE

3 RESEARCH METHODOLOGY

3.1 Introduction

This chapter describes the methodology used in the study. These include: the research design, the population of the study, sample frame, sampling technique, sample size, data collection methods, research procedures, data analysis and presentation of the research findings.

3.2 Research Design

Research design can be defined as, “the blueprint for the collection, measurement and analysis of data” (Cooper & Schindler, 2014). It provides the logical sequence that creates a connection between the research questions, empirical data collected and the conclusion arrived at. The research design used in this study is descriptive correlation. This approach was adopted given that it allowed the researcher establish the association or relationship between the variables under review (Cooper & Schindler, 2014). The approach assisted in establishing the facts that the study intended to identify without manipulating the variables of the study. According to Williams (2011) a descriptive design examines the situation as it exists in its current state and it involves the identification of attributes of given phenomena based on exploration of relationship between given variables. Research questions that are likely to adopt the descriptive research design begin with or contain either ,'Who', 'What', 'Where', 'When', or ‘How’ (Saunders, Lewis, & Thornhill, 2016). This approach was appropriate for this study that sought to establish how various determinants contribute to strategic risk management in project at Amref Health Africa.

3.3 Population and Sampling Design

3.3.1 Population

Population can be defined as the total collection of the elements, events, people or records that have the custody of the desired information and can answer the research questions that have been developed by the researcher (Cooper & Schindler, 2014). The researcher desires to make inference from the population. A clear definition of the research population
provides assurance as to the validity and reliability of the study results (Eldredge, Weagel, & Kroth, 2014). The target population or unit of analysis of this study was Amref Health Africa’s executive committee members, senior management teams, program managers, project managers, operational managers and senior officers across the 7 countries where the organization has presence. These include Kenya, Uganda, Tanzania, Ethiopia, South Sudan, Malawi and Senegal.

Table 3.1: Population Distribution

<table>
<thead>
<tr>
<th>Region</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenya</td>
<td>43</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>22</td>
</tr>
<tr>
<td>Tanzania</td>
<td>20</td>
</tr>
<tr>
<td>Uganda</td>
<td>19</td>
</tr>
<tr>
<td>Malawi</td>
<td>10</td>
</tr>
<tr>
<td>Senegal</td>
<td>6</td>
</tr>
<tr>
<td>South Sudan</td>
<td>5</td>
</tr>
<tr>
<td>Respondents</td>
<td>125</td>
</tr>
</tbody>
</table>

3.3.2 Sampling Design

Sampling design is defined as the actual plan for obtaining a sample from a given population (Saunders, Lewis, & Thornhill, 2016). This section provides a detailed description of the sampling frame, sampling technique and the actual sample size drawn from the population. Saunders, Lewis and Thornhill (2016) define a sample as a subgroup, subset or part of a larger population. According to Cooper and Schindler (2014) sampling is considered to be the selection of some elements within the population from which the researcher wants to gather data for analysis.

3.3.2.1 Sampling Frame

Sampling frame is, “the complete list of all cases in the population from which a probability sample is drawn” (Saunders, Lewis, & Thornhill, 2016). Cooper and Schindler (2014) view the sampling frame as the list of elements, events, people or records from which the sample will be drawn from. They go further to state that it is the correct list of
population members. The sampling frame used for this study was the management teams of Amref Health Africa as obtained from employee records maintained by the Human Resources Directorate.

### 3.3.2.2 Sampling Technique

Sampling technique is the strategy employed by the researcher to select the sample from the population. It could either be a probability or non-probability sample (Cooper & Schindler, 2014). For this study a census approach was adopted. According to Saunders, Lewis and Thornhill (2016), when a researcher adopts a census approach then he needs to consider all elements from his population and obtain data from the entire population. Coopers and Schindler (2014) noted that a census study is appropriate to use when the population is small and when the elements are quite different from each other. Census was selected because the population under review was small (N=125). The information relating to strategic project risk management, strategic planning, resource allocation, management attitude and organization culture rests with the senior management teams, programme managers, project managers and senior officers within Amref Health Africa. This will involve selecting all executive committee members, senior management teams, program managers, project managers, operational managers and senior officers across the 7 countries in Africa where Amref Health Africa has offices.

### 3.3.2.3 Sample Size

Sample size is the actual number of items/units selected for study from which data will be drawn from (Cooper & Schindler, 2014). Sampling allows the researcher to draw conclusion about the population (Saunders, Lewis, & Thornhill, 2016). It is only useful if it allows the researcher to make accurate and reliable conclusions (Eldredge et al, 2014). The sample size for this study was selected using the rule of thumb for determining the sample size i.e. where a given population is less than 100 (N<100) then the entire population should be taken as a sample. Since this was a census study, the sample size constituted of all the executive committee members, senior management teams, program managers, project managers, operational managers and senior officers across the various offices.
3.4 Data Collection Method

Data collection is the systematic gathering and measuring information on targeted variables with the ultimate aim of answering the specific research questions (Cooper & Schindler, 2014). The study used primary data collection. The data primary collection tool used was the questionnaire. Saunders, Lewis and Thornhill (2016) defined a questionnaire to be a method of data collection where the respondents respond to the same set of questions in a given order. The questionnaire was adopted given that responses from the same set of questions was required. The respondents of this study were also geographically dispersed in 7 countries hence the questionnaire was the most cost effective way of collecting the data. The questionnaire was developed based on the research questions of this study. This ensured that the research problem was appropriately addressed during this research. The measurement scale adopted was the Likert measurement scale. Given that this research had three research questions, the questionnaire was structured as follows: Section A captured the demographic information; Section B, C D and E addressed each of the research questions under investigation.

3.5 Research Procedures

Research procedures are the detailed steps that are undertaken while conducting the research (K'aol, 2013). The questionnaire was developed by the researcher and presented to the supervisor for review so as to determine whether the research questions were fully addressed. Subsequently, it underwent pilot testing by using 5 questionnaires that were submitted to 5 randomly selected employees. Consent was obtained from the university as well as Amref Health Africa senior management to conduct the research. The questionnaire was mainly administered through an online information technology platform called Google forms. The researcher consistently followed-up with the intended respondents to ensure completion and submission of the questionnaire.

3.6 Data Analysis Methods

Data analysis is the process of conducting an evaluation on the data that has been collected using analytical and logical reasoning (Cooper & Schindler, 2014). Data analysis ensures
that the researcher obtains useful and usable information (Saunders, Lewis, & Thornhill, 2016). This entails editing, managing the data to understandable volumes, establishing patterns and applying statistical techniques (Cooper & Schindler, 2014). The data obtained underwent an initial review to verify its completeness and accuracy. The data gathered was edited and cleaned in order to detect errors and omissions that might have interfered with the accuracy of the data. The statistical package for social sciences (SPSS) computer software was then used in data analysis by generating the descriptive statistical measures such as the charts and frequency distribution tables.

Data collected was analyzed using descriptive and inferential statistics. Descriptive statistical analysis includes methods for organizing and summarizing data such as tables and graphs to organize data, and establishing the measures of central tendency such as the average score and dispersion measures such as variance and standard deviation to summarize data (Cooper & Schindler, 2014). Inferential statistical analysis entails making valid conclusions about the populations on the basis of the data describing the sample (Saunders, Lewis, & Thornhill, 2016). The data collected was organized and summarized in tables. A cross tabulation of the demographic information was done on a country by country basis. The researcher used Pearson Correlation to find correlation between the variables in the study i.e. strategy formulation process, resource allocation and systemic factors and strategic risk management. Analysis of the responses obtained per research question was then performed to establish the trend of the various determinants of strategic risk management under review.

