

**THE EFFECTS OF MANPOWER PLANNING ON GROUND HANDLING
OPERATIONS IN TANZANIA AVIATION INDUSTRY: THE CASE STUDY
OF JULIUS NYERERE INTERNATIONAL AIRPORT (JNIA)**

NEEMA MWANG'AMBA

**A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE DEGREE OF HUMAN RESOURCES
MANAGEMENT OF THE OPEN UNIVERSITY OF TANZANIA**

2020

CERTIFICATION

The undersigned certifies that he has read and hereby recommends for acceptance by the Open University of Tanzania a dissertation entitled: *“The Effect of Manpower Planning on Ground Handling Operations in Tanzania Aviation Industry: The Case Study of Julius Nyerere International Airport (JNIA)”* in partial fulfillment of the requirements for the Degree of Master of Human Resource Management of the Open University of Tanzania.

.....

Dr. Salum Mohamed

(Supervisor)

.....

Date

COPYRIGHT

No part of this dissertation may be reproduced, stored in any retrieval system, or transmitted in any form by any means, electronically, photocopying, recording or otherwise without prior permission of the author or The Open University of Tanzania in that behalf.

DECLARATION

I, **Neema Mwang'amba**, do hereby declare that this dissertation is my own original work and that it has not been presented and will not be presented to any other University for a similar or any other degree award.

.....

Signature

.....

Date

DEDICATION

This thesis is dedicated to: God Almighty my creator, my strong pillar, my source of inspiration, wisdom, knowledge and understanding. He has been the source of my strength throughout the time and on His wings only have I soared. Glory to Him and Him alone.

My father, the Late Anderson Mwang'amba, who taught me that the best kind of knowledge to have is that which is learned for its own sake. It is also dedicated to my mother, Mama, Mwalimu Asteria Mwang'amba, who taught me that even the largest task can be accomplished if it is done one step at a time.

Mama Irene Shiuga and the Late George Nzunda, my great parents, who never stop giving of themselves in countless ways.

Fred, Innocent and Ivana, who have been affected in every way possible by this quest. Thank you. My love for you all can never be quantified.

ACKNOWLEDGEMENT

I would first like to thank my dissertation supervisor Dr. Salum Mohamed of the Open University of Tanzania, Dar es Salaam. The door to Dr. Salum Mohamed's office was always open whenever I ran into a trouble spot or had a question about my research or writing. He consistently allowed this paper to be my own work, but steered me in the right the direction whenever he thought I needed it.

I would also like to thank the experts in Aviation Industry of Tanzania who were involved in the validation survey for this research project, as it is difficult to mention everyone, I express my sincere gratitude to all of them. Without their passionate participation and input, the validation survey could not have been successfully conducted.

I would also like to acknowledge Mr. Frederick Rutahindurwa as the second reader of this thesis, and I am gratefully indebted to his very valuable comments on this thesis.

Finally, I must express my very profound gratitude to my parents and to my dear Husband and my loving Mama, Mama Mwang'amba for providing me with unfailing support and continuous encouragement throughout my years of study and through the process of researching and writing this thesis. This accomplishment would not have been possible without them. Thank you.

ABSTRACT

The purpose of this study as to assess the effect of manpower planning in ground handling operations in Tanzania Aviation Industry. The objectives of the study was to examine the factors influencing manpower planning of ground handling operations in Tanzania aviation industry. The study sample included 65 respondents from the Tanzania Aviation Industry in Julius Nyerere International Airport selected using random sampling and non propability(purpose) sampling. The study used a explatory research design, both primary and secondary data collection methods were used while questionnaire and interview tools were used to gather data. Data was analyzed using Ms Excel(2007) and Software Package for Social Scientist (SPSS) version 19. The study findings revealed that underutilization of human resources, Lack of skilled trained manpower, abseentism and organization's poor manpower planning were the reasons for failure for a ground handling company to operate efficiently and reach its objectives. Based on the findings of the research it was suggested that manpower planning activities can be visibly identified and tackled at one at policy level; Any changes in legislations and government control concerning hours of work, work conditions, restrictions on the employment, contract labor and casual labor, if not dealt in consideration of the aviation industry have impact in manpower planning. It was recommended that at planning level, having manpower of a right kind, at a right time and right number enables any organization to achieve its objectives and also benefit individual employees in the best way possible.

