



**ST. MARY'S UNIVERSITY SCHOOL OF  
GRADUATE STUDIES  
MASTERS OF PROJECT MANAGEMENT**

**ASSESSING ORGANIZATIONAL RISK MANAGEMENT  
PRACTICES IN TIME OF COVID-19 CRISIS—A CASE  
STUDY OF ETHIOPIAN AIRLINES**

**BY: G. NEKERWON GWEH**

**JULY, 2021  
ADDIS ABABA, ETHIOPIA**

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**BY: G. NEKERWON GWEH**

**ID. No. SGS/0271/2012/A**

**ADVISOR: DEJENE MAMO (PhD),**

**Assistant Professor of Finance and Political Economy**

A THESIS SUBMITTED TO ST.MARYS UNIVERSITY SCHOOL OF  
GRADUATE STUDIES IN PARTIAL FULFILLMENT OF THE  
REQUIREMENTS FOR THE DEGREE OF MASTERS OF  
PROJECT MANAGEMENT

JULY, 2021

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**SCHOOL OF GRADUATE STUDIES**  
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RESEARCH TITLE:

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APPROVED BY BOARD OF EXAMINERS

Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Dean, Graduate Studies

Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Advisor

Name: Dereje Teklemariam (PhD)

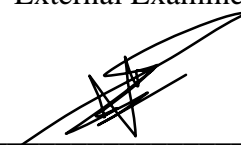
Signature: \_\_\_\_\_



External Examiner

Name: ASFAW YILMA (PhD)

Signature: \_\_\_\_\_



Internal Examiner

## DECLARATION

I, the undersigned, declare that this thesis is my original work, prepared under the guidance of Dejene Mamo (PhD). All sources of materials used for the thesis have been duly acknowledged. I further confirm that the thesis has not been submitted either in part or in full to any other higher learning institution for the purpose of earning any degree.

G. Nekerwon Gweh

Name

St. Mary's University, Addis Ababa

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Signature

July, 2021

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## ACKNOWLEDGEMENTS

Let me first of all give praises to God Almighty for granting me the opportunity to be alive and see this long awaited dream becomes a reality. I prayed many years ago that I will one day earn a Master's Degree and I am so grateful that God has made this possible.

Secondly, I would like to express my profound gratitude to my Advisor for this Research project, Dr. Dejene Mamo (Assoc. Professor, Finance and Political Economy) for his frank and critical review, sincere comments and encouraging support he provided throughout this study. Sir, I remain forever grateful for your fatherly role and the high degree of professionalism you showed me to make this thesis possible. May Egzhabher (God) Bless and keep you strong.

The author also acknowledges the moral, financial and other forms of support from colleagues, friends, workmates and relatives whose meager contributions served as a source of strength and inspiration throughout this academic journey. I would particularly recognize the support of the Ethiopian Airlines Human Resource Department, especially Mr. Chimdesa Chari (Senior HR Officer) for coordinating all processes leading to selecting respondents and data collection. You were truly my miracle helper, thank you so very much. Heartfelt gratitude and appreciation also goes to all the respondents from the Risk Management Section and the Project Management Department of Ethiopian Airlines, your contributions to this research project will never be forgotten.

To all the members of my class group at St. Mary's University, ( Mehari Melese, Liyu Dender, Hana Getachew, and Nardos Teklehana. Not forgetting my own brother, Lidetu Tekle). You all accepted me and welcomed me to the group with opened arms and we successfully did great school projects together. I must say, it was so much fun being with you guys as my new family in Ethiopia. I am very grateful for all your support and true friendship. Not to forget Ms. Haymanot Berhanu and the Color Effect Print & Advertising PLC, thank you for your support to do all my desktop publishing for all my school works.

Finally, to my parents, my siblings and family members, I would say thank you all for working so hard to make me the man I have become. You all believed in me and have supported me in every way possible to achieve my dreams. I am dedicating this achievement to you all. God bless you all abundantly.



## LIST OF ACRONYMS

AABLA	Africa Business Leaders Award
AFRAA	African Airlines Association
CCA	Corporate Council of Africa
CEO	Chief Executive Officer
CFI	Corporate Financial Institute
COVID-19	Coronavirus Disease
FAA	Federal Aviation Administration
EAA	Ethiopian Aviation Academy
EASA	European Aviation Safety Agency
ECAA	Ethiopian Civil Aviation Authority
EINA	Ethiopian Immigration and Nationality Affairs
ERM	Enterprise Risk Management
ESQR	European Society for Quality Research
ET/ETG	Ethiopian/Ethiopian Group
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IDC	Industrial Development Corporation
MPL	Multi-Crew Pilot License
MRO	Maintenance Repair & Overhaul
PMBOK	Project Management Body of Knowledge
PMI	Project Management Institute
PPE	Personal Protective Equipment
SAA	South African Airways
SCCT	Situational Crisis Communication Theory
TLM	Team Leadership Model
WFP	World Food Program
WHO	World Health Organization
WTO	World Trade Organization

## **ABSTRACT**

*A natural situation such as this COVID-19 health crisis is a real phenomenon and has destroyed many organizations, livelihoods, and commercial projects in many countries across the globe. However, some multilateral and continental companies and individual business practitioners have adopted key strategies especially in terms of risk management and crisis mitigation measures to overcome the difficulties presented by these crises and remain sustainable.*

*For seventy-five (75) years now and still counting, Ethiopian Airlines has recorded great success and survived very few crisis as a company. This is due to what the student researcher will characterize as visionary and far-sighted leadership. This study has endeavored to capture and document some of the company's success strategies used through effective leadership practices and functional communication; while utilizing comprehensive risk management plus an effective crisis response measure for this global health crisis. Other leaders in the aviation/travel industry in African, can take interest in learning from the ET Group's experience to save their institutions and survive any turbulence during and after the crisis. A fundamental finding from the study revealed that the Strategic Business Plan of Ethiopian Airlines calls for the establishment of "Multi-Purpose-Business Units" as a key principle of its vision 2025. This is seen in how the company has diversified its operations into tourism, hospitality, MRO and Aviation trainings in addition to the original passenger and cargo services it offers as an airline.*

*The student researcher believes these findings will serve as lessons to protect investments, sustain employment and save the livelihoods of many employees in the hospitality, tourism and other air travel related services in Africa and beyond.*

**KEY WORDS:** RISK, STRATEGIES OF RISK MANAGEMENT, TEAM LEADERSHIP MODEL, SITUATIONAL CRISIS COMMUNICATION THEORY, CRISIS



# CHAPTER ONE

## INTRODUCTION

### 1.1 Background of the Study

In a world full of uncertainties, every business and/or organization faces the risk of unexpected, harmful and catastrophic events that can cost the company losses in terms of financial or human resource, especially in this era of massive globalization (Burke 2003). These eminent threats, which may also be avoidable, could derive from a wide variety of sources, including financial uncertainties, legal liabilities, strategic management errors, accidents and natural or man-made disasters. Additionally, Information Technology (IT) security threats and data-related risks, and the proper kind of risk management strategies to alleviate them are now creeping in as top priorities for companies who deal in the digital space, with the fast emergence of the internet age in the 21<sup>st</sup> century (Schwalbe, 2006).

Hence, Risk Management allows organizations to attempt to prepare for the unexpected by minimizing risks and extra costs before they happen. Through implementing a risk management plan and considering the various potential risks or events before they occur, an organization can save itself crucial resources and protect its future. This is evident that a robust risk management plan will help a company establish procedures to avoid potential threats, minimize their impacts should they occur and cope with the results, (Chapman & Ward, 1997). This ability to understand and control risk enables organizations to be more confident in their business decisions. Furthermore, strong corporate governance principles that focus specifically on risk management can help a company reach their goals (Cole et Rouse 2020).

Different organizations react to crisis situations differently resulting in either turning around their businesses or leaving them to perish (Pan & Chen, 2014). Effective crisis mitigation is designed to avoid or reduce the negative effect to protect institutions, personnel, or enterprises from being damaged (Lei & Chang, 2016). Consequently, the ability of a leader to turn crisis to an advantage will depend on the leader's ability to adopt appropriate risk mitigation strategies and best business practices. Thus, crisis effect mitigation will play a significant role in the sustainability of the aviation industry which is already being hugely impacted by the ongoing health crisis. The objective in this study therefore, is to investigate the strategies of risk

management and understand what approaches and best practices has been employed by Ethiopian Airlines to keep the company operating through the global COVID-19 outbreak. Many big and well recognized companies in the airlines or travel industry have experienced an unprecedented degree of losses in terms of income or revenue generation due to lack of operation. Airplanes have been grounded for months due to global lockdowns and some companies even lost their employees to the coronavirus pandemic which has ravaged the entire 2020 year.

According to the International Civil Aviation Organization (ICAO), aviation-supported jobs potentially fell from 46 million in 2019 to 41.7 million (-52.5%) in 2020 while direct aviation jobs (at airlines, airports, manufacturers and air traffic management) fell by 4.8 million (a 43% reduction compared with pre-COVID situation). Furthermore, nearly 39,200 special repatriation flights took nearly 5.4 million citizens home after borders closed in March 2020 and special cargo flights totaling nearly 46,400 transported 1.5 million tons of cargo, mostly medical equipment, to areas in need during the height of the pandemic response throughout the year (ICAO, October 2020).

In a more specific context to Africa, a recent analysis by the International Air Transport Association (IATA) Regional office for Africa and the Middle East indicates that Africa aviation's recovery will be weaker than expected. Estimating that the industry will reach just 30% of its 2019 levels. According to IATA's projections, the region is expected to see around 45 million travelers in 2020 rising to 70 million travelers in 2021 in terms of absolute numbers. A full return to 2019 levels which was about 155 million travelers is not expected until late 2023.

Though domestic travel is picking up across Africa as countries re-open their borders, international travel remains heavily constrained as major markets including the European Union remain closed to citizens of African nations. The report further disclosed that four (4) of the continent's flyers have ceased operations due to the impact of COVID-19 and two (South African Airlines and another) are in voluntary administration, with many more in serious financial distress. Without urgent financial relief more carriers and their employees are at risk, as is the wider African air transport industry, which supports 7.7 million jobs on the continent (IATA, November 2020).

As recent developments show, the COVID-19 outbreak looks determined to cross over to the New Year (2021) as many countries in the developed world and even in Africa are still grappling with second wave of surge in cases. However, with the emergence of several COVID-19 vaccines in recent months, there seem to be hope on the horizon that could help the world put an end to this huge catastrophe and prepare to deal with its impacts on the global economy and the livelihoods of the world's more than 7 billion population.

Consequently, these researches and critical analyses by ICAO, IATA and global bodies like the WTO and others have identified the causes of economic devastation which leads to the loss of investment for shareholders and source of livelihood for so many, including customers and employees and their families. To proffer key solutions to such mind-blowing crisis affecting global public health, strategies to mitigate the effect of the crisis situations at various levels may prove effective (Meiste & Jakstiene, 2015). Beyond the knowledge of possible crisis management, business/project managers will need a comprehensive risk mitigation strategies to protect their institutions against future occurrences. Findings from this research work could reduce the adverse impacts of risk the crisis poses and ensure best practices needed for sustainability depending on what can be attained from the ET Group's approach.

## **1.2 Statement of the Problem**

In the midst of such extraordinary crisis the world is faced with and the momentous risks it poses to the survival of businesses especially in the airlines, travel and tourism industry, and several African airlines seem to miss out on implementing appropriate risk management strategy to minimize the impact of the crisis on their business. However, a comprehensive study to determine the full impact of the crisis on the industry is yet to be conducted.

To date, available literatures on assessing the potential impacts of the crisis and correlating risk management approaches being used by different African airlines provide mixed results.

A study by the African Development Bank (AfDB) in late 2020 suggests that the heavy interdependence of the aviation industry on all economic and social issues and on domestic and international mobility has led it to be one of the hardest-hit industries by the COVID-19 crisis. This supports aviation analysts' warning about the potential of the crisis to hamper Africa's aviation development.

IATA reported in October that job losses in the aviation (and related industries) sector could reach 4.5 million— out of the 7.7 million that served before the pandemic. However, these estimates could fall

short of the actual consequences if coordinated efforts by governments do not materialize before it is too late.

A recent study by the International Civil Aviation Organization (ICAO) indicates that, aviation-supported jobs potentially fell from 46 million in 2019 to 41.7 million (-52.5%) in 2020 while direct aviation jobs (at airlines, airports, manufacturers and air traffic management) fell by 4.8 million (a 43% reduction compared with pre-COVID situation).

An initial risk analysis by AfDB predicts serious financial distress caused by COVID has ravaged the aviation industry leaving more airlines and their employees at risk of losing their livelihoods. IATA for its part predicts that aviation recovery in Africa will be weaker than expected in 2020 reaching just 30% of its 2019 levels due to continuous nature of the pandemic.

Even though there may be ample literatures looking at the impact of the COVID-19 crisis in all sectors of the economy and on the aviation industry in African continent specifically, no studies so far have endeavored to assess the approaches of risk management practices being used by airlines companies to mitigate the effects of the crisis on their businesses. Thus, there are potential gaps in literatures and knowledge regarding this issue for which this study has been initiated.

The key problem this study endeavors to address is that African Airlines have suffered the damaging impact of the COVID-19 pandemic which is leading to potential decline in the growth of the aviation industry in Africa. This can be attributed to ineffective implementation of risk mitigation measures by some of these companies to address the effect of the crisis.

Specifically, Airlines companies (South African Airlines, Air Namibia) seem to overlook the critical issue of risk management when it comes to their operations. This failure of big companies to anticipate potential crisis and to establish and implement comprehensive risk management measures to mitigate the impact of such crisis has caused them to collapsed (ICAO 2020).

### **1.3. Research Objective**

#### **1.3.1 General Objectives**

The key objective of this qualitative case study research is to examine the approaches of risk management practices applied by the management of Ethiopian Airlines to mitigate the effects of COVID-19 and sustain the company throughout the pandemic.

#### **1.3.2 Specific objectives**

- \* Assess and document risk management methods, best practices and lessons learned by Ethiopian airlines to survive the damaging impact of this unexpected health crisis.
- \* To gain an in-depth understanding of the company's risk management practices for adequate crisis response and long-term sustainability.
- \* Identify key lessons learned by the company through this crisis to serve as reference point to guide appropriate risk mitigation measures during future crisis.

#### **1.3.3 Research Questions**

The study attempts to answer the following key research questions:

1. What approaches of risk management practices has the management of Ethiopian Airlines employed to keep the company operating through the global COVID-19 outbreak?
2. How important it is for a company like Ethiopian Airlines to have a well-defined risk management strategy in place to mitigate the effects of a crisis and sustain its long-term operations and short-term projects?
3. What are the 3 most important lessons you have learned so far in this crisis and how can these lessons shift your approach to risk management for mitigating the effects of future crises?
4. What could you say is the key contributing factor to Ethiopian Airlines' successful handling of the COVID-19 crisis so far?