3.7 Chapter Summary

This chapter outlined the research design, population, sampling technique and sample size. It also described the data collection methods, research procedures to be followed and the data analysis techniques to be employed in this research.
CHAPTER FOUR

4 RESULTS AND FINDINGS

4.1 Introduction
This chapter gives the results and findings of the collected data. Data is analyzed using descriptive and inferential statistics. Findings from the study are presented in figures and tables. The first section of the analysis presents demographic information of the respondents. The following sections have been presented in accordance to the research questions. The chapter ends with a summary of the chapter.

4.1.1 Response Rate
The questionnaires that were distributed to the respondents were 125 but only 78 were filled. This represents a response rate of 62%. According to Mugenda and Mugenda (2003), a response rate of 50% and above is considered good. Therefore, a response rate of 62% was a good response rate for the study.

![Response Rate Pie Chart]

**Figure 4.1: Response Rate**

4.2 Demographic Information
This section analyses the demographic information of the respondents such as the respondent’s country of operation, current department in the organization, length of time worked at Amref Health Africa, current number of projects in respondents’ portfolios that they supervise, estimated current budget under respondents’ portfolio s of projects, number of employees currently supervised, and cross tabulations.
4.2.1 Respondent’s Country of Operation
As the results in figure 4.2 indicate, majority of the respondents at 33% operate in Kenya. The next group of respondents at 14% were respondents whose country of operation is Tanzania, 12% of respondents operate at a regional level, that is, more than one country. These respondents are mainly based at the Amref headquarters in Kenya. Another 12% of the respondents operate in Uganda, 9% of the respondents operate in Malawi, another 12% operate in Ethiopia, 6% of the respondents operate in Senegal, and finally, 5% of the respondents operate in South Sudan.

Majority of the respondents operate in Kenya while the least operate in South Sudan. This is in line with the number of projects in each of the countries represented by the number of cost centres with Kenya having 107 cost centres and South Sudan having 14 cost centres.

![Country of Operation](chart.png)

**Figure 4.2: Respondent’s Country of Operation**

4.2.2 Current Department in the Organization
According to the results in figure 4.3, majority of the respondents are in the programme department. This was represented by 52%. Respondents in the finance department came in second at 24%, respondents in the human resource department were 8%, and 7% of the respondents were in the ICT department. Each of the other departments such as Audit and Risk, Management, Procurement, and Administration, and Business Development had less than 5% of the respondents.
Most of the respondents were mainly from programme because most of the organizations employees work directly in projects and are therefore project-specific personnel. On the other hand Business Development had the least respondents given that it is a new department that has been set-up to address the issue of sustainability within the various projects and the organization as a whole. It therefore currently has very few employees.

![Current Department in the Organization](image)

**Current Department in the Organization**

<table>
<thead>
<tr>
<th>Department</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Programme</td>
<td>52</td>
</tr>
<tr>
<td>Mgt, Procurement, &amp; Admin</td>
<td>3</td>
</tr>
<tr>
<td>ICT</td>
<td>7</td>
</tr>
<tr>
<td>Human Resources</td>
<td>8</td>
</tr>
<tr>
<td>Finance</td>
<td>24</td>
</tr>
<tr>
<td>Business Development</td>
<td>2</td>
</tr>
<tr>
<td>Audit &amp; Risk</td>
<td>4</td>
</tr>
</tbody>
</table>

Figure 4.3: Current Department in the Organization

**4.2.3 Length of Time Worked at Amref Health Africa**

The results in figure 4.4 show that majority of the respondents have worked at Amref Health Africa for 2 to 5 years. This group was followed by respondents who have worked at the organization for 5 to 10 years; this was represented by 26% of the respondents. 25% of the respondents have worked at the organization for less than 2 years while 13% of the respondents have worked at the organization for more than 10 years.

This is in line with the general project lifecycle within Amref Health Africa that has most projects implemented within a timeframe of 2 to 5 years. Those who have worked for more than 10 years are the least given that very few programmes have run for more than 10 years.
4.2.4 Current Number of Projects in Respondents’ Portfolio that they supervise

The results in figure 4.5 reveal that most respondents at 30% have 2 to 5 projects in their portfolio that they supervise. 26% of the respondents have one project that they supervise, 19% of the respondents have more than 10 projects in their portfolio that they supervise, 16% of the respondents do not have any projects in their portfolio that they supervise, and 9% of the respondents have between 5 to 10 projects in their portfolios that they supervise.

This is in line with the current Amref Health Africa organizational structure whereby most project managers supervise between 2 to 5 projects especially where the project budgets and activities are not large. For the very big projects with significant budgets and activities, the project managers’ in-charge are not assigned any other projects. Moreover, Amref Health Africa has Programme Managers/Directors who oversee all projects within key thematic areas like HIV, TB and Malaria and Water Sanitation and Hygiene. The respective project managers report to the Programme Managers/ Directors.
4.2.5 Estimated Current Budget under Respondents’ Portfolio of Projects

As the results in figure 4.6 indicate, most respondents at 38% have an estimated current budget of US$ 2,000,001 and above under their portfolio of projects. 23% of the respondents have an estimated current budget of US$ 0 to 100,000 under their portfolio. 17% of the respondents have US$ 500,001 to 1,000,000, 14% of the respondents have US$ 100,001 to 500,000, 7% of the respondents have US$ 1,000,001 to 1,500,000, and 1% of the respondents have an estimated current budget of US$ 1,500,001 to 2,000,000 under their portfolio of projects.

This is in line with current project set-up in Amref Health Africa where each of the strategic directions/ thematic areas has a number of projects with a cumulative project budget of above US$ 2,000,000. Moreover most projects run for a period of 2 to 5 years and therefore the cumulative budget of most projects is likely to be above US$ 2,000,000.
4.2.6 Number of Employees Currently Supervised

According to figure 4.7, most of the respondents at 87% have 0 to 10 employees that they supervise while 13% of the respondents supervise more than 20 employees. Most projects in Amref Health Africa would have between 2 to 10 employees with the exception of the few very large projects that have more than 10 employees.
4.2.7 Cross Tabulation between Country of Operation and Length of Time Worked at Amref Health Africa

The results in figure 4.8 indicate that majority of the respondents operate in Kenya and have been at their place of work for various periods of time. As the results reveal, 10 of the 78 respondents who operate in Kenya have been at their work place for 5 to 10 years, 9 respondents who operate in Kenya have been at their work place for 2 to 5 years, 4 of the respondents who operate in Kenya have been at their work place for more than 10 years, 4 of the respondents who operate in Malawi have been at their work place for 2 to 5 years, 4 of the respondents who operate in regions have been at their work place for more than 10 years, 4 of the respondents operate in regions have been at their work place for 2 to 5 years, 4 of the respondents who operate in Tanzania have been in their work place for less than 2 years while 4 of the respondents who operate in Uganda have been at their work place for 2 to 5 years.

This is in line with the current operations level in Amref Health Africa with Kenya and South Sudan representing approximately 40% and 3% respectively of the entire organizations operations.

Figure 4.8: Cross Tabulation of Country of Operation and Length of Time Worked at Amref Health Africa
4.2.8 Cross Tabulation between Country of Operation and Current Number of Projects in Respondents’ Portfolio they supervise

According to the results in figure 4.9, majority of the respondents operate in Kenya and have 2 to 5 projects in their portfolio that they supervise, these were 9 of the 78 respondents. 7 of the 78 respondents also in Kenya have more than 10 projects in their portfolio that they supervise, 5 of the respondents who operate in Kenya have one project that they supervise while 5 more respondents who operate in Kenya do not have any projects in their portfolio that they supervise, and 5 respondents who operate in regions do not have any projects in their portfolio that they supervise.

This is in line with the current operations level in Amref Health Africa with Kenya representing approximately 40% of the entire organizations operations. Most of the regional staff provide support services to the entire organization and would not be considered to be project-specific personnel.