TABLE OF CONTENTS

CERTIFICATION	ii
COPYRIGHT	iii
DECLARATION	iv
DEDICATION	v
ACKNOWLEDGEMENT	vi
ABSTRACT	vii
LIST OF TABLES	xiii
LIST OF FIGURES	xiv
LIST OF ABBREVIATIONS	xvi
CHAPTER ONE	1
INTRODUCTION	1
1.1 Background to the Study.....	1
1.2 Statement of the Research Problem.....	3
1.3 Research Objectives.....	6
1.3.1 General Research Objective.....	6
1.3.2 Specific Objectives of the Study.....	6
1.4 Research Questions.....	6
1.4.1 General Research Question.....	6
1.4.2 Specific Research Questions.....	7
1.5 Significance of the Research.....	7
1.6 Scope of the Study.....	8
1.7 Organization of the Study.....	8

CHAPTER TWO	9
LITERATURE REVIEW	9
2.1 Introduction.....	9
2.2 Conceptual Definitions	9
2.2.1 Manpower Planning.....	9
2.2.2 Aviation	9
2.2.3 Aviation Industry	10
2.2.4 Ground Handling Operations.....	10
2.3 Theoretical Literature Review	10
2.3.1 Importance of Manpower Planning	10
2.3.2 General Information Concerning Ground Operation Sectors	11
2.3.3 Challenges in Achieving Effective Delivery Services.....	12
2.3.4 The Effects of Underutilization of Manpower on Performance of Ground Handling Operations	15
2.3.5 The Effects of Lack of Education and Skill of Labour on the Performance of the Ground Handling Operations	16
2.3.6 The Effects of Poor Human Resources (Employees) Scheduling Plan and Control on the Performance of the Ground Handling Operations ...	17
2.3.7 The Effects of Absenteeism of Employee on Performance of Ground Handling Operations in the Aviation Industry in Tanzania	17
2.3.8 Markovian Theory	18
2.3.9 Planning Theory.....	19
2.3.10 David Guest's Theory	19
2.4 Empirical Literature Review.....	20

2.4.1	Empirical Literature Review Worldwide.....	20
2.4.2	Empirical Literature Review in Africa	22
2.4.3	Empirical Literature Review in Tanzania.....	24
2.5	Research Gap	28
2.6	Conceptual Framework.....	29
2.7	Theoretical Framework.....	30
2.7.1	Manpower Planning	30
CHAPTER THREE		33
RESEARCH METHODOLOGY		33
3.1	Introduction.....	33
3.2	Research Design	33
3.3	Research Approach	33
3.4	Area of the Study	34
3.5	Population of the Study.....	34
3.6	Sample Size and Sampling Design	34
3.6.1	Sampling Design.....	34
3.6.2	Sample Size.....	35
3.7	Data Collection Methods	36
3.7.1	Primary Data	36
3.7.2	Secondary Data	37
3.8	Data Collection Tools	37
3.8.1	Questionnaire	37
3.8.2	Key Informant Interviews	38
3.8.3	Documentation.....	38

3.9	Data Reliability and Validity	39
3.9.1	Data Reliability	39
3.9.2	Validity	40
3.10	Data Analysis and Presentation	40
3.11	Ethical Considerations	41
	CHAPTER FOUR.....	42
	RESEARCH FINDINGS AND DISCUSSION.....	42
4.1	Introduction.....	42
4.2	Demographic Profile of respondents	42
4.2.1	Demographic Characteristics of Respondents	42
4.2.2	Age.....	42
4.2.3	Sex and Marital Status	43
4.2.4	Level of Education.....	44
4.2.5	Job Experience.....	44
4.3	The Effects of Underutilization of Human Resources on Ground Handling Operations Performance on the Aviation Industry	44
4.4	Effects of Lack of Trained and Skilled Labour on the Ground Handling Operations Performance in the Aviation Industry	46
4.5	The Effects of Absenteeism of Staff on Ground Handling Operations Performance in the Aviation Industry in Tanzania.	47
4.6	Findings from Interview	48
4.7	Discussion of the Findings.....	49
4.7.1	Effects of Underutilization of Manpower on Ground Handling Operations Performance in the Aviation Industry	49

4.7.2	Effects of Lack of Trained and Skilled Staff and on Ground Handling Operations Performance in the Aviation Industry	50
4.7.3	The Effects of Absenteeism of Staff on Ground Handling Operations Performance in the Aviation Industry in Tanzania	50
4.7.4	The Effects of Poor Human Resources (Employees) Scheduling Plan and Control on Ground Handling Operations Performance in the Aviation Industry in Tanzania	51
CHAPTER FIVE		52
SUMMARY THE MAIN FINDINGS, CONCLUSION AND RECOMMENDATIONS.....		52
5.1	Introduction.....	52
5.2	Summary of the Main Findings	52
5.3	Implication of the Study Finding	53
5.3.1	Implication for Policy Markers.....	53
5.3.2	Implication for the Industry	54
5.3.3	Implication for Academician	54
5.4	Conclusion	55
5.5	Recommendations.....	56
5.6	Limitations of the Study	57
5.7	Areas for Future Research	58
REFERENCES.....		59
APPENDICES		63