#### **1.4 Scope of the Study**

A crisis as defined by (Kopaliński, 2000: 282) is a moment, a period of breakdown, a turning point, time of economic crisis. It is associated with an enduring disruption of the regular and goal-oriented activities, upsetting the functional balance, and even with a threat to one's existence. While the Corporate Financial Institute (CFI) views risk in the Business context to be a threat to a company's ability to achieve its financial goals. It further explains that risk in business means that a company's or an organization's plans may not turn out as originally intended or that it may not meet its target or achieve its goals. Note that risk can also be influenced by various external factors, which may include rising prices of raw materials for production, growing competition, or changes or additions to existing government regulations and civil unrest or health crisis (CFI 2020).

In view of the foregoing, the scope of this study is specifically focused on investigating the approaches of risk management strategies applied by authorities at Ethiopian Airlines throughout the global COVID19 pandemic to mitigate the effects of the crisis for the business to remain sustainable.

This study further endeavor to address the key research questions through selected participants in consideration of the ongoing impact the COVID-19 crisis is having on the global economy and the aviation or travel industry in particular. To achieve this, the study relies on variety of indicators with specific focus on related concepts such as threat, crisis and crisis situation. Additionally, the research further expands the concepts of Risk Management as described by the Project Management Institute (PMI) and briefly reviewed the Situational Crisis Communication Theory (SCCT), and the Team Leadership Model (TLM) in an effort to highlight the roles of leadership and proper communication in time of crisis. The responses to the research questions are further supplemented through semi-structured interviews.

## **1.5 Significance of the Study**

The study will provide basic information and outline the approaches of risk management methods used by Ethiopian Airlines management to mitigate the effect of the COVID-19 crisis and sustain the business. The findings from this investigations will provide insights for best practices of risk management strategies for preventing huge losses to business in terms of capital investment for both investors, employees and customers in the travel sector.

Decisive leadership and effective communication play a significant role in the survival and sustainability of business organizations in time of crisis. Based on candid implementation of risk management measures and information sharing, managers use information during crisis in decision making critical to the adoption of mitigation strategies (Salvador and Ikeda 2018). Hence, detailed risk management and crisis mitigation strategies for airlines might reposition them into speedy recovery and help companies in the sector that are going bankrupt to better prepare to survive potential future crises.

The most beneficiary from the finding of the study are among others, leaders, stakeholders, investors and practitioners in the aviation industry and policy makers, due to the fact that findings of the study will confirm the platform for managers of other airline companies especially in Africa to learn from the experiences of experts at Ethiopian airlines who are solely dedicated to mitigating the effects of risk and managing crisis to continue addressing the needs of customers and stakeholders. Finally, it will be used as central and initial point for further research.

## **1.6 Organization of the Paper**

The study is separated into several key components with five (5) main chapters. The first Chapter gives an introductory perspective of the study whilst the second chapter deals with the aspect of reviewing relevant literature available regarding the topic. The third chapter is devoted to a presentation of the methods used in the study. The remaining two, chapters-four and five highlight data presentation and analysis, and discussion of findings followed by summary and recommendations respectively.

## **CHAPTER TWO**

### **REVIEW OF RELATED LITERATURE**

The connotation of crisis implies a variety of negative situations and experiences of different disciplines and professions. In recent decades, different authors have expressed their thoughts and findings that formulates the basis and the body of knowledge that underpin the current study (Asrar-ul-Haq & Anwar, 2018; Machi & McEvoy, 2016; Williams et al., 2017).

The literature review of a given research usually includes critical analysis and synthesis as well as the consolidation of the diverse perspectives of the topic from different scholars, subject matter experts and authors. Similarly the literature review for this study, endeavors to draw on the perspectives of existing works and theories relevant to the effects of risk management approaches in the context of crisis mitigation.

#### **2.1 Theoretical Review**

In this era of global connectivity and growing technology, many companies conduct abundant portions of their jobs in the form a project. Projects were mainly found in the construction industry and sections of the military as a traditional practice during the 19<sup>th</sup> century; but the global competition in today's markets couple with fast-changing technology is inspiring most companies to adopt project management methods (Burke 2003). This is clearly seen by the immense successes gained through the implementation of mega projects across the world.

To put this in context, the Project Management Institute defines Project management as the application of knowledge, skill, tools and techniques to project activities to meet project requirement. This process is mostly accomplished through the use of the processes such as: initiating, planning, executing, controlling, and closing (PMBOK guide 2000).

##### **2.1.1 Definition and Overview of Risk Management**

Risk management is the scientific art of identifying, analyzing, and responding to risk throughout the lifecycle of a project and in the best interests of meeting project objectives. (Schwalbe, 2006). Risk management has been practiced informally by everyone, with or without noticeable

consciousness since the onset of time. Modern risk management, which had become a widely accepted management function during the period from 1955-1964 (Snider, 1991) has its roots in insurance to which it has been closely aligned for more than three centuries (Ibid).

Moreover, the story of risk management has not all been positive and supports the argument that it is currently ineffective at managing surprise. In the 1960's project management was under heavy criticism for project failures due to technical uncertainty, contract strategy, community opposition and project environmental impacts (Morris, 1997). A project manager may still today argue that the last two are external project factors and outside the immediate project environment under their control (Ibid) and it may be often assumed that these will be passed up the line to higher management levels (Chapman & Ward, 1997).

The main objectives of risk management according to (Yee et al., 2001) include:

- Enables more systematic and less subjective decision-making.
- Provides an improved understanding of the risks facing a project by identifying risks and response scenarios.
- Assists in deciding which risks require urgent attention and which can be addressed in the future.
- Alert management's attention to the many possible outcomes for a project, and that appropriate measures should be planned for any adverse consequences.

Flanagan and Norman (1993) proposed a risk management framework as shown in Figure 2.1.1(A) which depicts the elements of the risk management system – risk identification, risk classification, risk analysis, risk attitude and risk response.



Figure 2.1.1(A) Risk management Framework (Source: Flanagan & Norman, 1993).

According to (PMBOK, PMI 2000) and (Schwalbe 2006), Project Risk Management has the following processes as displayed in figure 2.1.1(B)

Risk Management Planning
Risk Identification
Qualitative Risk Analysis
Quantitative Risk Analysis
Risk Response Planning
Risk Monitoring and Control

Figure 2.1.1(B) Risk Management processes (Source: Flanagan & Norman, 1993)

The following Figure 2.1.1(C) depicts how risk management processes involved in each step of the project management cycle

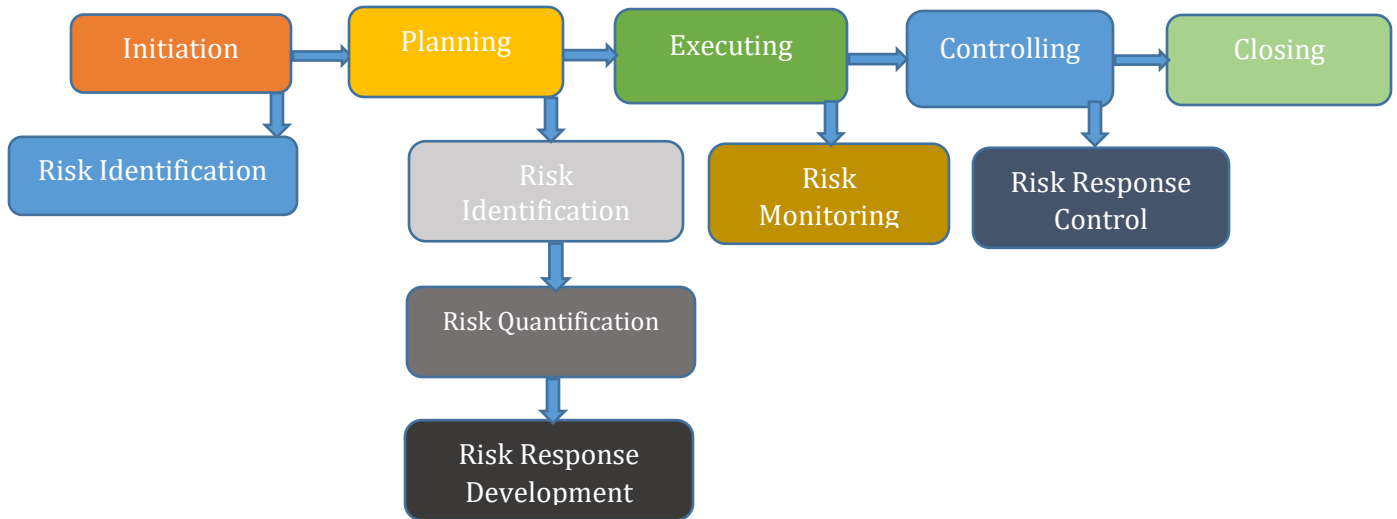


Figure 2.1.1(C) Risk Management Processes (Source: Dan Brandon, 2006)

Risk management will not get rid of all the risks. However, it will enable explicit decision making which will reduce the potential effect of certain risks. It will also engender the process of rational and secure decisions regarding the allocation of risk among the stakeholders to the project. Moreover, Risk analysis is not a substitute for professional judgments and experience. On the other hand, it helps professionals to make use of the full extent of their experience and

knowledge by redeeming them from the necessity of making simplifying assumptions in order to produce predetermined plans and forecasts. Risk analysis is a supplement to, not a substitute for professional judgments (Flanagan & Norman, 1993).

Taking cue from the Project Management Body of Knowledge (PMBOK Guide), one of the most important of the Nine Knowledge Areas in Project Management is Project Risk Management. This simply means, project risk management deals predominantly with the need for project leaders and managers to think ahead and visualize how to compensate for minimizing the potential of things going wrong in the project.

It is important to further emphasize that effective risk management should ensure that all the identified risks are analyzed on the basis of the likelihood of their occurrence and the magnitude of their impact on the project. This will make it possible to identify those risks that are most likely to occur and those with the highest severity on the project. Using such procedure, one can then classify risks in term of priority as follow:

Risk Classification chart

High probability	high impact
Low probability,	high impact
High probability	low impact
Low probability	low impact

Fig 2.1.1(D) Risk classification chart (Source: Dan Brandon, 2006)

Due to global economic pressures, instability in the corporate environment and market forces which leads to increasing demands and tougher competition, projects have to be implemented at lesser cost, within shorter timeframe, and with better functionalities (qualities). This further escalates growing demands on the management’s ability to forecast and react to unforeseeable events or risks (Timothy & Warren, 2002).

Risk is described by (Raftery, 1994) as an abstract concept whose measurement is very difficult. The 5<sup>th</sup> edition of Oxford Advanced Learner’s Dictionary defines the term “risk” as –the possibility or chance of meeting danger, suffering loss or injury”; while the British Standard (BS

4778) considers risk to be “A combination of the probability, or frequency, of occurrence of a defined hazard and the magnitude of the consequences of the occurrence”.

Risk as a general concept may include other related connotations, for example, the Corporate Financial Institute (CFI) views risk in the Business context to be a threat to a company’s ability to achieve its financial goals. CFI goes further to explain that risk in business means that a company’s or an organization’s plans may not turn out as originally intended or that it may not meet its target or achieve its goals. Such risks cannot always be blamed on the owner of the company, as risk can also be influenced by various external factors, which may include rising prices of raw materials for production, growing competition, or changes or additions to existing government regulations and civil unrest or health crisis (CFI 2020).

Consequently, risk management is a critical factor to successful project management in today’s ever changing world.

### **2.1.2 Risk in Economic Terms**

Risk is an objective phenomenon as it involves real economic occurrences connected with the existence of a threat (danger) stemming from, among other things, the demand fluctuations, the activity of competitors, cooperation conditions, and State regulatory actions. It is also a subjective phenomenon, because it results from the decision-makers’ knowledge of economic processes. A business organization may be dealing with a risk when the decision results of a situation are not fully known.

As indicated earlier, Risk is considered a phenomenological variable, which implies that this concept is interesting to investigate in terms of how people understand it. However, if a risk is identified with a threat, it relates mainly to the uncertainty and variability of the specific actions results. Thus, there are various suggestions concerning distributional risk measures, such as variance, semi variance, standard deviation or variability.

Therefore, it is assumed that the distribution probability of selected important environment states with a negative impact on the value of expected action results. Risk is a function of two variables – the probability of failure and the magnitude of the loss. Probability is also a function of the quantity and quality of information on the economic and social and political processes

(Sienkiewicz, 2006: 45). In practice, to determine the risk, the following mathematical formula can be applied: **Risk = loss probability x loss value.**

The development of an enterprise involves uncertainties and danger, but it also creates opportunities. Risk management primarily aims at identifying threats and opportunities. The determination of the diversified risk impact extent on the enterprise is of pivotal importance (Kaczmarek, 2008: 11).

Risk management can be defined as a decision making process in a way that ensures the highest level of security by reducing the impact of anticipated factors on the economic entity functioning.

Therefore, risk management focusses on the prevention and mitigation of losses. The concept of risk management should constitute an inseparable part of an enterprise's development strategy. Once drawn up, it will make it possible to plan the organization's performance taking into account risk factors, and to monitor the extent of the impact of these factors on the broadly-defined financial performance and financial standing (Sienkiewicz, 2006: 45).

Risk management is aimed at the complete elimination or, at least, the mitigation, of causes and/or the effects of events that can disrupt the organization's economic processes resulting in a crisis.

There are two phases of risk management:

- Risk analysis (identification, estimation, evaluation)
- Risk management (planning, control, monitoring).