![Cross Tabulation between Country of Operation and Current Number of Projects in Respondents' Portfolio they Supervise](image)

**Figure 4.9:** Cross Tabulation between Country of Operation and Current Number of Projects in Respondents’ Portfolio they supervise
4.2.9 Cross Tabulation between Country of Operation and Estimated Current Budget under Respondents’ Portfolio of Projects

The results in table 4.1 reveal that majority of the respondents operate in Kenya and their estimated current budget under their portfolio of projects is US$ 2,000,001 and above. These were 13 of the 78 respondents. 7 respondents who operate in Kenya have an estimated current budget of US$ 0 to US$100,000, 5 of the respondents who operate in Malawi have an estimated budget of US$ 100,001 to US$ 500,000, 4 of the respondents who operate in regions have an estimated current budget of US$ 0 to US$100,000, 4 respondents from Senegal have an estimated budget of US$ 2,000,001 and above, 4 respondents from Tanzania have an estimated current budget of US$ 500,001 to US$ 1,000,000, and 4 more respondents who operate in Uganda have an estimated current budget of US$ 2,000,001 and above. Of the 78 respondents, 1 respondent did not answer the two questions on country of operations and estimated current budget of portfolio of projects.

This is in line with the current operations level in Amref Health Africa with Kenya representing approximately 40% of the entire organizations operations.

Table 4.1: Cross Tabulation between Country of Operation and Estimated Current Budget under Respondents’ Portfolio of Projects

<table>
<thead>
<tr>
<th>Country of Operation</th>
<th>Estimated current budget under your portfolio of projects</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>US$ 0 - 100,000</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>1</td>
</tr>
<tr>
<td>Kenya</td>
<td>7</td>
</tr>
<tr>
<td>Malawi</td>
<td>2</td>
</tr>
<tr>
<td>Regional</td>
<td>4</td>
</tr>
<tr>
<td>Senegal</td>
<td>1</td>
</tr>
<tr>
<td>South Sudan</td>
<td>0</td>
</tr>
<tr>
<td>Tanzania</td>
<td>1</td>
</tr>
<tr>
<td>Uganda</td>
<td>2</td>
</tr>
<tr>
<td>Total Responses</td>
<td>18</td>
</tr>
<tr>
<td>Non Responses</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
</tr>
</tbody>
</table>
4.2.10 Cross Tabulation between Country of Operation and Number of Employees Respondents Currently Supervise

According to the results in figure 4.10, majority of the respondents operate in Kenya and supervise 0 to 10 employees, these were 22 of the respondents. 9 of the respondents operate in regions and supervise 0 to 10 employees, 9 more respondents who operate in Tanzania supervise 0 to 10 employees, 7 respondents who operate in Malawi supervise 0 to 10 employees, 7 of the respondents operate in Uganda and supervise 0 to 10 employees, 6 of the respondents operate in Ethiopia and supervise 0 to 10 employees, 4 of the respondents who operate in Kenya supervise more than 20 employees, and 4 of the respondents who operate in South Sudan supervise 0 to 10 employees.

This is in line with the current operations level in Amref Health Africa with Kenya and South Sudan representing approximately 40% and 3% respectively of the entire organizations operations.

![Cross Tabulation between Country of Operation and Number of Employees Respondents Currently Supervise](image)

**Figure 4.10: Cross Tabulation between Country of Operation and Number of Employees Respondents Currently Supervise**
4.3 Strategy Formulation and Strategic Project Risk Management

This section provides results on how strategy formulation process contributes to effective strategic project risk management in Amref Health Africa.

4.3.1 Strategy Formulation Descriptive Statistics Table

Table 4.2: Strategy Formulation Descriptive Statistics Table
Strongly disagree=1, Disagree =2, Neutral =3, Agree=4, Strongly Agree=5

<table>
<thead>
<tr>
<th>Strategy Formulation</th>
<th>N</th>
<th>Mean</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country projects aim at achieving the organizations vision</td>
<td>78</td>
<td>4.53</td>
<td>.528</td>
</tr>
<tr>
<td>Country projects aim at achieving the organizations mission</td>
<td>78</td>
<td>4.44</td>
<td>.524</td>
</tr>
<tr>
<td>Specific project outputs are linked to the overall organizations specific objectives.</td>
<td>78</td>
<td>4.23</td>
<td>.663</td>
</tr>
<tr>
<td>Country program management aggressively scan the environment to establish critical success factors.</td>
<td>77</td>
<td>3.61</td>
<td>.764</td>
</tr>
<tr>
<td>All country projects have clear measurable targets loaded into Amref Information Management Systems (AIMS).</td>
<td>76</td>
<td>3.68</td>
<td>.867</td>
</tr>
<tr>
<td>Country program has identified critical activities to undertake to ensure organizations objectives are met.</td>
<td>76</td>
<td>4.13</td>
<td>.660</td>
</tr>
<tr>
<td>Country program conducts performance assessments to ensure objectives set remain realistic in a changing environment.</td>
<td>75</td>
<td>3.89</td>
<td>.863</td>
</tr>
<tr>
<td>Views of programs personnel are considered in strategic plan development.</td>
<td>78</td>
<td>3.82</td>
<td>.802</td>
</tr>
<tr>
<td>Strategy formulation is facilitated by a distinct department.</td>
<td>77</td>
<td>2.97</td>
<td>1.124</td>
</tr>
</tbody>
</table>

According to the results in table 4.2, country projects aim at achieving the organizations vision had the highest mean at M (4.53). This was followed by country projects aim at achieving the organizations mission with a mean, M (4.44). This revealed that most of the respondents strongly agree that the projects that they implement are directly aligned to the organizations vision and mission. We can further deduce that strategy formulation components i.e. the vision and the mission are considered while preparing various project proposals. The question on whether specific project outputs are linked to the overall organizations specific objectives had a mean, M (4.23) while the question on whether country program has identified critical activities to undertake to ensure organizations
objectives are met had a mean, M (4.13). The lowest mean recorded was on the question of whether strategy formulation is facilitated by a distinct department with a mean, M (2.97). The reason why the mean was very small is because there is no department in Amref Health Africa called strategy department that solely facilitates the strategy formulation, implementation, monitoring and evaluation. Instead the process is spearheaded by the Executive Committee that constitutes of managers from various departments and external consultants.

The question on whether strategy formulation is facilitated by a distinct department had the highest standard deviation, SD (1.124). The reason for this is that most employees felt that the organization does not have a specific department that is tasked with strategy formulation hence the mean was low, thus creating a higher deviation from the aggregate mean. The question on whether country projects aim at achieving the organizations mission had the lowest standard deviation SD (0.524). This implies that most respondents agreed that the country projects are aligned to the organizations mission hence resulting to the least deviation from the aggregate mean.

4.3.2 Correlation between Strategy Formulation Process and Strategic Project Risk Management

One of the objectives of the study was to determine whether there existed any relationship between the strategy formulation process and strategic project risk management. This was done through a correlation analysis where each of the elements in the questionnaire was run against the independent variables and the dependent variable as indicated below:
Table 4.3: Strategy Formulation Correlation Matrix

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Country projects aim at achieving the organizations vision</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Country projects aim at achieving the organizations mission</td>
<td>.710''</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Specific project outputs are linked to the overall organizations specific objectives.</td>
<td>.354''</td>
<td>.491''</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Country program management aggressively scan the environment to establish critical success factors.</td>
<td>.313''</td>
<td>.324''</td>
<td>.285''</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 All country projects have clear measurable targets loaded into Amref Information Management Systems (AIMS).</td>
<td>.096</td>
<td>.238''</td>
<td>.328''</td>
<td>.309''</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Country program has identified critical activities to undertake to ensure organizations objectives are met.</td>
<td>.186</td>
<td>.108</td>
<td>.242''</td>
<td>.219</td>
<td>.422''</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 Country program conducts performance assessments to ensure objectives set remain realistic in a changing environment.</td>
<td>.186</td>
<td>.224</td>
<td>.191</td>
<td>.402''</td>
<td>.255'</td>
<td>.459''</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 Views of programs personnel are considered in strategic plan development.</td>
<td>.042</td>
<td>.127</td>
<td>.152</td>
<td>.242'</td>
<td>.063</td>
<td>.151</td>
<td>.323''</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 Strategy formulation is facilitated by a distinct department.</td>
<td>-.176</td>
<td>-.069</td>
<td>.114</td>
<td>.188</td>
<td>.288'</td>
<td>.089</td>
<td>.376''</td>
<td>.154</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>10 Strategic Project Risk Management</td>
<td>.049</td>
<td>.013</td>
<td>.028</td>
<td>.380''</td>
<td>.142</td>
<td>.278''</td>
<td>.366''</td>
<td>.555''</td>
<td>.265''</td>
<td>1</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