LIST OF TABLES

Table 3.1: Sample Size.....	36
Table 3.2: Data Reliability Statistics.....	40
Table 4.1: Respondent's Biographical Data.....	43
Table 4.2: Effects of Underutilization of Human Resources (Manpower) on Ground Handling Operations Performance.....	45
Table 4.3: Effects of Lack of Trained and Skilled Labour on the Ground Handling Operations	46
Table 4.4: The Effects of Absenteeism of Manpower on Ground Handling Operations Performance.....	47

LIST OF FIGURES

Figure 2.1: Ground Handling Framework 13

Figure 2.2: Conceptual Framework 29

LIST OF ABBREVIATIONS

AFP	African Flight Planes
AFS	Africa Flights Services
ANOVA	Analysis of Variance
DOC	Direct Operation Costs
FSF	Flight Safety Foundation
HR	Human Resources
HRM	Human Resource Management
HRP	Human Resource Planning
IT	Information Technology
JNIA	Julius Nyerere International Airport
KII	Key Informant Interview
MHRM	Master of Human Resource
NAS	National Aviation Services
OUT	Open University of Tanzania
SBP	State Bank of Pakistan
SPSS	Software Package for Social Sciences
TAA	Tanzania Airport Authority
TAI	Tanzania Aviation Industry
TCAA	Tanzania Civil Aviation Authority
UDSM	University of Dar es salaam
UK	United Kingdom
URT	United Republic of Tanzania
USD	United State Dollar
VIP	Very Important Personnel

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Modern airports are centers of transportation that service a large number of aircraft and passengers every day. To facilitate this large volume of transportation, airports are subject to many logistical and decision problems that must continuously be solved to make sure each flight and passenger travels safely and efficiently through the airport. When an aircraft lands, a significant number of tasks must be performed by different groups of ground crew, such as fueling, baggage handling and cleaning. These tasks must be complete before the aircraft is able to depart, as well as check-in and security services. These tasks are collectively known as ground handling and are the major source of activity with airports. Clausen et al, (2010).

The aviation industry in Tanzania consists of 368 airports where 58 among them are being managed by Tanzania Airport Authority (TAA) and the remaining airfields are privately owned by mining companies and tour operators (AfDB, 2017). Julius Nyerere International Airport (JNIA) being one of the modern airports in the country with improved main high way, three terminals, full length paved taxiways and many others. It is a center of transportation that services a large number of aircrafts from Q400 (Bombardier) to Boeing 737(Airbus) and passengers every day. For over 2 decades, ground handling operations in Tanzania Airports have been being carried by SWISSPORT Company and due that the services offered were regarded of less standard and most of the time left clients unsatisfied (URT, 2017). In 2015 the Swissport handled a total of 16,534 and 21,402 gross and weighted flights

respectively, which is an increase of 9% and 12% when compared to 15,225 and 19,077 gross and weighted flights handled in 2014. Embarking passengers handled were 1,218,319 as compared to 1,111,156 passengers handled in 2014. This is an increase of 10% when compared to 2014. The company handled 24,874 tons of cargo in 2015 recording an increase of 4% compared to 23,908 tons handled in 2014.(Swissport Annual Report 2015).

Humans are considered as the most crucial, volatile and potentially unpredictable resource, which an organization utilizes. Manpower planning seeks to make the links between strategy, structure and people more explicit. The purpose of manpower planning is to get a better matching between manpower requirement and manpower availability. The concept of manpower planning has been over emphasized in human resource literatures because it determines the effective operations and achievement of any organization. Predeesh and Venugopalan (2011) define the concept as the process of getting right number of employees, with right skills experiences and competence doing the right jobs at the right time at minimum costs. Clausen et al.(2010), pointed out that in order to realize continued growth of airport and airlines, reliable ground operation should be in place. Inefficiency that are posed by aircraft ground handling operations generally leads to delays of aircrafts scheduling and ultimately results to both greater loss in aviation industry investments and high operation costs (Scholz, 2010).

The business environment of airports in Tanzania is becoming increasingly competitive, as both airports and ground handling operators are changing to private ownership. The increasing liberalization of the ground handling market in Tanzania

prompts ground handling operators to increase cost effectiveness and deliver fast, efficient and reliable service. Until end of 2019, Swissport Tanzania Plc and NAS Dar Airco Companies dominated the market, but Celebi Tanzania Aviation and Union National Holding Limited received licenses to operate in Tanzania's ground handling operations in the aviation sector (balancing between the demand and supply of workforce, scheduling and optimization) in an environment where there was only one company running the show in more than 30 years.