Figure 2.1.2 (a) Phases of risk management

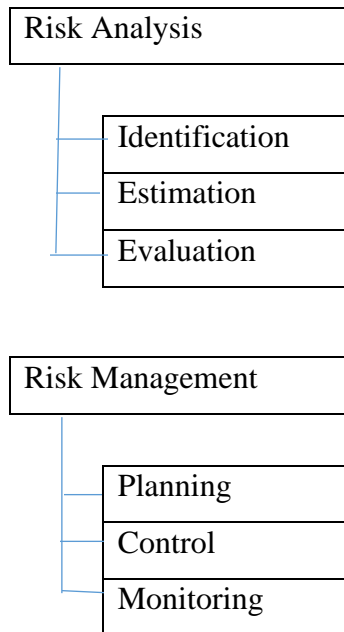
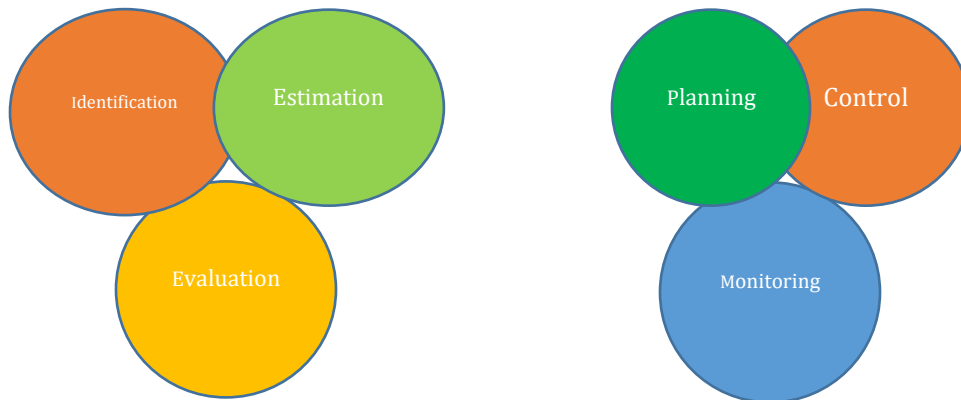


Figure 2.1.2 (b) Phases of risk management



Source: Sienkiewicz 2006: 45.

### **2.1.3 Risk in Relation to Threat**

Risk is considered as a phenomenological variable, which implies that this concept is interesting to investigate in terms of how people understand it. However, if a risk is equated to a threat, it relates mainly to the uncertainty and variability of the specific resulting actions. A prevention or mitigation system for possible threat effects should be created by taking into account the experience and the dynamics of the threats to safety development at the international, regional, national and local levels. Such a system should be based on the rules of risk management in crisis situations (Beck & Baran, 2012).

Threats and uncertainty on the other hand have always been the part of human existence, and, in the past, this phenomenon used to be even greater than it is today. The risk of individuals and their families developing a disease, sustaining a premature death, or societies being decimated by famine and plague, was much greater in the Middle Ages than it is at present. Risk semantics is something quite different. Since the early modern period it has been associated with the growing impact of decisions, uncertainties and probability in the process of modernization. It concerns future threats, which we can see now, stemming from civilization's success (Beck & Baran, 2012: 15).

### **2.1.4 Crisis and Crisis Situation**

A crisis can be defined as a moment, a period of breakdown, a turning point, a time of economic crisis (Kopaliński, 2000: 282). It is associated with an enduring disruption of the regular and goal-oriented activities, upsetting the functional balance, and even with a threat to one's existence. The basic characteristics of a crisis include the surprise factor, time pressure, late response, a loss of control, a danger to important functions, an increase in tension, and information deficit (Gołębiowski, 2003: 10).

The concept of a crisis is very often equated to the concept of a crisis situation; however, these concepts are not identical and there are significant differences between them:

- A crisis is an element of a crisis situation,
- Every crisis is a crisis situation, but not every crisis situation has an element of a crisis,

- The occurrence of crisis symptoms does not have to cause changes to the organization core, but it poses a challenge for the subjective sense of the operation normality (Kosowski, 2008: 24).

According to K. Krzakiewicz, crisis situations are characterized by the following factors:

- Threat of the losses incurrence and the survival of the organization being in danger,
- Loss of control over the ongoing events,
- Serious, negative impact on the organization's resources,
- Not enough time to take necessary actions or to react,
- Lack of credible information, i.e. the occurrence of uncertainty (Krzakiewicz, 2008: 11-15).

Severity and length of a crisis are conditional on the following factors:

- Correlation between the number and intensity of particular events,
- Number and force of external and internal factors influencing an organization,
- Intensity of the impact of particular factors on the chain of events,
- Importance of each factor to the organization's operation (Krzakiewicz, 2008: 11-15).

The taxonomy of threats in crisis management involves the assignment of threats to specific groups, which characterize a given threat. From the perspective of crisis management, not all groups will be prioritized in the same way. While conducting a threat analysis as part of crisis management, the first step is to locate the threat by taking into account its source, and then its destructiveness level and spatial extent (Grodzki, 2012: 71).

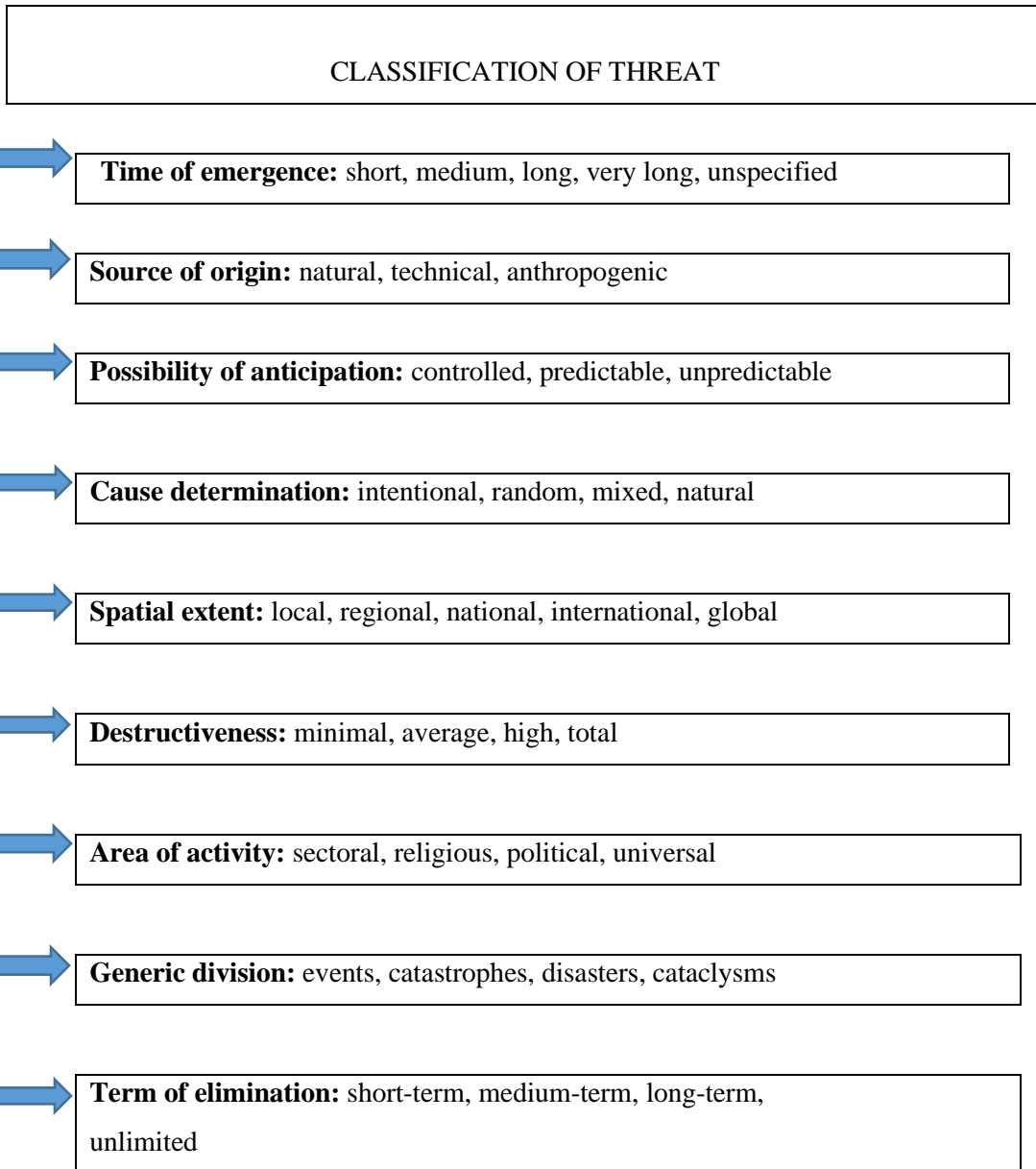


Figure 2.1.4(i) Threat classification (Source: Ficoń 2007)

### **2.3 Theories of Leadership and Communication**

The concept of risk management should constitute an inseparable part of an enterprise's development strategy. Risk management is aimed at the complete elimination or, at least, the mitigation, of causes and/or the effects of events that can disrupt the organization's economic processes resulting in a crisis.

Additionally, Prof. Ostrowska in a 2014 article on the subject regards Risk as a phenomenological variable, which makes this concept interesting to investigate in terms of how people understand it. However, if a risk is equated to a threat, it relates mainly to the uncertainty and variability of the specific actions results.

A prevention or mitigation system for possible threat effects should be created by taking into account the experience and the dynamics of the threats to safety development at the international, regional, national and local levels. Such a system should be based on the rules of risk management in crisis situations (Ostrowska 2014).

Based on the limitation of available theory that specifically addresses risk management, the Situational Crisis Communication Theory (SCCT) and the Team Leadership Model (TLM) are used as the connecting basis of this study. These theories have been analyzed in the general context of crisis management as this research endeavors to draw out the benefits of a comprehensive risk management strategy in time of a given crisis.

Coombs developed the SCCT in 2007 and provided a framework for understanding the behavior of stakeholders during crisis situations (Coombs, 2007a). The SCCT projects the pattern of the reaction of stakeholders in response to the crisis that threatens the reputation of an organization. The SCCT holds that communication affects people's perceptions of a crisis. The words that management uses and the actions they take affect how people perceive an organization during the crisis (Coombs, 2015).

In turn, those perceptions shape evaluations of the organizational reputation as well as stakeholders' emotional response toward future interactions with the organization. From the SCCT, the student researcher drawn a parallel with the global health crisis affecting the world's economies with specific reference to the aviation industry to the leader's ability to understand

and adopt strategies to mitigate the crisis. The main assertion to a functional approach to team leadership is that the leader's main job is to implement what the group needs to be successful (Nouthouse, 2016; Zaccaro, Rittman, & Marks, 2001).

The Team Leadership Model stemmed from the functional leadership approach by McGrath in 1962, which emphasized the diagnose selection of the appropriate tools and the guidelines to mitigate the crisis. Thus, the SCCT guidelines for managers and leaders in a crisis situation entails the adoption of strategic communication with stakeholders to repair the reputation, reduce the adverse effect, and to prevent harmful behavioral intentions (Coombs, 2007a; Park, 2017), whereas the proponents of TLM emphasized the ability of the leadership to diagnose, and select the appropriate tools and the guidelines to mitigate the crisis.

### **2.3.1 Situational Crisis Communication Theory**

The SCCT holds that communication affects people's perceptions of a crisis (Coombs, 2007a). The premise of SCCT was on the establishment of a correlation between the crisis response strategies and the level of crisis responsibility attributed to a particular crisis. Coombs (2007a) derived the SCCT theory from attribution theory and explained that stakeholder attributions of crisis responsibility have effective and behavioral consequences for an organization. Thus, the words management uses, and the actions they take affect how people perceive an organization during the crisis. Those perceptions eventually shape evaluations of the organizational reputation as well as stakeholders' emotional response toward and future interactions with the organization.

Coombs (2007a) defined crisis as the negative event that leads stakeholders to assess crisis responsibility and evoke sympathy or anger leading to negative word of mouth. The responsibility, therefore, lies on the leadership to adopt crisis response strategies to repair the reputation, to reduce negative affect and to prevent negative behavioral intentions (Coombs, 2007a). The proponents of SCCT provides guidelines for matching crisis response strategies to crisis types to best restore organizational reputations in times of crisis.

According to SCCT, a crisis situation consists of four elements that can be used to assess its potential threat to the organization's reputation: crisis type, damage severity, crisis history, and relationship history. SCCT suggests four response strategies that are useful in post-crisis

communication: deny, diminish, rebuild and reinforce. The response strategies have three objectives relative to protecting reputations: (a) shape attributions of the crisis, (b) change perceptions of the organization in crisis and (c) reduce the negative effect generated by the crisis. These objectives of the SCCT are essential elements of crisis mitigations that managers will need in rebuilding the image of their institutions and ensure the sustainability of their businesses.

The effect of crises on an organization is disastrous because crisis damage reputations and gives people reasons to think badly of the organization thereby destroying the stakeholders physically, emotionally and financially. A wide array of stakeholders that are adversely affected by a crisis may include community members, employees, customers, suppliers, and stockholders. The SCCT advocates model the crisis and provide an evidence-based set of guidelines for using crisis response strategies that can benefit crisis managers in many organizations (Coombs, 2007a, 2015; Coombs & Holladay, 2014), including the aviation industry.

Understanding the reputational and image threats of crisis will, therefore, help crisis managers anticipate possible crises, prepare to manage and resolve information on the facts of the crisis, take remedial measures during the crisis, and prepare key stakeholders to build the company credibility before the crisis occurs.

### **2.3.2 Team Leadership Model**

Team leadership model is one of the leadership concepts that are gaining popularity among practitioners and researchers. The model developed from the functional leadership approach by Joseph E. McGrath in 1962 and has since given a deeper perspective to the team leadership model (Zaccaro, Rittman, & Marks, 2001). Northouse (2016) defined a team as a type of organizational group that is composed of members who are interdependent, who share common goals, and who must coordinate their activities to accomplish these aims.

Northouse further stated that an effective team leader has a vast repertoire of knowledge, actions or skills, focus on the internal and external demands on a team, and finds solutions to the challenges that prohibit success of the institutions (Northouse, 2016). Team leaders, therefore, have the ultimate responsibility of examining internal or external issues and designing the

appropriate interventions (Hawkinson, 2016). More specifically, team leaders explore possible threats and dangers with the potential of destroying the foundations of their organizations.

The team leadership concept is consistent with functional leadership theory, which is the most prominent team leadership model (Santos, Caetano, & Tavares, 2015). The main assertion to a functional approach to team leadership is that the leader's main job is to implement what the group needs to be successful (Baysak & Yener, 2015; Graça & Passos, 2015; Marathe, Balasubramanian, & Singhal, 2017; Santos, Caetano, & Tavares, 2015).

In a study to validate the appropriateness of the functional leadership approach as a useful tool for training leaders and promoting team performance, Santos et al. (2015) provided evidence of the functional leadership approach as an effective way to promote team goal achievement and enhance team effectiveness in solving organizationally-based problems. They concluded that situation clarification, strategy clarification, and team coordination were three critical capabilities of team leadership function of performance on task-related problems.

A team-centered view of leadership results in devotion to the roles of leadership and the fulfillment of team leadership functions instead of outermost focus on the leaders' styles. The functional leaders are therefore responsible for diagnosing any problems that could potentially impede group and organizational goal attainment. Leadership that is focused on the team will generate, plan appropriate solutions, and implement solutions within typically complex social domains (Biemann, Kearney, & Marggraf, 2015; Graça & Passos, 2015).