**Key**

<table>
<thead>
<tr>
<th>Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Country projects aim at achieving the organizations vision</td>
</tr>
<tr>
<td>2 Country projects aim at achieving the organizations mission</td>
</tr>
<tr>
<td>3 Specific project outputs are linked to the overall organizations specific objectives.</td>
</tr>
<tr>
<td>4 Country program management aggressively scan the environment to establish critical success factors.</td>
</tr>
<tr>
<td>5 All country projects have clear measurable targets loaded into Amref Information Management Systems (AIMS).</td>
</tr>
<tr>
<td>6 Country program has identified critical activities to undertake to ensure organizations objectives are met.</td>
</tr>
<tr>
<td>7 Country program conducts performance assessments to ensure objectives set remain realistic in a changing environment.</td>
</tr>
<tr>
<td>8 Views of programs personnel are considered in strategic plan development.</td>
</tr>
<tr>
<td>9 Strategy formulation is facilitated by a distinct department.</td>
</tr>
<tr>
<td>10 Strategic Project Risk Management</td>
</tr>
</tbody>
</table>
According to the results on table 4.3, at 99% confidence level, the independent variables, country projects aim at achieving the organizations mission and country projects aim at achieving the organizations vision had a very strong positive statistical significance at $r = 0.710; p \leq 0.01$. Further, specific project outputs are linked to the overall organizations specific objectives and country projects aim at achieving the organizations mission had a very strong statistical significance $r = 0.491; p \leq 0.01$. This means that most of the respondents felt that these elements were critical for the organization to have for there to be effective strategic project risk management within the organization. Another strong positive correlation was between the independent variable, views of programs personnel are considered in strategic plan development and the dependent variable Strategic Project Risk Management at $r = 0.555; p \leq 0.01$. This means that majority of the respondents felt that views of program personnel needed to be considered in strategic plan development as a tool for effective strategic project risk management. If the program personnel are involved in the strategic plan development process then they will also drive the agenda of ensuring that any risks that could prevent the organizations from meeting the project objectives set are mitigated on time.

At 95% confidence level the independent variables country program management aggressively scan the environment to establish critical success factors and specific project outputs are linked to the overall organizations specific objectives had a positive relationship at $r = 0.285; p \leq 0.05$. Further strategy formulation is facilitated by a distinct department and all country projects have clear measurable targets loaded into Amref Information Management Systems (AIMS) had a positive relationship at $r = 0.288; p \leq 0.05$. This implies that management could consider these independent variables given that they do contribute to effective strategic project risk management. Another positive relationship was between the independent variable, country program has identified critical activities to undertake to ensure organizations objectives are met and the dependent variable Strategic Project Risk Management at $r = 0.278; p \leq 0.05$. This implies that some of the respondents felt that it would be identification of critical activities to undertake to ensure that organizations objectives are met would contribute to effective strategic project risk management.

The independent variable, all country projects have clear measurable targets loaded into Amref Information Management Systems (AIMS) and dependent variable, Strategic
Project Risk Management, had a weak positive relationship at r 0.142; p ≤ 0.05. This implies that most respondents felt that this was not a critical element for effective strategic project risk management. There was also weak positive relation between the independent variables, views of programs personnel are considered in strategic plan development and country projects aim at achieving the organizations vision at r 0.042; p ≤ 0.05. There was no negative relationship noted between any of the strategy formulation elements in the questions with that of strategic project risk management.

4.4 Resource Allocation and Strategic Project Risk Management

This section analyses how the allocation of organizational resources contributes to effective strategic project risk management in Amref Health Africa. This was achieved through correlation analysis. The study findings are presented in the following section.

4.4.1 Resource Allocation Descriptive Statistics Table

Table 4.4: Resource Allocation Descriptive Statistics Table

<table>
<thead>
<tr>
<th>Resource Allocation</th>
<th>N</th>
<th>Mean</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>The organization has financial resources to achieve objectives.</td>
<td>78</td>
<td>3.47</td>
<td>.977</td>
</tr>
<tr>
<td>The organization has physical office space for its operations.</td>
<td>78</td>
<td>4.29</td>
<td>.605</td>
</tr>
<tr>
<td>The organization has robust Information Technology to support its operations.</td>
<td>78</td>
<td>3.54</td>
<td>1.028</td>
</tr>
<tr>
<td>The organization has personnel for its day to day operations.</td>
<td>76</td>
<td>4.14</td>
<td>.725</td>
</tr>
<tr>
<td>The organization has a good reputation within the health sector.</td>
<td>75</td>
<td>4.67</td>
<td>.644</td>
</tr>
<tr>
<td>The organization is investing in innovative resources to support organizations objectives.</td>
<td>78</td>
<td>3.87</td>
<td>.762</td>
</tr>
<tr>
<td>The organization has invested in training personnel to ensure skills set remain relevant in the changing environment.</td>
<td>78</td>
<td>3.06</td>
<td>.944</td>
</tr>
<tr>
<td>The organizational assets are unique and not shared by other organizations within the health sector.</td>
<td>78</td>
<td>3.03</td>
<td>.967</td>
</tr>
</tbody>
</table>
The organization has a good reputation within the health sector had the highest mean, M (4.67) followed by the organization has physical office space for its operations with a mean, M (4.29). This means that most respondents strongly agreed that Amref Health Africa has a strong good reputation and the physical infrastructure to undertake its mandate. The reason as to why this is so is because Amref Health Africa was founded in 1957 and has consistently maintained a good relationship with the various governments and communities over the last 60 years. The organizational assets are unique and not shared by other organizations within the health sector had the lowest mean, M (3.03). This implies that majority of the respondents felt that other health related non-governmental organizations within the region had similar assets that Amref Health Africa has.

The organization has robust Information Technology to support its operations had the highest standard deviation, SD (1.028) followed closely by the organization has financial resources to achieve objectives at SD (0.977), the organizational assets are unique and not shared by other organizations within the health sector at SD (0.967) and the organization has invested in training personnel to ensure skills set remain relevant in the changing environment at SD (0.944). The reason for this is that a significant number of respondents felt that Amref Health Africa lacks adequate financial resources, information technology infrastructure and unique assets to accomplish its mandate. This resulted to a lower mean hence a higher deviation from the aggregate mean. The organization has physical office space for its operations had the lowest standard deviation SD (0.605). This means that most respondents agreed that the organization has adequate physical office space for its operations hence a lower deviation from the aggregate mean.