1.2 Statement of the Research Problem

The aviation industry is undergoing continuous development as air traffic becomes an increasingly important factor in our society, for both business and leisure. As a result, airports form a pivotal part of the infrastructure and economy of any population center. Tanzania will be one of fastest growing regions in continent in terms of international traffic with an average rate of 6-7 percent compared to the global average of 5.8 percent, and 7.9 percent and 6.9 percent for the Middle East and Asia Pacific respectively. While in Europe and Latin America and North America are projected to record lower international passenger growth of 5.0 percent, 5.8 percent and 4.9 percent respectively.

This trend is expected to continue in coming years due to several factors, notably robust economic growth, demographic boom, increased urbanization and emergence of middle class. Airport plays a vital role in the country's growth process by acceleration convergence of goods and persons. The contribution of air transport far exceeds that of road transport sevenfold. Growth of air transport directly maps into economic growth due to spillover effect through creation of direct and indirectly jobs

in the industry and other auxiliary sector such as tourism and other service sectors. In 2010, The aviation industry in the continent supported about 7 Million jobs including 257,000 direct jobs through the impact of travel and tourism. Forecast indicates that aviation industry in Tanzania is set to grow. Over the next 20 years impliedly jobs creation by the industry is projected at 800,000 both directly and indirectly jobs. (JNIA Journals)

Airports are increasingly liberalizing their ground handling operations. Ground handling operations that have traditionally been subsidized to corporate divisions of the airport or the national airline are now being offered in free competition. In the European Union, the liberalization of the ground handling market by directive 96/67/EC has caused a rise in the number of third-party ground handling companies of more than 80% between 1996 and 2010. This increased competition has caused increased need for effectiveness and cost minimization.

The emergence of low-cost carriers in recent years causes new challenges for ground handling operations. In contrast to traditional carriers, low cost carriers operate with very short ground times to minimize expenditures. This causes a highly constrained working environment for ground handling companies and an increased risk of disruption in case of delays.

In view of new competitors and the growth of the air transport market, airlines try to cut their costs and increase competitiveness. Beneath fuel costs and crew personnel, ground handling activities represent a major cost factor. Handling tasks can be distinguished by planeside (ramp) operations and passenger services. Tasks on the

ramp include baggage handling, aircraft cleaning, refueling, water services, bus transportation, cargo and catering, load planning and control, traffic control, towing and de-icing. Passenger services mainly refer to check-in, boarding, ticketing, help desks, sales reservation offices and back office activities. Beyond these basic tasks, aircraft maintenance and security checks must be considered.

At their base airports, airlines usually accomplish these tasks by their own personnel. Alternatively, airports and ground handling companies offer ground handling services to airlines. With increasing deregulation, international handling companies with worldwide subsidiaries see their market shares growing. Clearly, efficient planning of staff is crucial in controlling costs.

Airports often work on a continuous basis with operations on 24 hours, seven days a week. Workforce demands are subject to high variations at different times of the day. Airlines often use the hub-and-spoke principle, meaning that connecting flights from smaller airports are bundled at larger stations in order to minimize passenger transfer times for long-haul connections. This practice as well as commuter activity of business people result in two, three, or even more pronounced peak times of high workload within each day.

Manual scheduling is a tedious and error-prone task, and it frequently takes planners several hours or even days to prepare staff plans by hand. Processes are difficult to overview by planners, and different resources are tightly coupled. At large airports, it is normally impossible to handle staff without computer support. According to the researcher's knowledge, no study has tried to examine the factors leading to failure in

ground handling operations and performance in its airports. Henceforth this study seeks to investigate and explore the factors that influence the manpower planning of the ground handling organizations at JNIA airport.

1.3 Research Objectives

1.3.1 General Research Objective

This study seeks to examine the effects of manpower planning on ground handling operations in Tanzania aviation industry.

1.3.2 Specific Objectives of the Study

Specifically, the study seeks to:

- (i) To examine the effects of underutilization of manpower of ground handling operations in Tanzania aviation industry.
- (ii) To examine the effects of lack of trained and skilled staff ground handling operations in Tanzania aviation industry.
- (iii) To examine the effects of absenteeism of staff on ground handling operations performance in Tanzania aviation industry.
- (iv) To examine the effect of the Human Resources (employees) scheduling plan and control affecting the ground handling operations in Tanzania aviation industry.

1.4 Research Questions

1.4.1 General Research Question

General research question of this study is; what are the factors influencing manpower planning of ground handling operations in Tanzania aviation industry?