In addition, the functional leader's job is to monitor the team and then take whatever action is necessary to ensure team effectiveness (Santos et al., 2015). Effective team performance begins with not only how the leader sees the problem confronting the team, but also the environmental and organizational contingencies that define the larger context of team action (Northouse, 2016). Therefore, leadership plays an important role in assessing the crisis situation of an organization, analyzing the attribution of responsibilities and their respective crisis response form.

Thus, the success and failure of an organization depend on how the leader organizes team members to perform the various tasks including diagnosing any problems, generating and planning appropriate solutions, and implementing solutions. The Ethiopian airlines operate



independently as a national carrier, and this research is looking at ET as a single team, and the CEO is the team leader.

It is also important to emphasize that consistent positions between the team leadership concept and the functional leadership theory fits correctly with the concepts of project management; because it brings together experts from different fields such as procurement, quality and monitoring & evaluation among others to successfully implement a project.

#### **2.4. COVID-19 Crisis and the Airline Industry Response**

The travel sector has been one of the worst casualties of the coronavirus disease outbreak since it was declared a pandemic in early 2020, with flights grounded and borders closed. From government bailouts to staff layoffs and forced retirements in some cases, commercial airlines have taken drastic measures to stay afloat through this damaging health crisis (AFP).

But Ethiopian Airlines found a way to limit the damage. According to CEO Tewolde GebreMariam, the company pivoted to meet surging demand for air shipping in March, repurposing 45 passenger jets to build out its cargo fleet. "We were very quick, very fast, flexible and agile to move our forces, resources and everything to cargo, I would say that those actions have saved the airline". So far these measures have caused Ethiopian Airlines to avoid seeking a bailout from government, laying off any full-time employees or requesting deferrals on debt payments, (CEO Tewolde).

For the first half of the year (2020), ET reported an unaudited profit estimate of 44million dollars, a gain which is largely credited to its partnership with the World Food Program (WFP) following the United Nation's decision taken in April to open a humanitarian transport hub at the Bole international airport in Addis Ababa.

To date Ethiopian has operated 360 cargo charters of personal protective equipment (PPE) to more than 80 countries, and the airlines has planned to make available at least 40 airplanes to join the global vaccine distribution, the CEO noted.

As the industry attempts to gradually recover, ET is aiming to cement its ties with other African carriers, starting with the struggling South African Airways (SAA). This comes in addition to a

45-percent stake the company holds in Zambia Airways which the CEO said he expected would be launched in October/November last year and the already existing partnerships with Malawian Airlines and ASKY Airlines out of its Western African hub stationed in Togo.

However, these promising signs are not without key challenges that has faced Africa's biggest airline (ET) and the global aviation industry as a whole. In the early parts of 2020, Ethiopian Airlines reported a loss of \$550 million resulting from international flight restrictions due to the COVID-19 pandemic, a revenue loss which led to 90% cut of international flights for the national carrier. This means flying to only 19 international destinations out of 110 destinations that the airline used to cover pre-COVID 19 times. The international aviation industry in general lost \$52 billion, with African airlines losing \$4.2 billion of said total (ICAO 2020).

In more positive news for Ethiopian Airlines, the company officially completed and launched its 86,000-square-meter terminal expansion project at Addis Ababa's Bole International Airport in late August 2020. With the capacity to serve 22 million passengers a year, Africa's main transit hub is now home to the continent's second largest capacity airport after South Africa's O.R. Tambo International.

But this is no ordinary terminal project: the \$300 million Terminal 2 has the distinction of being the world's first completed amid the pandemic and designed with an eye towards biosafety.

Aside from daily airport cleaning procedures, this means digitized features, including state-of-the-art thermal scanners, 30 self-check-in kiosks, 60 check-in counters, 32 arrival immigration counters with eight e-gates, 16 security screening areas, touch-free sanitizing gel dispensers, and socially distanced gate seating.

The new facility now provides a contactless experience for travelers. "Using the Ethiopian mobile app, you can book, pay, check in, print tags, drop baggage, scan your boarding pass at immigration, or at the lounge. It's about empowering the customer to own the experience end to end. Miretab Teklaye," Ethiopian Airlines' director of integrated marketing, told the audience during the launch.

The ultramodern terminal which was built in multiple phases over three years, is part of Ethiopian's strategy to continue investing in infrastructure, one of its four key pillars. The project

was financed by EXIM Bank China and designed by Singapore firm CPG. Although the airline went from growth mode to survival mode in March, future plans remain in place for the redesign of Addis' domestic terminal by 2021, as well as an 80 to 100-million-passenger \$5 billion airport just 39 kilometers southeast of the capital, according to the ET Group official site.

Like the world's major commercial carriers, Ethiopian has suffered a massive loss in passenger flight revenue since Covid-19, to the tune of \$1 billion by the close of June 2020. What's notably different, however, is that the airline hasn't been impacted negatively in the way other carriers have: no government bailout request, no layoffs and no salary reductions. Instead, it has managed to turn a profit.

Official data from the company says, while other African airlines were grounded in late March 2020, Ethiopian saw the opportunity to recoup its passenger revenue loss by expanding its established 10-fleet cargo unit. The airline converted 25 passenger planes to cargo and deployed its 54,000-square-meter, high-tech pharma wing to store and distribute Covid-19 medical supplies and millions of PPE donations from China and from the UN World Food Programme to over 80 countries in Africa, Canada, the U.S., Europe, Asia, and South America.

In addition to completing the airport expansion, the global shutdown has opened a window of new opportunities for the airline. Ethiopian began transporting Norway's fish exports and Kenya's flower exports. As a result of the skyrocketing demand through June, the airline doubled its cargo revenue and its cargo route expanded to 74 destinations. "If cargo hadn't been our strategic pillar back in 2010, we couldn't do anything now, (CEO Teklaye).

Additional cash revenue sources have come from aircraft maintenance, repair and overhaul (MRO) services, which is another of Ethiopian's established business units. In this sector, 40 aircraft from sub-Saharan Africa, plus a Middle East carrier — as well as from 63,000 repatriation charter flights to the Americas, Middle East and Asia since March. Ethiopian airline's decision to diversify over the years had proven to be "a life-saving decision" according to the company's veteran CEO.

In June 2020, just as PPE cargo and repatriation demands decreased, Ethiopian Airlines began resuming its commercial flights. Thirteen aircrafts have been reconfigured back to passenger and the airline is currently operating 68 daily flights, albeit at limited capacity and reduced

frequency, to destinations such as Dubai, Istanbul, Paris, London, and two of Ethiopian's heaviest Africa routes – Ghana and Nigeria. It's a number that keeps shifting as more governments lift flying bans.

Aviation experts have expressed doubt that increased cargo revenue could keep Ethiopian afloat over the long-term. With other African airlines crumbling, the current aviation climate may also open the door wider to outside competitors looking for a share of African skies. But Ethiopian remains optimistic it can empower its fellow African carriers, while continuing to eye global opportunities in cargo, MRO, and even in hospitality with vacation packages aimed at Addis Ababa's 70 percent transit passengers, incorporating the city's new green and historic attractions, such as Unity Park and Entoto Park, according to the online news agency, skift.com.

## **2.5 Ethiopian Airline in Preview**

Ethiopian Airlines ("Ethiopian") is the national airline of Ethiopia with its main hub at Bole International Airport. During the past sixty plus years, the airline has become one of the continent's leading carriers, unrivalled in Africa for efficiency and operational success, turning profits for almost all the years of its existence. It has also become one of Ethiopia's major industries.

Ethiopian Airlines was founded on December 30, 1945, by Emperor Haile Selassie with assistance from TWA. It commenced operations on April 8, 1946, with a weekly service between Addis Ababa and Cairo with five Douglas DC-3 propeller-driven aircraft. The airline started long-haul services to Frankfurt in 1958 and inaugurated its first jet service in January 1963 from Addis Ababa to Nairobi. In the early 1960s it provided some initial aviation support to the Ethiopia-United States Mapping Mission in its operation to provide topographic maps of Ethiopia.

### **2.5.1 Partnerships**

Although it relied on American pilots and technicians at the beginning, by its 25th anniversary in 1971 Ethiopian Airlines was managed and staffed by Ethiopian personnel. In 1998, it started transatlantic services. In 2007, Ethiopia Airlines provided basic pilot and aviation maintenance training to trainees from African countries including Rwanda, Tanzania, Chad, Djibouti,

Madagascar and Sudan. Other training was given to employees of Kenya Airways, Air Zimbabwe, Bellview Airlines, Cape Verde Airlines and Air Madagascar.

Ethiopian Airlines has code share agreements with: South African Airways, Lufthansa, TAAG-Angola Airlines, Gulf Air, Air One, Brussels Airlines, British Midland (BMI), Rwanda Air, and Saudi Arabian Airways.

Despite its well-structured and visionary leadership, the management of Ethiopia Airlines still believes in decent and trusted partnerships through its business operations, as exemplified by the numerous agreements with other multilateral and continental partners in the aviation industry. Most of these agreements and partnerships are geared toward fostering the company's growth and achieving its expansion strategy. Some of these key partnerships are mentioned as follow.

Ethiopian Airlines and ASKY signed a management contract which enables Ethiopian Airlines to manage ASKY for a period of five years. The management contract is an important move marking an historic intra-African co-operation in the airline business. The agreement helps the two carriers to develop a West African hub in Lome, Togo for the regional and inter-continental routes.

Ethiopian Airlines officially joined Star Alliance in December 2011 and subsequently entered into a code share agreement with Scandinavian Airlines, one of the founding members of Star Alliance, providing travelers with better connectivity and a broad range of services between Europe and Africa. She also signed code share partnerships with Singapore airlines and Asiana Airlines further expanding her reach.

In its quest to diversify business operations and build a solid human capacity, Ethiopian and The University of Mississippi, the largest public research university in Mississippi, signed a Memorandum of Understanding (MOU) to introduce different aviation related training programs into the existing courses of Ethiopian Aviation Academy (EAA).

In addition to the Mississippi University MOU, Ethiopian Aviation Academy joined IATA's global training partner network as an IATA Authorized Training Center thereby becoming the largest African carrier by Revenue and Profit according to IATA.

Through this initiative, Ethiopian Aviation Academy became the first in Africa to graduate 26 pilots trained with Multi-Crew Pilot License (MPL) in 2012. An additional 319 trainees graduated in different fields from the Ethiopian Airlines Aviation Academy in the following year. This academy has now grown to a center of excellence for aviation training on the continent.

Ethiopian signed a partnership business agreement with ACM Aerospace of Germany pursuant to the aerospace manufacturing development program it has embarked on. The company and Industrial Development Corporation (IDC) also signed an agreement to mark Shareholders of Zambia Airways in line with its expansion policy.

Ethiopian and DHL Global Forwarding, signed have form a joint venture company – DHL-Ethiopian Airlines Logistics Services Ltd., to build the Leading Cargo Logistics provider JV Company in Africa; the company is based in Ethiopia and do business in the entire continent of Africa, enhancing Ethiopia's logistics infrastructure and connections.

Ethiopian has an advanced maintenance base, which is fully operational for Airframe maintenance up to D-Checks, Engine, Overhaul, Components repair & overhaul, Light Aircraft maintenance and technical, and management assistance for other airlines. The maintenance base is certified by the US- Federal Aviation Administration (FAA).

Ethiopian is self-sufficient in all aviation training systems. The Ethiopian Aviation Academy offers training for Pilots, Aircraft Technicians, Cabin Crew (Service Trainee), Marketing & Sales as well as Management and Finance staff.

### **2.5.2 Growth and Expansion**

Analysts agree that it is unusual to find a business in Africa that is 100% owned by its government actually thriving. Even though the Ethiopian government holds complete ownership of the business, the airline continues to excel, turning profits for almost all the years of its existence. Its success as a government run operation is largely based on the fact that the government does not interfere and the airline's management is allowed to operate independently. Ethiopian Airlines also invests in promoting Ethiopian culture and tourism, more than the government does, covering 25 percent of the budget for trade fairs and tour operations.

In July 2009 Boeing and Ethiopian announced an order for five Boeing 777-200LRs. In doing so, Ethiopian Airlines becomes the first African carrier to order the ultra-long-range 777-200LR model. Ethiopian Airlines earlier was the first African carrier to order the 787 Dreamliner, committing to 10 in 2005. Ethiopian will begin taking deliveries of the B777-200LR in October, 2010 and the A-350-900 in 2017.

The order for the five B777-200LRs is valued at \$ 1.3 billion. It also ordered twelve Airbus-350-900s at US\$2.9 billion. The new purchase of aircraft from Boeing and Airbus is made in line with Ethiopian's fast growth strategy in which it is predicated that the fleet size would significantly increase in the next ten to fifteen years. Thus, in order to meet the required level of fleet size going forward, Ethiopian made the decision to diversify its fleet type among Boeing, Airbus and Bombardier aircraft.

Ethiopian Airlines' own stated strategic plans for 2010 include reaching a revenue target of US\$1billion, increasing its fleet to 30 jet aircraft, increasing its international destinations to 60, further expansion of its training and cargo services, the construction of a new catering building and a four-star hotel, expanding the Ethiopian Aviation Academy and installing a B787 simulator. The company has since renewed and revitalized its strategies during 2008 to improve the route network in order to meet the needs of its customers.

### **2.5.3 Aircraft Fleet**

Before the lockdowns began due to the COVID-19 pandemic in early 2020, ET operation has increased to a total of 123 international passenger and freight services destinations worldwide, as well as domestic services to 32 destinations and passenger and cargo charter flights. Ethiopian Airlines operates the Youngest Fleet in Africa as categorized in the chart below: There are 119 aircraft in total with 115 in operation as the 4 Boeing 737 Max planes are grounded following the accidents in early 2019.

Figure 2.5.3 Chart of Ethiopian Airlines Aircraft fleet

S/N	Aircraft Type	Total aircraft
1.	Boeing 787-8 Dreamliner	19
2.	Boeing 787-9 Dreamliner	4
3.	Boeing 777-200LR	6
4.	Boeing 777-200LRF	10
5.	Boeing 777-300ER	4
6.	Boeing 767-300ER	6
7.	Boeing 737-700	10
8.	Boeing 737-800	17
9.	Boeing 737-800F	2
10.	Boeing 737MAX 8	4 (grounded)
11.	Airbus A350-900	12
12.	Bombardier DH8-Q400	25

Source: ET Group official website

This monumental achievement was followed by a very tragic moment in Ethiopian Airlines recent history when its flight ET 302 in scheduled service from Addis Ababa to Nairobi on March 10, 2019 was involved in an accident around Bishoftu (Debre Zeit). All the 157 passengers and flight crew lost their lives in the accident. The aircraft Boeing 737-800MAX with registration number ET- AVJ took off at 08:38 am local time from Addis Ababa, Bole International Airport and lost contact at 08:44am.