**4.4.2 Correlation between Resource Allocation and Strategic Project Risk Management**

Another objective of the study was to determine whether there existed any relationship between the resource allocation and strategic project risk management. This was done through a correlation analysis where each of the elements in the questionnaire was run against the independent variables and the dependent variable as indicated below.
Table 4.5: Resource Allocation Correlation Matrix

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>0.288*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>0.428**</td>
<td>0.368**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>4</td>
<td>0.425**</td>
<td>0.413**</td>
<td>0.373**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>-0.014</td>
<td>0.263*</td>
<td>0.362**</td>
<td>0.194</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>0.170</td>
<td>0.196</td>
<td>0.205</td>
<td>0.344**</td>
<td>0.375**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>0.305**</td>
<td>0.080</td>
<td>0.339**</td>
<td>0.163</td>
<td>0.324**</td>
<td>0.481**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>-0.109</td>
<td>0.031</td>
<td>0.077</td>
<td>-0.006</td>
<td>0.144</td>
<td>0.005</td>
<td>0.112</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>0.334**</td>
<td>0.139</td>
<td>0.423**</td>
<td>0.405**</td>
<td>0.265*</td>
<td>0.449**</td>
<td>0.428**</td>
<td>0.179*</td>
<td>1</td>
</tr>
</tbody>
</table>

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).

Key

<table>
<thead>
<tr>
<th>Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 The organization has financial resources to achieve objectives.</td>
</tr>
<tr>
<td>2 The organization has physical office space for its operations.</td>
</tr>
<tr>
<td>3 The organization has robust Information Technology to support its operations.</td>
</tr>
<tr>
<td>4 The organization has personnel for its day to day operations.</td>
</tr>
<tr>
<td>5 The organization has a good reputation within the health sector.</td>
</tr>
<tr>
<td>6 The organization is investing in innovative resources to support organizations objectives.</td>
</tr>
<tr>
<td>7 The organization has invested in training personnel to ensure skills set remain relevant in the changing environment.</td>
</tr>
<tr>
<td>8 The organizational assets are unique and not shared by other organizations within the health sector.</td>
</tr>
<tr>
<td>9 Strategic Project Risk Management</td>
</tr>
</tbody>
</table>

The results on table 4.5, at 99% confidence level, show that the following independent variables have a very strong positive relationship. The organization is investing in innovative resources to support organizations objectives and the organization has invested in training personnel to ensure skills set remain relevant in the changing environment had a very strong positive statistical significance at r 0.481; p ≤ 0.01. The organization has robust Information Technology to support its operations and the organization has financial resources to achieve objectives had a very strong positive statistical significance at r 0.428; p ≤ 0.01. This means that the current investment being done in personnel within Amref Health Africa towards innovation are critical elements for there to be effective strategic project risk management. There are more employees being recruited to spearhead the
unique health solutions innovations such as LEAP. This is followed by a strong positive relationship between the organization is investing in innovative resources to support organizations objectives and the dependent variable, strategic project risk management, at \( r = 0.449; p \leq 0.01 \). This means that most respondents agreed that investing in innovative resources improves the effectiveness of strategic project risk management. Innovative resources help the organization reinvent itself in the current turbulent environment.

At 95% confidence level the independent variable, the organization has a good reputation within the health sector had positive relationship with the dependent variable, strategic project risk management, at \( r = 0.265; p \leq 0.05 \). This implies that fewer respondents felt that there was any relationship between Amref Health Africa’s reputation and strategic project risk management. The independent variables the organization has physical office space for its operations and the organization has a good reputation within the health sector had a positive relationship at \( r = 0.263; p \leq 0.05 \). This implies that fewer respondents felt that these were not critical elements for there to be effective strategic project risk management.

The organizational assets are unique and not shared by other organizations within the health sector had a very weak positive relationship between the other independent variables and the dependent variable, strategic project risk management, at \( r = 0.179; p \leq 0.05 \). This implies that most respondents felt that this variable was not important in enhancing effective strategic project risk management. Therefore the management should not focus so much in ensuring that they possess unique assets.

### 4.5 Systemic Factors and Strategic Project Risk Management

This section analyses how systemic factors contribute to effective strategic project risk management in Amref Health Africa.

#### 4.5.1 Systemic Factors Descriptive Statistics Table
Table 4.6: Systemic Factors Descriptive Statistics Table

Strongly disagree=1, Disagree =2, Neutral =3, Agree=4, Strongly Agree=5

<table>
<thead>
<tr>
<th>Systemic Factors</th>
<th>N</th>
<th>Mean</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>The organization has high focus on task to be undertaken</td>
<td>78</td>
<td>3.96</td>
<td>.711</td>
</tr>
<tr>
<td>The organization has a high focus on people</td>
<td>78</td>
<td>3.51</td>
<td>.990</td>
</tr>
<tr>
<td>The organization has a culture of continuous innovation.</td>
<td>78</td>
<td>3.46</td>
<td>.848</td>
</tr>
<tr>
<td>The organization has a culture of continuous improvement.</td>
<td>78</td>
<td>3.78</td>
<td>.784</td>
</tr>
<tr>
<td>The organization focuses highly on achieving a high burn rate.</td>
<td>76</td>
<td>4.36</td>
<td>.743</td>
</tr>
<tr>
<td>The organization focuses highly on programmatic impact of activities to society.</td>
<td>76</td>
<td>3.99</td>
<td>.887</td>
</tr>
<tr>
<td>The concept of, “One Amref” is shared across the organization.</td>
<td>76</td>
<td>3.21</td>
<td>1.075</td>
</tr>
<tr>
<td>The organization has diversified too much in terms of various projects implementation.</td>
<td>77</td>
<td>3.49</td>
<td>1.008</td>
</tr>
<tr>
<td>The organization has high bureaucratic structures</td>
<td>78</td>
<td>3.12</td>
<td>1.105</td>
</tr>
<tr>
<td>Shared services have improved efficiency within the organization.</td>
<td>78</td>
<td>3.49</td>
<td>.964</td>
</tr>
</tbody>
</table>

The results on table 4.6 indicate that the organization focuses highly on achieving a high burn rate had the highest mean, M (4.36). This means that most respondents agreed that Amref Health Africa focuses heavily on ensuring that all projects achieve 100% burn rate. This subsequently implies that all project activities are fully implemented and therefore funds provided by donors are fully absorbed. The organization has high bureaucratic structures had the lowest mean, M (3.12). This means that more respondents agreed that Amref Health Africa has relatively flat structures and that bureaucracy had been largely curtailed within the organization.

Moreover, the organization has high bureaucratic structures had the highest standard deviation, SD (1.105) followed closely by the concept of, “One Amref” is shared across the organization at SD (1.075). This means a significant number of respondents felt that the organization does not have bureaucratic structures especially with the current open door
policy embraced within the organization. Further, a number of respondents felt that the concept of “One Amref” is yet to be fully realized given that the centralized systems had just been recently rolled out in all countries. The organization has high focus on task to be undertaken had the lowest standard deviation, SD (0.711). This means that most respondents believed that the organization takes its various project activities very seriously and seeks to ensure that its mandate of bringing a lasting health change in Africa through strengthening health systems is achieved.

4.5.2 Correlation between Systemic Factors and Strategic Project Risk Management

Another objective of the study was to determine whether there existed any relationship between the systemic factors and strategic project risk management. This was done through a correlation analysis where each of the elements in the questionnaire was run against the independent variables and the dependent variable as indicated below:

Table 4.7: Systemic Factors Correlation Matrix

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
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</tr>
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<td>3</td>
<td>.375**</td>
<td>.457**</td>
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<td></td>
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<td>4</td>
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<td>.648**</td>
<td>.505**</td>
<td>1</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>.101</td>
<td>.208</td>
<td>.306**</td>
<td>.266*</td>
<td>1</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>.521**</td>
<td>.571**</td>
<td>.553**</td>
<td>.615**</td>
<td>.384**</td>
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<tr>
<td>7</td>
<td>.277*</td>
<td>.323**</td>
<td>.273*</td>
<td>.431**</td>
<td>.284*</td>
<td>.480**</td>
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<td></td>
</tr>
<tr>
<td>8</td>
<td>.203</td>
<td>-.082</td>
<td>-.111</td>
<td>-.027</td>
<td>.033</td>
<td>-.015</td>
<td>.005</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>-.127</td>
<td>-.280*</td>
<td>-.168</td>
<td>-.376**</td>
<td>-.199</td>
<td>-.191</td>
<td>-.380**</td>
<td>.166</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>.104</td>
<td>.266*</td>
<td>.007</td>
<td>.125</td>
<td>.003</td>
<td>.069</td>
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<td>.104</td>
<td>-.090</td>
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<td></td>
</tr>
<tr>
<td>11</td>
<td>.475**</td>
<td>.451**</td>
<td>.540**</td>
<td>.534**</td>
<td>.234*</td>
<td>.545**</td>
<td>.397**</td>
<td>.019</td>
<td>-.260</td>
<td>.455**</td>
<td>1</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).
The results on table 4.7, at 99% confidence level, reveal that the independent variables, the organization has a high focus on people and the organization has a culture of continuous improvement had a very strong positive statistical significance at $r = 0.648; p \leq 0.01$. This was followed by a very strong positive relationship between the organization focuses highly on programmatic impact of activities to society and the organization has a culture of continuous improvement at $r = 0.615; p \leq 0.01$. This means that most respondents felt that the culture of continuous improvement is a critical element to have for effective strategic project risk management. The organization focuses highly on programmatic impact of activities to society and the organization has a high focus on people within the organization also displayed a very strong positive statistical significance at $r = 0.571; p \leq 0.01$. This implies that these are critical elements for there to be effective strategic project risk management. This also indicates that the organization is investing in the right people with the right skills to ensure that the project activities implemented directly benefit the communities that Amref Health Africa serves. Additionally the independent variable, the organization focuses highly on programmatic impact of activities to society and the dependent variable, strategic project, risk management have a strong positive correlation at $r = 0.545; p \leq 0.01$. From this result, we can deduce that most respondents felt that for there to be effective strategic project risk management then the organization has to keep a close track on the impact of the various programmatic activities so that the objectives are met. Failure to keep track of these programmatic activities implies that risks may arise and remain undetected.
At 95% confidence level the independent variables, the concept of, “One Amref” is shared across the organization and the organization has high focus on task to be undertaken had a positive relationship at r 0.277; p ≤ 0.05. This implies that management could consider focusing on these elements so that effective strategic project risk management is achieved. Further there was a positive relationship between the independent variable; the organization focuses highly on achieving a high burn rate and the dependent variable, Strategic Project Risk Management at r 0.234; p ≤ 0.05. This implies that the management could also consider ensuring that the burn rate is monitored for there to be effective strategic project risk management.

Further, the findings of the study established the existence of negative relationships between different questions on systemic factors. The organization has high bureaucratic structures and the concept of, “One Amref” is shared across the organization had the highest negative correlation at r 0.380; p ≥ 0.05. This was followed closely by the organization has high bureaucratic structures and the organization has a culture of continuous improvement at r 0.376; p ≥ 0.05. This means that most respondents felt that the organization would not be able to achieve the concept of “One Amref” and culture of continuous innovation if the organization had high bureaucratic structures. From this we can deduce that bureaucracy could impede innovation and improvement hence affecting effective strategic project risk management.

4.6 Chapter Summary

This chapter analyzed the data obtained from the field and presented the results and findings using pie charts, graphs and tables. This chapter covered information on the demographic information of the respondents, information on the organization’s strategy formation, resource allocation, systemic factors, and the strategic project risk management. This chapter is followed by chapter five which will cover discussions, conclusions, and recommendations.
CHAPTER FIVE

5 DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter provides the discussions, conclusions and recommendations of the research project from the research questions to the data analysis. The study sought to establish the determinants of strategic project risk management in Amref Health Africa. The chapter mainly constitutes the summary, conclusions, recommendations and suggestions for further studies.

5.2 Summary

The purpose of this study was to examine the determinants of strategic risk management in projects at Amref Health Africa. The 3 research questions that guided the study mainly sought to establish how strategy formulation process, allocation of organizational resources and systemic factors contribute to effective strategic project risk management in Amref Health Africa.

The study adopted descriptive statistics to establish the determinants of effective strategic project risk management in Amref Health Africa. The target population or unit of analysis of this study was Amref Health Africa’s executive committee members, senior management teams, program managers, project managers, operational managers and senior officers across the 7 countries where the organization has presence. The sampling frame used for this study was the management teams and key officers of Amref Health Africa as obtained from employee records maintained by the Human Resources Directorate. A census approach was adopted given that the population under consideration was small (N=125). The sample size was therefore 125 respondents. The primary data collection method used was self-administered questionnaires that were administered via google-forms. The number of responses obtained were 78 responses out of the 125 respondents hence a response rate of 62%. The results of this study were presented in tables and figures and the analysis was done using the Statistical Package for Social Sciences (SPSS).
computer software. The qualitative data was analyzed in line with the research questions and presented in prose form.

The research found that strategy formulation process affected the strategic project risk management of Amref Health Africa as confirmed by 65% of the respondents. Moreover 55% of the respondents noted that strategic risks are considered during the organizations strategy formulation process. 99% of the respondents felt that the current projects were aligned to the vision and mission of the organization. 92% of the respondents felt that the country programs had identified critical activities to undertake to ensure organizational objectives were met. A very strong positive statistical significance was noted between the independent variable, views of programs personnel are considered in strategic plan development and the dependent variable, Strategic Project Risk Management, at r 0.555; p ≤ 0.01. The weakest positive relationship noted was the independent variable, all country projects have clear measurable targets loaded into Amref Information Management Systems (AIMS) and dependent variable, Strategic Project Risk Management, at r 0.142; p ≤ 0.05.

The findings also showed that the risks and opportunities were considered while allocating resources as was stated by 51% of the respondents who noted that financial resources were allocated based on risk and 42% of the respondents who noted that human resources were allocated based on risk. Further most respondents at mean, M (4.67) and M (4.29) noted that the organization has a good reputation within the health sector and has adequate physical office space for its current programmatic operations. There was a very strong correlation between the organization investing in innovative resources to support organizations objectives and strategic project risk management at r 0.449; p ≤ 0.01. The weakest relationship was noted between the organizational assets are unique and not shared by other organizations within the health sector and strategic project risk management.

Further the findings showed that systemic factors such organizational structure and organizational culture affect strategic risk management. 87% of respondents noted that Amref Health Africa has high focus on the task to be undertaken and 63% of respondents felt that organization has high focus on people. 91% of the respondents felt that the organization focuses on achieving a high burn rate. A very strong correlation was noted between organization focuses highly on programmatic impact of activities to society and
strategic project risk management at $r \leq 0.01$. The weakest correlation was noted between high bureaucratic structures and strategic project risk management at $r \geq 0.05$.

### 5.3 Discussion

#### 5.3.1 Strategy Formulation and Strategic Risk Management

The research findings indicate a strong positive relationship between the strategy formulation process and strategic project risk management at Amref Health Africa. Most of the respondents acknowledged that the specific in-country projects contribute significantly to the achievement of the organization's vision and mission. The specific unique in-country project objectives are linked to the overall organizational objectives and this clearly loaded in Amref Information Management system. This is in line with Lalonde and Boiral (2012) that noted that organizations can no longer stick to the formal strategy formulation approach on risk management whereby strategy is viewed as a document an organization has. Rather, organizations have to move to reflective strategic praxis in the field of risk management whereby strategy is viewed as what an organization does.

Further majority of the respondents noted that strategy formulation is not facilitated by a distinct department. Rather, it is a consultative process where views of program personnel are considered in strategic plan development. This supports O'Brien (2011) views that strategy formulation process entails the utilization of various project management and financial analysis tools are used by people from various departments. Risk management is viewed as a distinct process that is mainly spearheaded by a distinct department. Most the respondents noted that strategic risks are considered during strategy formulation and that strategy formulation affects strategic project risk management. This is a clear indication that there is a high level of integration of strategy formulation and strategic project risk management at Amref Health Africa. This supports the views of Furstenberg (2014) that noted there is a need to ensure that there is a symbiotic relationship between strategic planning and risk management.