1.4.2 Specific Research Questions

The researcher was guided by the following specific research questions:

- (i) What are the effects of underutilization of manpower in relation to manpower planning affects ground handling operations in Tanzania aviation industry?
- (ii) What are the effects of lack of trained and skilled staff of ground handling operations in Tanzania aviation industry?
- (iii) What are the effects of absenteeism of employees of the ground handling operations affects manpower planning in Tanzania aviation industry?
- (iv) What are the effects of the poor Human resources (employees) scheduling plan and Control affecting the manpower performance of the ground handling operations in Tanzania aviation industry?

1.5 Significance of the Research

The study sought to identify the business environments for manpower allocation and requirements of modern airports that day by day are becoming increasingly competitive, as both airports and their ground handling operations are changing to private ownership. As airports are in competition to attract airline routes, efficient and reliable ground handling operations are imperative for the viability and continued growth of both airports and airlines.

The study explains how the increasing privatization reforms of the ground handling market will prompt ground handling operators to increase cost effectiveness and deliver fast and reliable service through explaining the theories and literatures relevant to the study. The study also demonstrate awareness on the policy actions that the private ground handling operators can undertake towards effective adoption of cost

effective quality ground handling of aircrafts for improved performance and better service delivery and therefore setting a framework towards reminding the air aviation industry decision makers to make policies that will enhance the operations at JNIA and other airports towards attracting and sustaining more airlines; in the processing boosting the tourism industry and economy of the country . Likewise, the study is expected to assists the researcher in completion of the academic requirements for completion of the Master Degree in Human Resources Management (MHRM) of the Open University of Tanzania (OUT).

1.6 Scope of the Study

It is not the interest of this study to discuss the extensive subject of manpower planning, because it is a very wide concept, the focus was only limited to the effect of manpower planning in ground handling operations in Tanzania Aviation Industry (TAI).

1.7 Organization of the Study

This study is organized into five chapters. Chapter one looks at the background to the problem, encompassing the research problem, objectives, research questions, significance, among other issues. Chapter two basically looks at literature review; chapter three covers the methodological approach used by the study. Chapter four looks at the study findings and discussion, while chapter five is looking at conclusions and recommendations.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The literature review based on the examination of factors influencing performance of ground handling operations in Tanzania aviation industry in regard to what others have already written about it. The literature review also helps to answer the research questions, which are posed in the study. The chapter consists of definition of key concepts, theories guiding the study, empirical literature review, research gap and conceptual framework.

2.2 Conceptual Definitions

2.2.1 Manpower Planning

Manpower planning is defined as the process of getting right number of employees, with right skills experiences and competence doing the right jobs at the right time at minimum costs (Predeesh & Venugopalan, 2011). This generally refers to the process of identifying organization human resource needs and planning the coverage of these needs.

2.2.2 Aviation

The term “aviation” comes from the Latin avis meaning "bird". The term aviation was coined in 1863 by French pioneer Guillaume Joseph Gabriel de La Landelle (1812–1886) in "Aviation ou Navigation aérienne sans ballons".

2.2.3 Aviation Industry

The aviation industry is the business sector dedicated to manufacturing and operating all types of aircraft. Air traffic controllers, when they are awake, are concerned with aviation safety (Venugopalan *et al.*, 2011).

2.2.4 Ground Handling Operations

Ground handling is a common term to describe tasks that are performed at or around aircraft while the aircraft is on the ground, or otherwise relating to the aircraft's arrival or departure. This can include technical operations, such as refueling, or more service-oriented work, such as check-in counter manning. Ground staff scheduling is a very complex task. Planning frequently involves several hundred employees, several thousand work tasks per week and multitudes of constraints. Airports often work on a continuous basis with operations on 24 hours, seven days a week. Workforce demands are subject to high variations at different times of the day (Predeesh and Venugopalan, 2011).

2.3 Theoretical Literature Review

2.3.1 Importance of Manpower Planning

The process of manpower planning results into several advantages to sustainability of an organization, Koltnerova *et al.*, (2012) discussed the importance of Manpower planning as it is through it an organization realizes its goals and objectives and it increases organization effectiveness and competitiveness, all these are said to be achieved if and only if these plans have followed the following route: Specifying the planned tasks of an organization on individual units, estimating the total human resource needs, estimating the existing internal human resource, estimating of pure

human resource need, the summary of documents, and lastly development of plans for personnel activities to ensure pure human resource needs.