#### 2.5.4 Travel Routes

During its colorful celebration of 55 years of uninterrupted operations to Frankfurt, Germany and 10 years of services to Guangzhou, China, Ethiopian started new services to Doha-Qatar, Vienna-Austria, Kano-Nigeria, Shanghai-China, Bale Robe & Kombolcha -Ethiopia. Four daily flights to Nairobi was also launched and daily flights to London commenced.

New flights to Asmara (Eritrea) Kisangani and Mbuji-Mayi (Democratic Republic of the Congo), Nosy Be (Madagascar), Mogadishu (Somalia), began in 2018, with Jakarta (Indonesia),



Buenos Aires (Argentina), Chicago (USA), Barcelona (Spain), Geneva (Switzerland), Manchester (UK) and Moscow (Russia) coming on board.

Ethiopian continued its aggressive expansion policy in 2019, starting new flights to Istanbul (Turkey), Marsellie (France) Garowe and Bosaso (Somalia); with new services to Blantyre, Ndola - Zambia, Seoul - South Korea, Enugu-Nigeria, Sao Paulo Rio de Janeiro – Brazil, Niamey-Niger, Singapore, Semere-Ethiopia. The management also increased its five weekly flights to Abuja to daily service.

### **2.5.5 Maintenance Repair & Overhaul**

The Ethiopian MRO services developed shop overhaul capability for the CFM56-3 engines. After achieving this milestone, the ET MRO service was granted approval for such capabilities from the Ethiopian Civil Aviation Authority (ECAA) and the USA Federal Aviation Administration (FAA). This led to the signing of an Agreement with Guinea Airlines, for strategic partnership in management, maintenance and training, on January 30, 2018 at Ethiopian headquarters.

Ethiopian Maintenance & Engineering Services has become the first in Africa with capability to repair the GEnx Engine, which powers the Boeing 787 aircraft, resulting to being certified by ETA Umwelt management Ltd., an independent environmental verifier, for establishing and maintaining environmental management system in compliance with the requirements of ISO 14001:2015.

Ethiopian and the Djibouti International Airport have signed a Memorandum of Understanding (MoU) for the provision of sea-air and air-sea cargo transport of goods in East Africa. The company management says these investments has enabled Ethiopian to operate with better comfort and efficiency for its customers.

### **2.5.6 Going Digital**

Ethiopian has availed its mobile application in the apple store and Google Play for customer to download on their mobile phones and use it to transact with the airline for many of its products and services. Besides empowering the customer to control the travel process, it will simplify, enrich and enhance customers' experiences across the entire journey.

Ethiopian Holidays, the tour operator wing of Ethiopian Airlines, announced the launch of its newly revamped website. Ethiopian has fully implemented Self Check-in Initiative, enabling its customers to check-in using their mobile device and avoid queues at the airport.

The Ethiopian Immigration and Nationality Affairs main Department in collaboration with Ethiopian Airlines has launched an e-visa service for all international visitors to Ethiopia effective June 01, 2018.

Ethiopian has registered record success in the 2017/18 fiscal year. In recognition of this success, at the 75th annual general meeting of the International Air Transport Association (IATA) held in Seoul, South Korea in January 2019, the body re-appointed Ethiopian Group CEO Mr. Tewolde Gebre-Mariam to the Board of Governors, making Ethiopian Airlines a board member for a three year-term.

#### **2.5.6 Awards and Recognitions**

In its seventy five (75) years of existence, Ethiopian airlines has proudly positioned itself as a leading player in the aviation industry thereby scooping numerous awards and recognitions for its excellent products/services, brilliant leadership style and its strategic business development model. The most notable of these accolades come between the years 2007 to 2019 and still counting as the company continues to grow and diversify its operations. Here are a catalog of the most prestigious awards in all categories of aviation operations.

Awarded in 2007 by the African Aviation Journal in recognition of its excellent financial performance, passenger growth, route network expansion, fleet modernization, in-flight service and overall customer care. In the same year, Ethiopian Airlines also received The 2007 Africa Business of the Year Award, presented by the US African Times for its "achievement and continuing contribution to the up-lifting of Africa's profile and the quality of life for Africans everywhere".

The company then secured the IATA-IOSA registration certificate as a result of its fundamental commitment to provide safe and reliable air transport services for passengers and cargo". There were more recognitions in the subsequent years of 2008-2010.

According to its official resource center, 2011 was another glorious year when Ethiopian Airlines received four different awards; the "AFRICAN CARGO AIRLINE OF THE YEAR" Award in February and "Deal of the Year 2010" Award on 20 April, 2011. The company was also named "Africa's Most Profitable Airlines" for the third time in a row in July that year and then received the African Airlines Association (AFRAA) Award for being consistently profitable over the years at the 43rd AFRAA Annual General Assembly held in Marrakesh, Morocco on November 21, 2011.

The success story of the business is not only limited to the airline alone but is spread out to other aspects of the company. Ethiopian Aviation Academy and Ethiopian MRO secured European Aviation Safety Agency Approval. Ethiopian Airlines Aviation Academy received the European Aviation Safety Agency (EASA) approved part-147 type maintenance training organization certification while Ethiopian MRO Unit received EASA Part 145 approval in 2011.

Ethiopian received five different awards during 2012. Ethiopian CEO won African Business leader of the year award from the corporate council on Africa (CCA). Ethiopian won the International Diamond Prize for Excellence in Quality by the European Society for Quality Research (ESQR) on December 2, 2012 in Brussels. Ethiopian won the "African Airline of the Year" and Captain Desta Zeru, Vice-President of Flight Operations, "Africa Legend of Travel" awards from African Travel Quarterly (ATQ) magazine. Ethiopian also received award for Excellent Customer Service by Planet Africa Network to African Diaspora.

Nine different awards and recognitions in 2013; Awarded for pioneering the African Renaissance from the President of the Federal Democratic Republic of Ethiopia. The SKYTRAX World Airline Award for Best Airline Staff Service in Africa for its outstanding customer service. "Africa's Best Business Class Airline" award by Chinese passengers. The Bombardiers Airline Reliability Performance Award for the third year in a row. Ethiopian won the Passenger Choice Awards for "Best Regional Airline in Africa", the African Business of the Year Award, double awards for the "African Airline of the Year" and "Best Cabin Crew in Africa". Ethiopian CEO won 2013 Airline Strategy Award for Regional Leadership and the 2013 Professional Excellence Award.

2014 was another sweeping year of awards with some of them being repeated from the previous years. Ethiopian Airlines won the "Best Airline to Africa" award by Premier Traveler Magazine,

the “Best Foreign Airline of the Year from Africa” by Kuala Lumpur Airport. The GOLD Level Boeing Performance Excellence Award, while Ethiopian Aviation Academy won the “Airline Training Service Provider of the Year” award from AFRAA followed by the “Best Airline of the Year” award from MICE Magazine in China. Ethiopian has also won the 2017 Airline Reliability Performance Award, for the 7th year in a row, from Bombardier Aerospace.

In February 2018 at a Customers Symposium organized by Guangzhou Baiyun International Airport in China, Ethiopian Cargo & Logistics Services received the “Export & Import Cargo Transportation” award. The Ethiopian Cargo & Logistics Services was also recognized as the “Fastest growing International Cargo Airline of the Year” at Air Cargo India International conference held in Mumbai later that month. The 2018 APEX Passenger Choice Awards for Best In-Flight Entertainment in Africa was also awarded to Ethiopian Airlines at the APEX Asia Conference held from March 13-14, 2018 in Shanghai, China.

The 2018 ‘Africa’s Outstanding Food Services by a Carrier’ Award as voted by PAX International readers at a ceremony held at the Radisson Blu Hotel in Hamburg, Germany in April 2018 and recognized by TripAdvisor, one of the largest and most reputed global travel sites, as “The Best Business Class in Africa and Indian Ocean”. Ethiopian has won SKYTRAX World Airline Award for the Best Airline in Africa, Best Business class in Africa 2018’, ‘Best Economy Class in Africa 2018’ and topped among Skytrax’s World’s Top 100 Airlines 2018 list, moving up from number 48 in 2017 to 40, as voted for by airline customers around the world.

November 2018, Ethiopian airlines crowned Company of the Year by All Africa Business Leaders Award (AABLA) in Johannesburg while the company CEO, Mr. Tewolde GebreMariam, was also listed among the finalist in the Business Leader of the Year category of the Award. He was honored as “Most Influential People of African Descent” early that year. Ethiopian won the prestigious African Champion of the Year Award at the Africa CEO Forum in Kigali, Rwanda in March 2019 and there were several other awards that year and even more to achieve in the coming years.

Ethiopian Airlines is the fourth largest airline in Africa by passengers and destinations in terms of market share and a strong workforce of about 16,000 employees globally; most of these employees are based at ET Group headquarters in Addis Ababa. The key business objective of the company is, “to achieve market leadership by 2025 as a World Class African Airline”.

## **2.6 Research Gap Analysis**

In its literature review, this study has searched and reviewed several books, journals, professional articles and other researches. These materials have lengthily discussed key related topics and analyzed theories in the context of crisis management and risk management and/or mitigation strategies. For example, the Cooperate Financial Institute argued that Risk in the context of Business is a threat to a company's ability to achieve its financial goals. This means that a company's or an organization's plans may not turn out as originally intended or that it may not meet its target or achieve its goals. It further postulates that Risk can also be influenced by various external factors, which may include rising prices of raw materials for production, growing competition, or changes or additions to existing government regulations and civil unrest or health crisis (CFI 2020).

Beck & Baran, 2012: 15 proposed that Risk Management does not get rid of all the potential risks, it however enables explicit decision making which will reduce the potential effect of certain risks. It will also engender the process of rational and secure decisions regarding the allocation of risk among the stakeholders to the project or business. While the Project Management Institute maintained that Project risk management deals predominantly with the need for project managers to think ahead and visualize how to compensate for minimizing the potential of things going wrong in the project.

Crisis, for its part, is associated with an enduring disruption of the regular and goal-oriented activities, upsetting the functional balance, and even with a threat to one's existence. The occurrence of crisis symptoms poses a challenge for the subjective sense of the operational normality of an organization or business (Kosowski, 2008: 24).

This fact about crisis is further supported by the description of the basic characteristics of a crisis, including the surprise factor, time pressure, late response, a loss of control, a danger to important functions, an increase in tension, and information deficit, as advanced by (Gołębiowski, 2003: 10).

Considering all the views from the different authors and scholars linking risk and crisis management or mitigation, the questions that come to mind is, how does this happen, especially with such large scale crisis as the COVID-19 that affects all sectors of human existence?

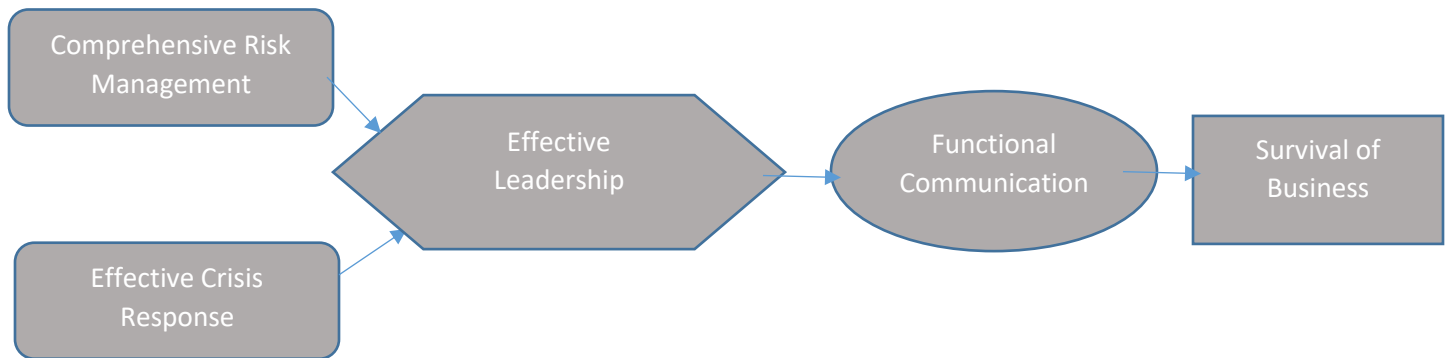
Where is the function of leadership in all of this? And how can these be communicated to ordinary employees who run the day-to-day operations of a business or project?

Based on these facts gathered from the literature, this study propose the following purpose statement: *Surviving a crisis as a Business organization requires effective risk management strategy and appropriate crisis response measures to mitigate the effect of the crisis for sustainable operation.*

The above purpose statement is supported by the literature as it points out the fact that Risk management is aimed at the mitigation of causes and/or effects of events that can disrupt the organizations economic processes resulting from a crisis (Sienkiewicz, 2006: 47).

However, the concept of crisis management, coherent with a comprehensive risk mitigation strategy should constitute an inseparable part of an enterprise's development strategy. And they cannot properly function in the absence of an effective leadership and a functional communication strategy.

This leads to the below conceptual framework as a guide for this study



Source: Own design

The student researcher's review of available literature on the specific topic "Assessing Organizational Risk Management Practices in Time of Crisis", found limited resources that addressed this topic and especially one that particularly studied an individual business organization or company. Thus, this study is focused on providing answers to the research questions and contributing to reduce possible gaps that may exist and also propose some key recommendations for future studies.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

The purpose of this chapter is to provide an overview of the research methodology. It includes the research approach and design, the data source and data collection method, definition of Variables, population and sampling, and methods of data analysis, in meeting the objectives of the research.

#### **3.1 Research Approach and Design**

The two main types of research approaches used in social sciences are: quantitative and qualitative research approaches. Quantitative research approach refers to the systematic empirical investigation of phenomena and quantitative properties and their relationships. That is to say, it emphasizes on collection of numerical data, which is a deductive approach (Bryman & Bell, 2003). Qualitative research approach refers to all non-numeric data or data that have not been quantified and can be a product of all research strategies (Saunders et al, 2009). It can range from a short list of responses to open-ended questions in an online questionnaire to more complex data such as transcripts of in-depth interviews or entire policy documents. (Saunders et al, 2009). Based on the above approach the student researcher used the qualitative research method, Combining the questionnaire and semi-structured interview techniques to interact with respondents. The student researcher believes that using this methods enables him to tackle the research problem which is a case study.

#### **3.2 Data Sources and Collection Method**

The study used both primary and secondary sources of data. Primary data collected to attain the research objectives regarding an in-depth understanding of the company's risk management practices for adequate crisis response and long-term sustainability by using questionnaire and semi-structured interviews. In order to assess and document risk management methods, best practices and lessons learned by Ethiopian airlines to survive the damaging impact of this unexpected health crisis, secondary data source is also obtained from unpublished Ethiopian Group documents as well as interview with key risk managements experts at the company.