A majority of the respondents indicated that project risk registers outlining key strategic risks that projects face exist within Amref Health Africa. Further, respondents noted that management has included strategic project risk management as a key agenda in the various
management meetings. This is a clear indication that the organization does not fall within the category of organizations outlined in the Economist Intelligence Unit (2010) as not being able to operationalize the linkage between risk management and corporate strategy.

Majority of the respondents noted that the country programs have identified critical activities to undertake to ensure that the organizations objectives are met. This supports what Wallis (2014) noted that integration of strategic risk management to strategy formulation can provide strategic and operational opportunities by focusing organizational management on activities that are critical to its success.

The respondents also noted that the in-country specific management aggressively scan the environment to establish critical success factors. This supports the views of Nitank and Trivedi (2016) who noted that the PESTLE analysis and SWOT analysis help in identifying critical external and internal risks. Scanning the environment entails the use of tools such as PESTLE, Porters Five Force Model and the Value Chain Analysis. Calatayud and Ketterer (2016) noted that enhancing value chain access and performance could be done by embracing an integrated risk management approach to value chains.

5.3.2 Resource Allocation and Strategic Risk Management

The research findings clearly indicate a strong positive relationship between resource allocation and strategic project risk management at Amref Health Africa. To begin with, most of the respondents noted that the organization has critical tangible and intangible resources at hand. The tangible resources noted by the respondents were financial resources, physical land and building and information technology infrastructure. The main intangible resources noted by most of the respondents was good reputation and skills vested in the human capital. The respondents further highlighted other tangible resources that provide it a sustainable competitive advantage over other NGOs as follows: Air-evacuation aircrafts, Medical Doctors that participate heavily in programming, high calibre of Amref Health Africa training programs’ alumni in key institutions, mHealth Platform, Clinic, Laboratory, Resource Centres across Africa, Community Health Workers and Nurse Training School. This supports the views of Brahma and Chakraborty (2011) who concluded that sustainability of any given organization is a factor of the firms critical resources and the immobility of those resources.
A fewer number of the respondents noted that the various projects have risk registers outlining the strategic risks the projects face and that risks are prioritized from those registers. The risk registers are a useful resource to assist in prioritization of various risks. This supports the views of Berg (2010) who developed a risk matrix that assists organizations prioritize various risks. Majority of the respondents highlighted that Amref Health Africa has invested in specific personnel that ensure that the organizations risks are assessed and managed. It was further by most of the respondents that Amref Health Africa has developed templates to facilitate its risk management process. This supports Spender and Groen (2011) view that there is need to incorporate uncertainty (i.e. risk) into the Resource Based View (RBV) framework if the organization is to attain a sustainable competitive advantage.

The study indicated that both human resources and financial resources at Amref Health Africa were allocated based on prioritization of various risks. The respondents also noted that the organization mainly allocated financial and human resources based on opportunities. This is in agreement with Pat'e-Cornell and Cox Jr. (2014) who noted that an organization needs to put the right people, in the right place with the right knowledge, incentives and resources as one of the foundations for effective strategic risk management. It also supports the EY (2014) report that concluded that it is imperative for organizations to have capital and resource allocations risk-adjusted.

5.3.3 Systemic Factors and Strategic Risk Management

From the research findings, there is a direct correlation between the systemic factors and the strategic project risk management at Amref Health Africa. A majority of the respondents noted that Amref Health Africa has a high focus on tasks and people. The high focus on tasks is further supported by the fact that most respondents indicated that the organizations seeks to ensure that it’s programmatic impact is felt in society and that it’s financial objectives are met through achieving a significant burn rate. This implies that the organizations culture could be viewed as networked culture according to IRM (2012) that developed the Sociability Vs Solidarity Model used in trying to establish an organizations risk culture. A networked culture further implies that organizations drives strong sociability which is likely to result to cohesion and common purpose within the
organization. Amref Health Africa could also be said have a mix of group culture that emphasizes on the focus on people, rational culture that emphasizes on meeting the objectives by undertaking the tasks and developmental culture that focuses on improvement and innovation. This supports the view that Amref Health Africa could be viewed to have a higher risk appetite as was highlighted by Iivari & Huisman (2007) who indicated that developmental, group and rational culture are positively associated with risk-taking.

Most of the respondents felt that Amref Health Africa has a culture of continuous improvement. Further, the respondents felt that the organization has a culture of continuous innovation. This supports the views of Teece, Peteraf and Leih (2016) who stated that organizations that have established a corporate culture of continuous renewal and innovations are able to remain responsive to any emerging risks.

A majority of the respondents also felt that Amref Health Africa does not have high bureaucratic structures. This supports the development culture within the organization and therefore supports the views of McManus, Seville, Vargo and Brunsdon (2008) who noted that risks require organizations to be able to adopt decentralized decision-making structures rather than rely on hierarchy and centralized authority.

The study established that the members of the Board and country specific national advisory councils keeps track of the risks identified within the various countries. This supports the view of Wieczorek-Kosmala (2014) who noted that for there to be strategic risk management maturity there is need for a very high board level commitment. However, we noted that a number of respondents noted that risk management plans were not being formally communicated to staff. This goes against Wieczorek-Kosmala (2014) who stated that there is need to cascade down to the entire organization the risk management strategy and framework that is continuously reviewed and updated.
5.4 Conclusion

5.4.1 Strategy Formulation and Strategic Risk Management

The study concludes that the strategy formulation process affects the strategic project risk management. This is in terms of the consideration of strategic risks during the strategy formulation stage. It also entails moving away from viewing strategy formulation and strategic risk management as documents to be drafted but instead a move to reflective strategic praxis whereby strategy is viewed as what an organization does. Integration of strategic formulation process and strategic risk management ensures that the organization keeps track of the critical activities it needs to undertake to ensure that it meets its objectives.

5.4.2 Resource Allocation and Strategic Risk Management

On the subject of resource allocation, this study concluded that resource allocation affects strategic project risk management in Amref Health Africa. The organization has tangible and intangible resources which are allocated based on opportunities available as well as the prioritization of risks. The organization has also invested in risk management templates, training personnel on strategic risk management so as to ensure that its risk management initiatives are effective and efficient in a dynamic environment.

5.4.3 Systemic Factors and Strategic Risk Management

The study also concluded that the systemic factors affect strategic project risk management in Amref Health Africa. This is in terms of the organizational culture and organizational structure of the organization. Amref Health Africa could be viewed as having a networked culture that enhances risk taking as well as adoption of risk management initiatives. The culture of continuous improvement and high level of board involvement implies that the organization is able to remain responsive to emerging risks. The lack of a highly bureaucratic structure implies that Amref Health Africa is able to make decisions in a more efficient and effective way which is a critical requirement for effective strategic project risk management.
5.5 Recommendations

5.5.1 Recommendations for Improvement

5.5.1.1 Strategy Formulation and Strategic Risk Management

Based on the research findings, this study recommends that the organization adopts and deliberates on a formal approach of scanning the environment so as to establish key strategic risks that would necessitate the revision of the strategic plan. The organization could further consider ensuring that risk management plans be a mandatory program document for all projects within the organization so that key strategic risks that could hinder the achievement of the organizational goals are identified in good time. The study further recommends that strategic project risk management be formally included as a responsibility within the project managers’ job descriptions in the same way key milestones within the organizations business plan are included in key management job descriptions.

5.5.1.2 Resource Allocation and Strategic Risk Management

The study recommends that more financial and information technology resources be invested in the strategic project risk management so as to improve the process. A risk management automated system will present all data regarding project specific strategic risks to management through a dashboard. Cascading the risk management framework adoption in all country offices will require training of project managers. This will require financial resources. Moreover the organization should also consider ensuring that project managers take advantage of key donor-specific training opportunities to ensure that they remain abreast on key policy changes that would present strategic project risks to Amref Health Africa.