2.3.2 General Information Concerning Ground Operation Sectors

The ground operations sector has experienced significant changes in the past 10-15 years because of changes in the use of resources in the aviation industry. This includes a reduction in aircraft turnaround times, changes to staffing levels, an increase in the level of outsourcing, and the use of new technologies and equipment. Additionally, newer aircraft require less maintenance so not all airlines have an engineer at each port. Thus, tasks such as receipt and dispatch, which were previously only carried out by engineers, have now become commonly accepted as ground operations functions at any airport. The term ground operations ‘encompasses the non-maintenance tasks carried out whilst an aircraft is on the tarmac before and after a flight. This includes a wide range of workers, for instance aircraft fuelers, baggage handlers/sorters, ramp agents, aircraft cleaners, caterers, customer service staff, load controllers and flight dispatchers. These roles are generally regarded as being semi-skilled, with the obligation of staff training resting on the employer rather than the employee, as occurs with pilots or engineers.

These other sectors of the aviation industry have recognized licensing and/or accreditation systems in place. What this means for ground operations staff is that when an employee moves from one company to another, in most cases, re-training will be required. The Flight Safety Foundation (FSF) estimates that ramp accidents cost major airlines US\$10 billion per annum, while a paper by Vandel (2014) shows there are a higher number of lost workday cases in commercial aviation than occur in

the mining or construction industries. In most industries, suitable training for staff has been identified and recommended as the most effective control in preventing injuries and accidents. Whilst in ground handling there is generally an understanding that an effective training system is a strong contributing factor in ensuring a safe environment for staff, aircraft and passengers, there is often not a clear understanding of what constitutes effective training and how this can be achieved.

2.3.3 Challenges in Achieving Effective Delivery Services

There are a number of challenges that must be overcome by ground handling agents in order to implement an effective services delivery system. One of the common challenges is the complexity and variability of the service offerings required by the different customers of a ground handling agent. For example, a typical ground handler with a certain number of airline customers may provide each customer airline with a different combination of services as described below:

Ground handling services: Ground handling services include all the services an aircraft needs during the period it remains on the ground. Some airlines receive these services from a ground handling services company while others prefer to use their own equipment. Under normal circumstances the company provides ground handling services in the following operational areas: ramp services; passenger services; cargo and mail services; load control, communication and flight operations services; representation and supervision services. Ground activities performed under passenger services category include: Incoming passenger acceptance and guidance to baggage claim areas and terminal exit, lost, damaged and transfer baggage processes of incoming passengers (if any), outgoing passenger acceptance for flight and baggage

processes, safe acceptance of outgoing passengers to the aircraft, Incoming and outgoing very important personel (VIP), unaccompanied children and special care passenger services, special trained personnel for disabled passengers.