The data are collected through reviewing key documentary evidence of the Airlines and from other supporting sources including books, journals, information from government departments, organizational records, research articles, web pages, and blogs, etc.

- i. **Documentary sources:** involves collecting information and data from existing annual reports and strategic policy documents of Ethiopian airlines as well as any relevant publications linked to the study.
- ii. **Questionnaire:** used to collect information from selected respondents from within the company. For this purpose structured questionnaires was developed, approved and administrated to respondents, based on the objectives of the study.
- iii. **Semi-Structured Interviews:** allow the use of open-ended questions and also enable the student researcher to ask follow up questions to gain the understanding of participants' submissions for the purposes of interpreting the information, capturing data about the participants' thoughts and to make balanced judgment. Respondents were selected based on their knowledge, experience and expertise about the subject matter.

### **3.3 Population Sample Size**

#### **3.3.1 Study Area**

Ethiopian Airlines is the national carrier of Ethiopia with 100% ownership by the Government of Ethiopia. Its Head Office is the Bole International Airport in the capital Addis Ababa. The airline was founded - December 21, 1945 and began operation on April 08, 1946 and has grown to a powerhouse in the African aviation industry. Ethiopian became a Star Alliance Member since 2011 recording more than 127 international destinations in five continents in addition to its 62 destinations in Africa and more than 22 domestic destinations nationally. A growing passenger rate at 12.16 million in 2019 and the number of employees as of November 2020 at the head office in Bole stands at 16,002, contributing significantly to national economic growth and job creation. The student researcher was motivated to focus the study in two departments (Risk Management section and Project Management Department) at the Bole head office.



### 3.3.2 Population

The study population refers to a reasonable sized groups of people or subjects used for gathering research data (Ruane, 2005). The study population for this research targeted to covered all staff members of the two departments, (Risk Management section and Project Management Department), which have about 15 staff. Unfortunately, there were only 6 respondents who returned the questionnaire. In deed the total size of the population in the Bole head office of Ethiopian Airlines is 16,002 consisting of both male and female and a total of 15 staff in the specific study area, less than 1% of the total population.

### 3.3.3 Sample size and procedure

Determining the appropriate sample size is important when undertaking a research. Thus, sample size depends on the total number of population, the level of confidence and the maximum deviation from true population that can be tolerated in the study. The student researcher was motivated to used two groups of samples for the study namely, experimental group and control group. Thus applying a simplified formula provided by (Yamane, 1967) to determine the minimum required treatment group sample size at 95% confidence level, degree of variability= 0.5 and level of precision (e) = 10%.

$$n = \frac{N}{1 + N(e)^2}$$

Where n is sample size,

N is the total number of study population (16,002)

Where e is the level of precision

Using the total population of 16,002 and level of precision of 10%, the sample size will calculated as follows.

$$n = \frac{16,002}{1 + 16,002(0.10)^2}$$
$$n = \frac{16,002}{1 + 16,002 * .01} = \underline{\underline{10}}$$

Figure 3.3.3

Total population size	Experimental/Target study population	Control group/Total Respondents
16,002	15	6

Source: Own design

### 3.3.4 Definition of Variables

Cause and effect is the relationship between two things when one thing makes something else happen. This concept uses the process of identifying potential causes of a problem or issue in an orderly way. It is often used in social science research to show order, inform, speculate, and demonstrate how behaviors change (William M.K. Trochim 2017).

This process follows three stages:

- **Stated Cause/Effect relationships:** the relationship is clearly stated by the researcher
- **Unstated Cause/Effect relationships:** the researcher makes inferences or “read between the linked” to make connections in the relationship
- **Reciprocal Cause/Effect relationships:** researcher identifies that effects may be part of a chain of causes. In this kind of structure, one effect goes on to cause a second effect, which may then cause a third effect, etc.

Hence, this study used the reciprocal Cause/Effect relationship as the defining variables.



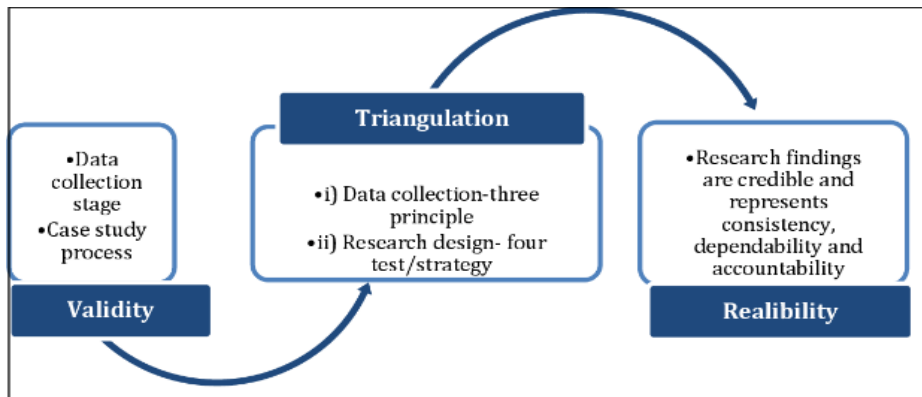
Source: Own designed

### 3.4 Data Analysis Method

Having collected and processed data, a critical element of a researcher's duty is to provide analysis of the data. Data analysis involve discovering meaningful patterns, themes and description of the data relative to the purpose of the research (Yin, 2014). An important process towards credible research outcome is triangulation. Triangulation is a validation technique and involves using more than one source of data and method of collection to confirm the authenticity of research data, analysis, and interpretation (Saunders et al., 2015).

In the social sciences, triangulation refers to the application and combination of several research methods in the study of the same phenomenon. Particularly, triangulation can be used in both quantitative and qualitative studies. It is a method-appropriate strategy of founding the credibility of qualitative analyses and becomes an alternative to traditional criteria like reliability and validity. Most researchers in the social sciences preferred triangulation for alignment in data.

Figure 3.4(i) A trend of the triangulation process.



(Source: Zeittey Karmilla Kaman, Zaleha Othman, 2016)

As shown in the figure above, the purpose of triangulation in qualitative research is to increase the credibility and validity of the results. According to O'Donoghue and Punch (2003), triangulation is a "method of cross-checking data from multiple sources to search for regularities in the research data."

Denzin (2006), for his part identified four basic types of triangulation: Data triangulation: involves time, space, and persons. Investigator triangulation: includes multiple researchers in an investigation. While Theory triangulation: comprises using more than one theoretical scheme in the interpretation of the phenomenon and Methodological triangulation: involves using more than one method to gather data, such as interviews, questionnaires, documents, observations, and etc.

Figure 3.4(ii) describes the four types of triangulation below



(Source: GenomeWeb, 2013)

### **3.5 Data Organization**

The logical and sequential process for data analysis is another stage of a qualitative case study research. Boddy and Boddy (2016) introduced the NVivo software as a potent and credible tool for research data analysis. They suggested a three-step approach in using the NVivo software which involves data impute, review and analysis. Thus, the first stage enhances the data analysis process while the review stage helped to identify and clean out redundant materials, thereby limiting the themes for analysis. These three-step approach were therefore adopted for this study beginning with inputting data into the NVivo software, reviewing and analyzing the data.

Hence, the main focus was to ensure a pattern of consistent sequence during the entire data analysis process in order to achieve a credible finding of this research. In addition, the student researcher also opted to manually review all the data, since the number of respondents were quite low and did not reached the target sample size. This was done to validate the results produced by the NVivo software which was being used for the first time by the student researcher.

Weigl et al. (2017) pointed out that using manual data analysis order than a data management tool like the NVivo software, was time consuming, error-prone, and could lead to inefficient data analysis. However, the student researcher submit that the NVivo software was used to reduce personal biases that may have come from the manual data analysis.

The data analysis demonstrates the neutrality and the examination of quality control measures given the need to prove the consistency and high degree of transparency in the research findings to avoid possible doubts (MacRae et al. 2015). In this regard, the profiles of respondents obtained from the Human Resource Department of Ethiopian Airlines are provided as follow.

### 3.6 Respondents' Profile

#### Brief Profile of Risk and Project Management Experts at Ethiopian Airlines Group

#### RISK MANAGEMENT SECTION

##### Respondent #1

1	Full name of Expert:	Confidential
2	Position Title:	GROUP FRAUD & RISK MANAGER
3	Year you joined ETG:	15/01/96
4	Total Years of Experience in Risk Management:	3 years

##### Respondent #2

1	Full name of Expert:	Confidential
2	Position Title:	SR. FRAUD & RISK ANALYST I
3	Year you joined ETG:	01/06/18
4	Total Years of Experience in Risk Management:	2 year

##### Respondent #3

1	Full name of Expert:	Confidential
2	Position Title:	SR. FRAUD & RISK ANALYST
3	Year you joined ETG:	01/11/18
4	Total Years of Experience in Risk Management:	2 years

#### PROJECT MANAGEMENT DEPARTMENT

##### Respondent #4

1	Full name of Expert:	Confidential
2	Position Title:	SR. PROJECT MGR. - FACILITY
3	Year you joined ETG:	03/09/90
4	Total Years of Experience in Risk Management:	8 years

##### Respondent #5

1	Full name of Expert:	Confidential
2	Position Title:	SR. PROJECT MGR. - FACILITY
3	Year you joined ETG:	25/01/99
4	Total Years of Experience in Risk Management:	6 years

##### Respondent #6

1	Full name of Expert:	Confidential
2	Position Title:	PROJECT MGR. AEROSPACE MANUFACTURING
3	Year you joined ETG:	08/11/19
4	Total Years of Experience in Risk Management:	1 year

Source: (HR Office, ET Group, 2021)

### **3.7 Limitation of the Study**

Unfortunately, the study suffered a severe limitation given the actual number of respondents who returned the questionnaire and took the semi-structured interview were not up to the targeted sample size the student researcher has planned. It is important to state clearly that such limited number may have impacted the outcome of the study to some extent. Other compelling challenges such as pandemic restrictions, safety measures and stringent company policy on releasing hard copies of crucial documents were also noticed.

## CHAPTER FOUR

### RESULTS AND DISCUSSION

This section of the paper outlines the findings based on the key research questions, while additional responses or feedback from respondents are provided from the semi-structured interview which was done as follow-up questions initial responses given on the questionnaires. The student researcher also draws out key emerging themes based on the data analysis and discussed in relation to the conceptual framework.

#### 4.1 Key Findings

- 1. What approaches of risk management practices has the management of Ethiopian Airlines employed to keep the company operating through the global COVID-19 outbreak?**

The responses provided by the respondents to this question, found that Ethiopian Airlines currently uses the Enterprise Risk Management approach to manage and handle overall risks event under the company. The study further revealed that Ethiopian Airlines' Strategic Business Plan calls for the establishment of "multi-purpose business units" as a key principle. This is seen in how the company has diversified its operations into tourism, hospitality and Aviation training in addition to the original passenger and cargo services it offers. This research discovered that the practice of multi-purpose business units is cardinal to Ethiopian's risk management strategy which allows the company to easily accept whatever risk a given crisis poses, because it has the capacity to spread the impacts of said risk to other sectors of the business.

- 2. How important it is for a company like Ethiopian Airlines to have a well-defined risk management strategy in place to mitigate the effects of crisis and sustain its long-term operations and short-term projects?**

The student researcher discovered from response to this question that risk management for a large and international company like Ethiopian Airlines serves as the backbone of the business. In other words, risk management is a vital part of Ethiopian's Strategic Business plan and it is the surviving lifeline of the company. As part of what this study observed, the company's action to remodeled more than twenty (20) passenger aircrafts from its fleet for use in cargo service was a very remarkable move which has kept the



company afloat to remain in operations throughout the COVID-19 crisis. This move allowed the business to accommodate the available opportunities presented by the crisis.

**3. What are the 3 most important lessons you have learned so far in this crisis and how can these lessons shift your approach to risk management for mitigating the effects of future crises?**

The following responses were discovered from this question

- Prioritizing the company's risk management policies and procedures in time of crisis and also giving priority to safety of employees, as Human Resource is the core for many business institutes.
- Using the crisis as an opportunity to expand the business in cargo market services.
- Evaluating the risk and taking fast action as time is crucial in any business and being the first to take maximum advantage.

**4. What could you say is the key contributing factor to Ethiopian Airlines' successful handling of the COVID-19 crisis so far?**

- Visionary leadership, commitment, dedication and the willingness of the management team to take risk for a good cause. And also showing humanity to the employees during this difficult time. This response factored in the angle of effective leadership the devotion of the Ethiopian management team to guarantee the social-economic survival of the company and its employees.

## **4.2 Emerging Themes**

### **4.2.1 Situation Awareness and Decision Making**

Risk Management experts explained situation awareness as the perception of environmental elements and events with respect to time or space, the comprehension of their meaning, and the projection of their future status. Good risk management practice involves consistently assessing situations for any existing or future threats or risks based on the current situations.

This concept of situation awareness speaks to the act of being aware of what is happening around you, where you are in relation to other people or things, and what potential threats there might be. It forms part of a well carved risk management strategy. The student researcher discovered that when these critical information are gathered from every step of the ladder (bottom to top)

and made available to decision makers, it leads to decisive action and smooth implementation. Furthermore, it points to how much a leader or the company management values collective team efforts.

As shown in their responses, most of the respondents, if not all, clearly showed how the Ethiopian management saw the possible negative impacts the COVID-19 crisis could have on the company, but they also saw the opportunities to diversify the company's operations. They allowed their own experts to evaluate the situation and listened to whatever opinion that came from the experts as an advice before management took any strategic decision.

#### **4.2.2 Leadership Presence Strategy**

The study found that leadership presence and availability in an organization during crisis play a significant role in reducing the effect of the crisis on the employees, the clients and the company itself. The participants in their responses emphasized the importance of leadership-employee-client engagement. Respondent-#1 during the interview stressed on the physical presence, strategic direction, and exemplary behavior at the highest level of the company. This perspective on leadership presence strategy involves management making themselves available sometimes to interact with employees and clients personally. Respondent-#4 for his contribution to this theme indicated that the physical presence of leadership during the time of crisis increases the trust and confidence of the customers in the company and it also reassures the employees "that yes, there is a crisis, but we believe in our management to solve this and protect our livelihoods".

The proponents of internal task function of the team leadership concept promote the ability of the leader to focus on goals and get the buy-in of team members and juxtaposing goal orientation with restructuring plans, processes, and roles to achieve organizational objectives (Northouse, 2016). Furthermore, Northouse (2016) listed eight characteristics of team features involving clear team goals, having a results-driven structure, competent team members, unified commitment, collaborative climate, standards of excellence, external support and recognition, and principled leadership that help in effective teams. These characteristics played major roles in bringing to light the risk management approaches employed by the management team at Ethiopian Airlines to mitigate the impact of this COVID-19 crisis on the company.