The study further recommends more investment in public relations initiatives that will ensure that the social enterprises investments done by Amref Health Africa are known to the respective country citizens. This will ensure that key strategic risk on sustainability is addressed.
5.5.1.3 Systemic Factors and Strategic Risk Management

The study recommends the formal selection of country risk management champions so that the strategic project risk management process is decentralized from the headquarters. Alternatively, a risk management committee could also be established within the specific country national advisory councils with an active coordinator to ensure that risk management is formally conducted within the various countries. The study further recommends the establishment of a compliance function within its structure to ensure that all projects comply with donor regulations that could present key strategic risks if not monitored.

Active and intentional communication of strategic risk management plans to all staff through its embedding in day to day project activities has also been recommended. This will allow the staff members embrace risk management as part of their individual responsibility.

5.5.2 Recommendations for Further Studies

The study focused on three determinants of effective strategic project risk management in Amref Health Africa. There is room for further research on other determinants of effective strategic project risk management such as effectiveness of communication of risk management plans to all staff. The researcher also proposes research on the hindrances to effective strategic risk management in Amref Health Africa.
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Dear Respondent

RE: REQUEST FOR YOUR PARTICIPATION IN MY RESEARCH PROJECT

I wish to request you to kindly participate in a research project that I am currently undertaking on “Determinants of Strategic Risk Management in Projects: A Case of Amref Health Africa.”

The objectives of this study are to determine how strategy formulation process, allocation of organizational resources and systemic factors contribute to effective strategic project risk management within the organization.

The information you will provide is strictly for academic purposes and therefore your feedback will be treated with utmost confidentiality.

Please take time to fill the questionnaire that will take approximately 15 minutes.

Sincerely,

Solomon Mwiti Mutwiri
solmon.mutwiri@amref.org/ solomon.mutwiri@gmail.com
Tel: +254-721-394-286
APPENDIX I: QUESTIONNAIRE

Please fill the information as necessary and tick [√] where appropriate.

SECTION A: Demographic Information

1. What is your current department in the organization?
   - Programme [ ]
   - Finance [ ]
   - Human Resources [ ]
   - Audit & Risk [ ]
   - Information technology [ ]
   - Administration [ ]
   - Fundraising [ ]
   - Monitoring and evaluation [ ]
   - Other (Specify)……………………

2. Which is the country of your operation?
   - Kenya [ ]
   - Uganda [ ]
   - Tanzania [ ]
   - Ethiopia [ ]
   - South Sudan [ ]
   - Malawi [ ]
   - Senegal [ ]

3. How long have you worked in Amref Health Africa?
   - Less than 2 years [ ]
   - 2 to 5 years [ ]
   - 5 to 10 years [ ]
   - Above 10 years [ ]

4. What is the current number of projects in your portfolio that you currently supervise?
   - 1 [ ]
   - 2 to 5 [ ]
   - 5 to 10[ ]
   - Above 10 [ ]
   - None [ ]

5. What is the estimated current budget under your portfolio in United States dollars?
   - 0 to 100,000 [ ]
   - 101,000 to 500,000 [ ]
   - 500,001 to 1,000,000[ ]
   - 1,000,001 to 1,500,000 [ ]
   - 1,500,001 to 2,000,000 [ ]
   - Above 2,000,000

6. How many employees do you currently supervise?
   - Less than 2 [ ]
   - 3 to 10 [ ]
   - Above 10 [ ]
SECTION B: Strategy Formulation

Please indicate on the scale provided below by ticking the extent to which you agree with the following statements: Strongly disagree=1, Disagree =2, Neutral =3, Agree=4, Strongly Agree=5

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
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<tr>
<td>7. Country projects aim at achieving the organizations vision.</td>
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<td>8. Country projects aim at achieving the organizations mission.</td>
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<td>9. Specific project outputs are linked to the overall organizations specific objectives.</td>
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<td>10. Country program management aggressively scan the environment to establish critical success factors.</td>
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<td>11. All country projects have clear measurable targets loaded into Amref Information Management Systems (AIMS).</td>
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<td>12. Country program has identified critical activities to undertake to ensure organizations objectives are met.</td>
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<td>13. Country program conducts</td>
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<td><strong>Statement</strong></td>
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<td>performance assessments to ensure objectives set remain realistic in a changing environment.</td>
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<td>14. Views of programs personnel are considered in strategic plan development.</td>
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<td>15. Strategy formulation is facilitated by a distinct department.</td>
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SECTION C: Resource Allocation

Please indicate on the scale provided below by ticking the extent to which you agree with the following statements: Strongly disagree=1, Disagree =2, Neutral =3, Agree=4, Strongly Agree=5

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<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
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<tr>
<td>16. The organization has financial resources to achieve objectives.</td>
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<td>17. The organization has physical office space for its operations.</td>
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<td>18. The organization has robust Information Technology to support its operations.</td>
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<td>19. The organization has personnel for its day to day operations.</td>
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<td>20. The organization has a good reputation within the health sector.</td>
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<td>21. The organization is investing in innovative resources to support organizations objectives.</td>
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<td>22. The organization has invested in training personnel to ensure skills set remain relevant in the changing environment.</td>
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<td>23. The organizational assets are unique and not shared by other organizations within the health sector.</td>
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SECTION D: Systemic Factors

Please indicate on the scale provided below by ticking the extent to which you agree with the following statements: Strongly disagree=1, Disagree =2, Neutral =3, Agree=4, Strongly Agree=5

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<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
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<td>24. The organization has high focus on task to be undertaken.</td>
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<td>25. The organization has a high focus on people.</td>
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<td>26. The organization has a culture of continuous innovation.</td>
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<td>27. The organization has a culture of continuous improvement.</td>
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<td>28. The organization focuses highly on achieving a high burn rate.</td>
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<td>29. The organization focuses highly on programmatic impact of activities to society.</td>
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<td>30. The concept of, “One Amref” is shared across the organization.</td>
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<td>31. The organization has diversified too much in terms of various projects implementation.</td>
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<td>32. The organization has high bureaucratic structures</td>
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<td>33. Shared services have improved efficiency within the organization.</td>
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**SECTION E: Strategic Risk Management in Projects**

Please indicate on the scale provided below by ticking the extent to which you agree with the following statements: Strongly disagree=1, Disagree =2, Neutral =3, Agree=4, Strongly Agree=5

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<tr>
<th>Statement</th>
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<td>34. Risk management is handled by a distinct department.</td>
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<td>35. The organization has a robust risk management framework.</td>
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<td>36. Strategic risks are considered during the strategy formulation.</td>
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<td>37. Strategy formulation affects risk management.</td>
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<td>38. Projects have a risk register that outlines key strategic risks the projects face</td>
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<td>39. Risks are prioritized within the various projects within the organization.</td>
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<td>40. The organization has invested in personnel to ensure that organizations risks are assessed and managed.</td>
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<td>41. Human resources are allocated based on prioritization of risks.</td>
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<td>42. Financial resources are allocated based on prioritization of risks.</td>
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<td>43. The organization has templates to facilitate its risk management process.</td>
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<td>Statement</td>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly Agree</td>
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<td>44. The organization employs the necessary risk mitigation strategies.</td>
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<td>45. The management has included strategic risk management as a key agenda in meetings.</td>
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<td>46. Risk management plans are formally communicated to staff.</td>
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<td>47. Project personnel view strategic risk management as part of their routine work activities</td>
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<td>48. Country program has a risk management champion in-charge of coordinating risk management.</td>
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<td>49. The Board keeps track of strategic risks faced by the Country Program.</td>
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</table>

50. What are some of the key improvement areas on strategic risk management process within Amref Health Africa?  
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THANK YOU VERY MUCH FOR YOUR SUPPORT