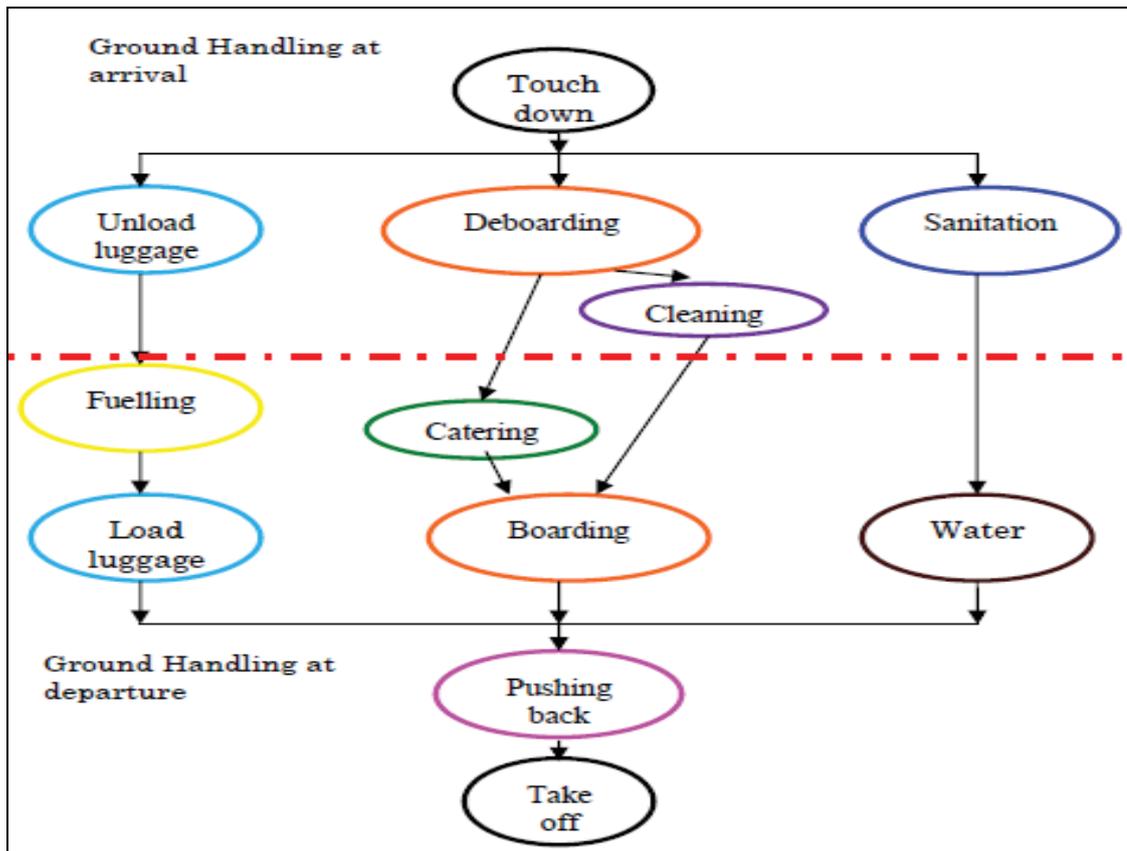


Figure 2.1: Ground Handling Framework

Source: Researcher

Ground activities performed under ramp services category include: ramp services include services that must be done with experienced staff and state of the art technology: meeting and marshaling the aircraft, offloading and loading the aircraft, equipment supply, provision of ground power unit, air condition unit and aircraft push-back tractor services, interior cleaning, provision of toilet and water services to the aircraft, passenger and crew transport between aircraft and passenger terminals, storage of pallets, containers and other unit load devices.

Ground activities performed under cargo and mail services category include: acceptance of export cargo and mail documents, physical control and preparation of export cargo and mail, monitoring cargo and mail for proper loading to the aircraft, custom transactions of export cargo, transfer of incoming cargo to import warehouse and incoming mails to relevant places, detection of disruption of imported cargo and mail if any, and taking necessary actions, completion of custom clearance of the imported cargo and preparing it for delivery to recipients, notification of recipients, transfer cargo services.

Ground activities performed under cargo load control, communications and flight operation services category: load control and communications services, coordination of aircraft servicing units, preparation and distribution of flight documents (customs declaration, loading instruction, load sheet, manifest, weather forecast, flight plan etc.), load control, weight and balance calculations, transmission and reception of all operational messages, notification of all related units, communication and coordination between aircraft and ground services.

Ground activities performed under flight operation services category include: flight permit and airport slot applications, preparation and distribution of flight plan to the cabin crew, coordination with fuel and aircraft catering companies, preparation of weather forecasts and navigation information and distribution to the cabin crew.

Ground activities performed under representation and supervision services category include: making payments and/or issuing guarantees on behalf of the airlines to related institutions such as terminal operators, airport authorities, customs, police, etc. against

all services provided and listed above as per respective contracts, establishing and maintaining contact with local authorities in the name of the airline company, preparing, transmitting and filing reports, statistics, documents, etc. related to flights.

Therefore, strategic manpower planning becomes more important as the company has to ensure its well-being in the industry amidst environmental changes. Base on the resource-based view of the companies, ground handlers should look inward to their resources as the sources of strategies. Resources that are valuable, rare, inimitable, and non-substitutable will lead to competitive advantage.

However, employee attitude, behavior, and work outcome are influenced by manpower planning practice based on social exchange theory and perceived organizational support theory, employee attitude and behavior can be predicted as a result of such practices, as they respond in return to the company with affective commitment and felt obligation in performing work. The study will unveil the challenges of manpower planning in aviation industry in Tanzania: the case study of ground-handling services at Julius Nyerere International Airport (JNIA).

2.3.4 The Effects of Underutilization of Manpower on Performance of Ground Handling Operations

The biggest obstacle in case of manpower planning is the fact that the industries in general are not making optimum use of their manpower and once manpower planning begins, it encounters heavy odds in stepping up the utilization. Having adequate manpower on hand is an important component in the success of the business. Manpower shortage can result in production shortfalls or the inability to meet the

needs of your customers. Too large of a staff can leave you with unwanted expenses due to bloated payroll. The number of factors can show the relationship between underutilization of resource of manpower and ground handling operations as follows:

Organisation structure: The nature of your organisational structure will help determine your manpower needs. Let say you organise by department, you may decide that you need one person to man each department.

Expansion: When you expand the business, it requires to do need assessment especially in manpower.

Business condition: The economic factors and general business conditions will help determine your manpower needs as well.

2.3.5 The Effects of Lack of Education and Skill of Labour on the Performance of the Ground Handling Operations

The extent of illiteracy and the slow pace of development of the skilled categories account for low productivity in employees. Low productivity has implications for ground handling operations. In Tanzania, the aviation schools and colleges are few and the knowledge of the existence of these to the majority is limited henceforth the number of people with the knowledge of Aviation is fewer compared to other industry like IT and the like.