In line with the conceptual framework of this study, this emerging theme of leadership presence and availability involve the physical presence, strategic direction, and exemplary disposition. This was demonstrated by the management swift action to remodel several passenger aircrafts to cargo planes when lockdowns were being imposed across the world to limit the spread of the coronavirus. All the respondents in this study mentioned this move by the company's management as very impressive and a form of strategic thinking.

#### **4.2.3 Strategic Internal Communication**

One significant theme that emerged during the conversation with the various managers is how management communicated with the employees internally and how management and staff jointly work together to communicate with customers externally. Respondent-#4 admitted that communicating with thousands of employees across all departments of the company was the most critical thing in dealing with a crisis of such magnitude. This, he noted was a challenge for both the management and the employees since such health crisis was new to everyone and there was just little information from the beginning. *“However, we managed to work aggressively with our internal structures that already exist to get important management decisions and critical messages to the employees at all levels”*. This implies that systematic and factual communication is a critical component of the risk management strategy of Ethiopian Airlines and the top management adopted it as one key strategy to mitigate the impact of the COVID-19 crisis on the company to remain in business till date.

#### **4.2.4 Transparent Public Communication**

Transparent public communication was another significant crisis mitigation strategy used by the ET Group management. The two senior participants (Respondent-#1 and Respondent-#4), as well as junior managers (Respondent-#2 and Respondent-#5), indicated how the ET Group management recognized the critical need to be transparent with external customers when communicating about the crisis in order to better position the company in the view of the public so the crisis would not present a damaging impact in terms of public relations. As Respondent-#1 emphasized *“the currency for public trust is truth and transparent communication”*. This idea, he said the ET Group management borrowed from public health experts and that it works true for all fields of business and even public service.

### **4.3 Relating Emerging Themes to Conceptual Framework**

The crisis of any sort has varying effects on organizations and their stakeholders. Crisis leaders will either design mitigation strategies to reduce the probability of the event occurring, reduce the magnitude of associated consequences, or both (Kirkos, 2015; Yang, Hsu, Sarker, & Lee, 2017). The effect of crisis can be addressed from both preventive, proactive and reactive perspectives (Gurtner, 2016; Lam & Su, 2015), depending on the phase of the occurrence (Gaudard & Romerio, 2015; Sztojanov & Stamatescu, 2015). Hence the crisis effect mitigation strategy cannot be universal.

Moreover, given most crises have early signals that suggest potential danger, sensing and taking proactive steps, such as developing a comprehensive risk management plan couple with an effective crisis mitigation strategy is deemed the first step toward evading or resolving a crisis or minimizing its impact (Aljuhmani & Emeagwali, 2017). Managers in a crisis can take various corrective measures depending on their specific conditions. As pointed out in chapter 2 of this study, the SCCT for crisis communication has been supported in various crisis situations involving product recalls, organizational misdeeds, and accidents (Conrado, Neville, Woodworth, & O’Riordan, 2016).

However, this study review of available literatures showed that there has been limited research conducted specifically looking at risk management approaches to mitigate the effect of crisis which consider the roles of effective leadership and functional communication as a catalyst for the survival of businesses in the aviation sector. This also speaks to the fact that no health crisis of this magnitude has hit the airlines industry over the last century.

Pillai, Kumar, and Krishnadas (2015), observed that during a crisis; leaders have the responsibility to deal with strategic challenges they face, manage risks exposures and utilize opportunities, correct errors they make, avoid the pitfalls they need to avoid, and create the paths away from crisis. This view of the researchers caused them to define a leader as one who never reacts, but observes, understands, analyzes and then acts decisively. Similarly, the advocates of TLM model suggests that leaders are responsible for diagnosing any problems that could potentially impede group and organizational goal attainment as well as generating and planning appropriate solutions (Northouse, 2016).

This suggestion is largely seen in one of the themes above, (Leadership Presence Strategy) that emerged during interactions with the respondents. Specifically, Respondent-#2 mentioned in his response to one of the questions, use of the “bottom up” approach of leadership decision making by the ET Group management. Another respondent, Respondent-#5 also alluded to a cordial working relationship amongst the management and the employees.

#### **4.4 Impacts of the Multi-Purpose Business Units**

Ethiopian Airline is currently implementing a 15-year strategic plan called Vision 2025 that will see it become the leading airline group in Africa with seven strategic business units.

In line with this Vision 2025, which is a clear roadmap to be accomplished in 15-years, the airline has so far registered historical success in financial, commercial, operational and customer service areas.

Ethiopian currently operates more than 125 of the young and most modern fleet, with less than five years of age, and has 48 fleet on order to be delivered soon. To accommodate such large aircraft fleet and rapid passenger/customer growth, a state-of-the-art passenger terminal, expected to handle 22 million passengers by 2025 and the modern Skylight Hotel were inaugurated on January 27, 2019. With a capacity of 373 rooms to accommodate 2000 guest at one time, the hotel is an edifice presented to the fast-growing African capital offering hospitality in par with international standard with an ultra-luxurious features of a Five-Star hotel.

The company holds a record 127 international destinations in five continents, more than 62 destinations in Africa and over 22 domestic destinations nationally.

#### **Cargo and Logistics**

Ethiopian Cargo and Logistics services is the largest cargo network operator in Africa. Currently with 10 - Boeing 777-300ER and 2 - Boeing 737-800F freighters dedicated solely to cargo, the airline serves 58 cargo destinations in Africa, the Gulf, the Middle East, Asia, Europe and North Americas with an average daily uplift of over 650 tons. With such capacity, the cargo and logistics services contribute about 38% of the company’s overall revenue.

## Ethiopian Maintenance Repair and Overhaul (MRO)

The scale of the MRO operation of Ethiopian Airline is the largest of such service in Africa and serves Africa and the Middle East. The facility is fully equipped with modern state-of-the-art technology equipment needed to repair/overhaul aircraft, engines and components. The MRO service was established in 1957 and it currently employs over 2,800 employees.

## Ethiopian Aviation Academy (EAA)

Ethiopian Aviation Academy (EAA) is the largest and the most modern aviation academy in Africa recognized as ICAO regional Training Center of Excellence. To train aviation professionals from classrooms to simulator training, EAA offers industry standard training for pilots, aircraft technicians, cabin attendants and ground services staff both for initial and recurrent students. The Leadership & Career Development Center is training thousands in Management and Leadership Skills. In the last 10 years, the EAA has trained about 10,592 individuals from across Africa and beyond in all areas of aviation; about 60% of these trainees have been employed by the airline.

Speaking of employment, the company's total human capital capacity stands at 16,002 employees as of November 2019 (ET Group Factsheet 2019).

Ethiopian Holidays, the tour operator wing of Ethiopian Airlines, announced the launch of its newly revamped website. Ethiopian has fully implemented Self Check-in Initiative, enabling its customers to check-in using their mobile device and avoid queues at the airport.

In addition to these services are the catering and tourism services which are also immensely contributing to the overall goal of the strategic business plan and the success of the multi-purpose business units. With incomes being generated from all these different streams of the business, the company's total revenue stands at about 3.9 billion USD as of November 2019 (ET Group Factsheet 2019).

In a broader view, the multi-purpose business unit strategy has allowed the Ethiopian Airline Group to diversify its operations into several business streams, which gives it the leverage to spread out potential risks stemming from possible crisis situations, leading to better mitigation measures. The strategy has also supported the company to create more employment and save livelihoods, thereby contributing immensely to the growth of the national economy of Ethiopia.

## 4.5 Questionnaires and Semi-structured interview Responses of Research

### RESPONDENT: #1

#### Research Topic:

Assessing Organizational Risk Management Practices in time of crisis–A Case Study of Ethiopian Airlines.

#### Questions for the senior level Managers:

1. How do you define risk management in the context of your business operation using a project management model? *It is the potential risk or problem that negatively impact project in a business operation which can be financial, political and can severely affect the project time table resulting in huge cost variation (resource). Companies should identify, assess and treat the risks to minimize the effect on the business operation and project completion.*

2. How important it is for a company like ET to have a well-defined risk management plan or strategy in time of crisis for its long-term operations and short-term projects?

*A well-defined risk management plan or strategy is crucial for a company to continue its business operation otherwise it can result in severe crisis in both long term operation and short term projects.*

**Interview response:** *“What I would say in short is, not have a well-structured risk management strategy for a big company such as ET means the management is settling for the worst case scenario is case a crisis shows up”.*

3. Apart from the COVID19 crisis, what other type(s) of crises did you experience as a major player in the airlines industry?

*A major crises is when Airlines faces aircraft accidents from the recent, B777 freighter fire accident, and more severe is when it is a passenger aircraft like B737 max, the Comoros & Beirut accidents. These are times where employees are affect psychologically and the company financially.*

**Interview response:** *“Another point I’ll add to my previous response is, the price of fuel skyrocketing or getting very low can causes a crisis, as it is the major expense for the airline operation. When fuel price get too high profit will be marginalized. When it is*

*very low demand for travel decreases significantly as lots of countries economy is based on fuel as a major export commodity or revenue”.*

4. What approaches of your risk management strategy did you consider in response to the COVID19 crises in order to mitigate its impact on your business?

The approach ET followed were:-

- On Human Resource: -
  - Employees were advised of COVID 19 preventive measures, wearing mask, keeping social distance and staying at home in case found positive to COVID test.
  - As the flight to many areas were canceled volume of work was less so, employees with accrued annual leave were advised to clear same and this gave more open working space for active employees to maintain social distance of 2 meters in office area.
  - A COVID quarantine area with beds were arranged for COVID patients within the company facility.
- On the business side ET worked aggressively on the cargo operation especially in transporting COVID-19 PPE equipment, masks etc. all over the world, even certain passenger aircrafts were converted to cargo to handle the huge cargo demand.

**Interview response:** *(No need for a follow-up because response is very clear)*

5. How effective were these approaches to achieve the desired outcomes of your strategy from your experience in project management?

It is very effective, similar approached but specific to project have to be done and stay on standby for any uncertainties or risk that can arise anytime on projects that are under progress.

**Interview response:** *“in project management, you have to consider all factors, the objective, scope, schedule and even the risks that come with implementation at all stages of the project. This in my view, makes a good project manager who understands the importance of risk management plan and its effective use”.*

6. What are key best practices from your approach of Project risk management throughout this crisis you will like to share with other managers?



Get clear understanding of the risk, evaluate and take fast action not to lose time and minimize project additional cost.

**Interview response:** *“Let me add to my first response that a well-informed decision and timely action is very critical during crisis period; so there’s no point in wasting time when the right people (experts) have advised you what to do”.*

7. How do you describe the role of leadership between your management and the employees to successfully implement your strategies for mitigating the effects of the crises? The role of a leader is very crucial in a company. Leaders should be role models so that employees will be motivated and follow suite. Without the employee a business enterprise can’t move an inch and will definitely get bankrupt. So leaders should motivate and work jointly with employees to solve or mitigate the effect of crisis.

**Interview response:** *“For us at ET, I will say this has work very well for us in every crisis we have faced. We have always enjoyed the senior management support and they always listen to our views and expert opinions to guide their decisions in time of crisis, which is very encouraging”.*

8. What are the 3 most important lessons you have learned so far in this crisis and how can these lessons shift your approach to risk management for mitigating the effects of future crises?
  1. Priority given to safety of Employees, as Human Resource is the core for my business institute.
  2. Using the crisis as an opportunity to expand the business in cargo market.
  3. Evaluating the risk and take fast action as time is crucial in any business and being the first to take maximum advantage.

**Interview response:** *“The points listed above works to mitigate future crises. However, the management must first work with the risk management experts to understand the situation, analyses the risk and make fast decision and closely follow the proper implementation of the decision”.*

*Additionally from the project management perspective, these are key things to consider:*

*\* Accident on site (It can be fatal); -it needs discussion with gang chiefs to make the other laborers to be stable.*

*\* Riot in the city: -It needs the contractor management team to understand the extent and to take imitate decision not the laborers to participate.*

*\* Shortage of liquid cash for the contractor:-It also crat crisis in the site and the project management team should be able to feel the early sign of crisis and warn the employees against the negative consequences of the same.*

9. Do you think your approach of risk management applied to deal with the effect of this crisis is successful enough to sustain the company's post COVID19 recovery?

Yes, definitely, ET for sure will shin post COVID because as clearly seen most Airlines competitive to ET are dying because of COVIDE-19 global effect.

**Interview response:** *“To further explain my response, very few Airlines managed to stay profitable during this crisis, most were bailed out by their government or laid off many employees. On the other hand ET managed without getting any support from the government and without laying off a single employee. This is a huge achievement that resulted in sustaining the company's post COVID19 recovery.*

10. What additional information can you provide in terms of best practices and lessons learned when it comes to risk management strategies to mitigate the impact of crisis such as COVID19 on big business?

The best practice and lesson to be learned in risk management is during actual crisis. This is seen when price of fuel has skyrocketed, aircraft accidents happen and now COVID 19. The risk management office within ET will have to record all this and make use of it in future crisis with some modification to specific conditions.

**Interview response:** *“By this I mean, rather than panicking/giving up easily during crises it is important to understand the situation, find out opportunities created as a result of the crises, focus on solutions, make fast decision and take calculated risk to grab the opportunities”.*

11. What could you say is the key contributing factor to Ethiopian Airlines' successful handling of the COVID-19 crisis so far?

- Visionary leadership, commitment, dedication and the willingness of the management team to take risk for a good cause. And also showing humanity to the employees during this difficult time. This response factored in the angle of effective leadership the

devotion of the Ethiopian management team to guarantee the social-economic survival of the company and its employees.

## **RESPONDENT: #4**

### **Research Topic:**

Assessing Organizational Risk Management Practices in time of crisis—A Case Study of Ethiopian Airlines.

### **Key Research Question:**

The general research question that is guiding this qualitative study is: **What approaches of risk management practices has the management of Ethiopian Airlines employed to keep the company operating through the global COVID-19 outbreak?** Ethiopian Airlines currently used Enterprise Risk Management approaches to manage and handle all over risks under the company.

**Interview Response:** *“To further explain this concept, ERM process as you know, in the ET Group case, the company’s board of directors instructs the management team to applied this strategy into setting of the Business plan and use it across the company; and management require the risk management team and other departments to identify potential events that may affect the entity, and designed strategies to manage these risks to be within ET’s risk appetite to provide reasonable assurance for the company”.*

### **Interview questions for the senior level managers:**

1. How do you define risk management in the context of your business?

Risk is the chance that an event, trend or course of action will have either a positive or negative effect on an organization’s ability to meet its strategic or operational objectives.

**Interview Response:** *“This can be simply explained that throughout a company/organization existence, some uncertain situation may arise, and therefore, the management must be ready and have a plan in place to deal with such crisis in order to keep the company operational”.*

2. How important it is for a company like ET to have a well-defined risk management plan or strategy in time of crisis for its long-term operations and short-term projects?

In general, even for personal life risk management is very important, for a large and international company like Ethiopian Airlines risk management means the back bone of the business. Once as a company we didn’t manage and handle risk well, business

continuity will be under question. So, in short risk management in Ethiopian airlines is one part of the business plan and it is the survival of the company.

**Interview Response: (sufficient response, no further question)**

3. Apart from the COVID19 crisis, what other type(s) of crises did you experience as a major player in the airlines industry? In my life and Airline work experience I don't think so such a murder and pandemic situation for the aviation industry.

**Interview Response:** *“As senior manager at Ethiopian Airlines, I witnessed the two aircraft accidents and sometimes in 2008-2009 the jet fuel shortage that hit the airline industry, but those crises cannot be compared to this COVID-19 health crisis”.*

4. What approaches of your risk management strategy did you consider in response to the COVID19 crises in order to mitigate its impact on your business? The risk management task force incorporating with the risk management section have plan many things to respond for COVID-19 crisis. One major thing Ethiopian airline take action for COVID-19 on the business plan were using the passenger aircraft for Cargo business. This activity is one part of risk management and by this as a company ET was successful by taking action and resist the current pandemic situation.

**Interview Response: (sufficient response, no further question)**

5. How effective were these approaches to achieve the desired outcomes of your strategy? As mentioned above in response to question no. 4, the mitigation action taken for the risk were very successful and even the impact has been yet a great positive impact for the company business.

**Interview Response: (no further question due to repeated response given)**

6. What are key best practices from your approach of risk management throughout this crisis you will like to share with other managers? As a company we have a policy and procedure how to manage risk; so that as per the policy and procedure all risk owners (each departments) first try to identify all possible risks under their operations and list them down, then send it to Fraud and risk management section (our department). Once all sections under the company identified all possible risks it is compiled as a company risk register format, we preauthorize it as per the identified risk impact and likelihood and we will manage it.

**Interview Response: (satisfactory response given, no further question)**

7. How do you describe the role of leadership between your management and the employees to successfully implement your strategies for mitigating the effects of the crises? *The role of leadership is highly important to motivate employee. Employee will always be influenced with a strong management who work hard and be exemplary so that they will be motivated and follow same.*

**Interview Response:** *“The role of ET leadership and management team was very good and the management staff/employee, customer and the COVID-19 taskforce were working hand to hand to protect everyone”.*

8. What are the 3 most important lessons you have learned so far in this crisis and how can these lessons shift your approach to risk management for mitigating the effects of future crises?

1. *In business there is always a challenge that we call a risk, we’re never free from risk, the only thing will be the level of the risk. So one big lesson I learned is for any risk incident that happens, management must take an immediate action to that by mobilizing and create awareness for the company and the community.*
2. *Have a strategic plan for any new thing that will happen towards the business activity.*
3. *Always have plan B i.e. for any activity if the first plan not successful, go for the next plan.*
- 4.

**Interview Response:** *(satisfactory response given, no further question)*

9. Do you think your approach of risk management applied to deal with the effect of this crisis is successful enough to sustain the company’s post COVID19 recovery? *Yes, it is very successful full. I can safely say our projects are progressing with the time schedule and the company has been stable all through the COVID-19 crisis financially and in terms of human resource.*

**Interview Response:** *(response okay, no further question)*

10. What additional information can you provide in terms of best practices and lessons learned when it comes to risk management strategies to mitigate the impact of crisis such as COVID19 on big business? *It is better to have experienced project management team besides risk assessment and a mitigation strategy for the actual occurrence.*

**Interview Response:** *“In other words, I encourage all African airlines managements to use Enterprise Risk Management system to manage their company risk/crisis situations. In general it involves the process of identifying, analysing and managing strategic risks. It provides the methodology for integrating risk into the strategic planning and resource allocation processes at the strategic level. So that as a company by involving all the concerned body/departments, they can manage risks in the business surroundings”.*

11. What could you say is the key contributing factor to Ethiopian Airlines’ successful handling of the COVID-19 crisis so far?
- Visionary leadership, commitment, dedication and the willingness of the management team to take risk for a good cause. And also showing humanity to the employees during this difficult time. This response factored in the angle of effective leadership the devotion of the Ethiopian management team to guarantee the social-economic survival of the company and its employees.

**RESPONDENT: #2**

**Research Topic:**

Assessing Organizational Risk Management Practices in time of crisis–A Case Study of Ethiopian Airlines.

**Questions for the junior level managers/supervisors:**

1. From your perspective of project management, how do you understand the concept of risk management in the time of a crisis? Risk management is a tool to continually identifying, analyzing, and evaluating potential vulnerabilities within an organization which enables to mitigate the possibility of a crisis situation arising.
2. Have you work to implement a risk management strategy during a crisis? If yes, what type of crises was it? Yes, this COVID-19 pandemic is my first crisis experience, since I was transferred to the project management department I late 2019.
3. What approaches of risk management did you consider to response to the crises and mitigate its impact? Identify risk, Analyze the affected activities, review health and safety program, incorporate all WHO prevention measures in strategy, prepare plan for implementation, plan to follow up and control the implementation, collect feedback, record the status and revise mitigation plan and the strategy, and implement
4. As a project management expert, what key strategies did you suggest to your manager to help the company mitigate the effects of the crises and remain sustainable? Create awareness, Strict follow up and control the implementation of mitigation measures, analyze implementation, collect feedback and revise the strategy.
5. How do you describe your role in working with management and other employees to successfully implement the risk management strategies in addressing the COVID-19 crises? Participate in preparation of risk management strategy and mitigation plan, Proper implementation of risk management strategy and provide feedback during implementation if any and discuss the way forward.
6. What are the crucial lessons learned and best practices you have gained from this crisis as a project management expert that you will like to share with others in the field? The key lesson here is that project or risk management experts must have due diligence as per prevention /mitigation measures at any time and place and update/revise the strategy and plan as per new report and findings and implement accordingly.



**RESPONDENT: #3**

**Research Topic:**

Assessing Organizational Risk Management Practices in time of crisis—A Case Study of Ethiopian Airlines.

**Questions for the junior level Managers:**

1. How do you define risk management in the context of your business operation using a project management model? *Predict/forecast unexpected financial or any crises and get prepared ahead of time to avoid or minimize its effect in a project and insure sustainable continuity of a project.*
2. How important it is for a company like ET to have a well-defined risk management plan or strategy in time of crisis for its long-term operations and short-term projects? *It is highly important for the sustainability and continuity of an organization*
3. Apart from the COVID19 crisis, what other type(s) of crises did you experience as a major player in the airlines industry? *The recent ET flight 302 passenger air craft crises (boing 737 aircraft)*
4. What approaches of your risk management strategy did you consider in response to the COVID19 crises in order to mitigate its impact on your business? *Drastic discussion to convert passenger aircraft to cargo as the passenger number suddenly drops down and cargo business relatively increase specially related to COVID19 medical items.*
5. How effective were these approaches to achieve the desired outcomes of your strategy from your experience in project management? *Very effective you have always to have plan –B. challenges will pop out any time in projects, therefore, the management must find out opportunities created as a result of the crises, focus on solutions, making fast decision and take calculated risk to grab the opportunities.*
6. What are key best practices from your approach of Project risk management throughout this crisis you will like to share with other managers? *Understand the situation and make fast decision to grab opportunities and closely follow the proper implementation of whatever decision that has been taken.*

**RESPONDENT: #5**

**Research Topic:**

Assessing Organizational Risk Management Practices in time of crisis–A Case Study of Ethiopian Airlines.

**Questions for the junior level Managers:**

1. How do you define risk management in the context of your business operation using a project management model? Practice of Identify, evaluate and mitigating risks to a project that the potential to impact the desire outcome.
2. How important it is for a company like ET to have a well-defined risk management plan or strategy in time of crisis for its long-term operations and short-term projects? No matter how well planed the projects can always encounter unexpected problems and to manage the risks on projects is a process that includes risk assessment and a mitigation strategy for the actual occurred.
3. Apart from the COVID19 crisis, what other type(s) of crises did you experience as a major player in the airlines industry? In addition to this global health crisis, Ethiopian airlines as a company has experienced two air plane crashes in recent years, which were very challenging for the company.
4. What approaches of your risk management strategy did you consider in response to the COVID19 crises in order to mitigate its impact on your business? At Ethiopian Airlines, we use the Risk Reduction strategy by spreading the potential risks of the COVID-19 crisis to other sectors of the business so the impact would not be severe.
5. How effective were these approaches to achieve the desired outcomes of your strategy from your experience in project management? By improving safety and quality control process, all employees and customers of ET were assured that they would be safe in the premises of the airlines. This was effective in helping the company's image.
6. What are key best practices from your approach of Project risk management throughout this crisis you will like to share with other managers? Risk assessment and a mitigation strategy for the actual occurrence is crucial to successful project implementation.

**RESPONDENT: #6**

**Research Topic:**

Assessing Organizational Risk Management Practices in time of crisis—A Case Study of Ethiopian Airlines.

**Questions for the junior level Managers:**

1. How do you understand the concept of risk management in the time of a crisis? **Looking at the opportunities and the possible negative impacts related with crisis.**
2. Have you work to implement a risk management strategy during a crisis? If yes, what type of crises was it? **Throughout the COVID-19 crisis, ETG implemented a simple risk management strategy by changing its operation from passenger service to cargo service to accommodate and make use of the available opportunities.**
3. What approaches of risk management did you consider to response to the crises and mitigate its impact? **The ET leadership used the bottom-up approach, the decision-making process is done at top management level after getting experts' advice.**
4. As a risk management expert, what key strategies did you suggest to your manager to help the company mitigate the effects of the crises and remain sustainable? **After the risk management section has assessed the situation and considered the potential impact and the opportunity the crisis would bring, our team then advised the senior management team to implement accepting the risk treatment strategies; where they could spread the potential risks of the health crisis to other sectors of the business, like cargo, tourism etc.**
5. How do you describe your role in working with management and other employees to successfully implement the risk management strategies in addressing the COVID19 crises? **My role has most of the time been determined by the responsibility given by the management team, and further to this as a person I have to follow the preventive methods given by the doctors and should protect my colleagues and myself from the pandemic.**
6. What are the crucial lessons learned and best practices you have gained from this crisis as a risk management expert that you will like to share with others in the field? **As a risk analyst, I have learned that practicing multi-business unit is the best way to sustain a company in this kind of crisis, like ET has done by diversifying its operations through cargo, hotel and other strategic business unit.**

## CHAPTER FIVE

### CONCLUSION & RECOMMENDATION

#### 5.1 Summary

As it has been clearly indicated in the introduction, the main objective of this study was to examine the approaches of risk management practices applied by the management of Ethiopian Airlines to mitigate the effects of COVID-19 and sustain the company throughout the pandemic. The study aimed at assessing and documenting risk management approaches, best practices and lessons learned by the airlines to survive the damaging impact of this unexpected health crisis. In view of this,

The study found out that Ethiopian Airlines uses the Enterprise Risk Management (ERM) approach as a business principle to handle and manage the company's overall risks regardless of where such risk emerges. Relying on its firm and well-structured governance system, the management focused on the skill sets of their human resources, and the availability of their leadership from the onset of this crisis and it has continued that way. Additionally, the student researcher also discovered that the leadership adopted strategic internal communication through the staff to engage with the customers, and a principle of transparent public communications to protect the image of the organization throughout the pandemic.

Moreover, the ET Group management exhibited situation awareness and certainty in decision making. As Respondent-#1 explained with no doubt, the swift move by the company's management to listen to its risk management experts' advice and shift or remodel more than twenty (20) passenger aircrafts for use in the cargo section of the business was very remarkable. This he noted above all, was a more offensive strategy of the company's business plan which re-align resources into innovative processes to reposition the company and remain sustainable in times of crisis.

## **5.2 Conclusion**

The negative effect of a crisis on the aviation sector and provision of travel related services is destructive as the effect has the propensity to destroy a given organization/airline company leading to loss of capital, loss of business opportunity, loss of reputation and loss of employment, like the case of Air Namibia and South African Airlines, as mentioned in the introduction. Consequently, the need for well layout strategies to mitigate the effect of the crisis has the potential of protecting the investment of shareholders and the employment of qualified employees.

To this end, after a careful review of all the available resources (literatures, questionnaires, interviews, etc.) for this research. It is the concluding view of this study that authorities at the Ethiopia Airlines have demonstrated effective leadership practices and functional communication; while utilizing comprehensive risk management plus an effective crisis response measure as described in the findings of this study, to professionally manage and mitigate the impact of the Coronavirus health crisis and to keep the company operating to a maximum scale till date. This observation is vividly exemplified in the management's strategic decisions, objective considerations, and conscious but bold actions they took at the right time to save the company. This conclusion is backed by the responses given for the specific questions and follow-up interviews of the respondents.

Unfortunately, given the actual number of respondents who returned the questionnaire and took the semi-structured interview, it is important to state clearly that such limited number could have had an impact the overall outcome of the study to some extent.

### **5.3 Recommendation**

As a strategic partner in the global economy, crises in the aviation sector may varied in nature from natural to man-made events. Hence, such crises could also need different mitigation strategies. The scope of this study was only limited to a particular company (Ethiopian Airlines) which is just a fraction of the many companies in the African aviation industry, and may not fully represent the entire population of institutions who are struggling to survive the COVID-19 crises as well.

Therefore, the student researcher would propose the following recommendations:

1. That future studies on the subject of crisis management and risk mitigation strategies could expand the number of case studies to involve more companies in the aviation sector in Africa, with a larger sample size to investigate and obtain a more expanded view.
2. That future research work on crisis management and risk mitigation could include the other African airlines who suffered the larger blow of the crisis through bankruptcy, staff layout and subsequent closure or ceased operations. The experiences of those other airlines like South African Airline for example, might introduce a new approach and bring about different perspectives on strategies for future crisis effect mitigation.
3. That future studies should take into account the diversity of leadership positions in the management structure of the airline and include other participants such as board members, other line managers and general employees who benefit from the work of the risk management team. Considering the perspectives of the risk and project management experts provided for this study were only limited to their experiences.
4. That future research could explore specific crisis type to allow in-depth investigations and analysis of all other aspects of this vast subject that this study could not cover.

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## **APPENDIX**

### **ENDORSEMENT**

This thesis has been submitted to St. Mary's University, School of Graduate Studies for examination with my approval as a University Advisor.

Dejene Mamo (PhD)  
Advisor  
St. Mary's University, Addis Ababa

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Signature  
July, 2021