This led to the lack of the skilled labour to most of ground handlers who resort to hire any that available and hence invest heavily on the trainings. This affects the operations as sometimes the demand is higher than the supply that is at the public at large.

2.3.6 The Effects of Poor Human Resources (Employees) Scheduling Plan and Control on the Performance of the Ground Handling Operations

Any increase in manpower is considered at the top level of management. On the basis of manpower plans, personnel budgets are prepared. These act as control mechanisms to keep the manpower under certain broadly defined limits. Some organizations do not have sufficient records and information on manpower. Several of those who have them do not have a proper retrieval system. There are complications in resolving the issues in design, definition and creation of computerized personnel information system for effective manpower planning and utilization. Even the existing technologies in this respect are not optimally used.

2.3.7 The Effects of Absenteeism of Employee on Performance of Ground Handling Operations in the Aviation Industry in Tanzania

Absenteeism is a pattern or habit of an employee missing work, often for no good reason. A high degree of absenteeism and turnover can cause serious problems for businesses. Absenteeism hurts productivity and costs money. Nation Aviation Services (NAS), for example, is currently suffering a high degree of absenteeism in its load control department. Employees are often absent. The load control employees must operate complex systems that requires training, so temp employees do not have the requisite skills to pick up the slack for absent load controllers. Thus, production decreases with each absent employee. This costs the company money.

Moreover, most of the absences are paid leave, which means even though production is down, labor costs remain the same. Although NAS suspects that many of these employees are abusing their sick leave, it is very hard to prove.

Turnover also affects the manpower planning in ground handling companies. Not only can turnover cause productivity problems, but it results in the loss of human resources that may not be easily replaced. For example, some of the company's best and most innovative key employees have voluntarily separated from service to pursue other opportunities. Loss of these employees not only hurts productivity but weakens the company strategically manpower planning because of the specialized skills and creativity that the employees brought with them. Even if the company can find the same quality of workers, the search, training and time involved costs and time lost.

2.3.8 Markovian Theory

A Markov theory is named after a Russian Mathematician Andrey Markov. Markovian manpower planning invariably uses information and statistical methods to show probable outcomes of trends and policies in personnel administration. It is the mechanism for examining potential labour problems and assessing strengths and weaknesses of possible solutions. It works with probabilities, continuous feedback and adjustments on a given human resources management approach. The Markovian method of manpower planning can foretell the future. The traditional approach to manpower planning leans heavily on qualitative approach (which, focuses on it focuses on individual concerns of the employees, such as their training, development, and creativity) to policy development that appears to be redolent of subjectivity. The Markovian model aims to predict the evolution of manpower system and/or control it by setting the organization's human resources policies. (e. g. recruitment, promotion, training.) The analytical Markov approach allows identifying interesting characteristics of manpower systems, which influence its future dynamics.

2.3.9 Planning Theory

One of the theories of Human resources management is known as the Planning Theory that is a, “Generally called procedural because it generally concerns itself with the process through which planning occurs and whether or not that process is valid” (Theories of Planning, 2013). Planning for human resource needs requires the matching of human resource availability and the human resource requirement. In this theory, human resource availability is assessed with the number of human resources who had resigned and hired.

A quantitative approach is analyzed whereby the approach is considered more local to an organization, and it is about top-level management preparing a draft for human resource planning. The Human Resource Management Information System and the human resources inventory levels are analyzed, and on the basis of that information, the future demand for manpower is forecasted, with the help of quantitative tools. This approach focuses on forecasting surpluses and shortages in human resources and is done mainly by top management.

2.3.10 David Guest's Theory

David Guest's theory stresses the distinction between compliance and commitment. Compliance concerns the basic “contractual” relations between employers and employees. In terms of planning, this is a simple manpower approach that seeks to fulfill the terms of the contract only. There is no stress on development plans. Yet with commitment, it is clear that planning is based around a struggle to build the firm around its employees and their specific talents. Most HR planning/management models revolve around this concept of worker development.

2.4 Empirical Literature Review

Some of the available relevant literature has been discussed below to have an insight of the previous work done on the subject.

2.4.1 Empirical Literature Review Worldwide

Clarke (2016) studied the commitment and manpower planning in United Kingdom (UK) based health care units and found that commitment may play a significant role specifically with performance outcomes. The researcher found that statistically both affective and normative forms of commitment have significant impact on manpower planning. The finding that continuance commitment was negatively related to network performance suggests that the relationship between commitment and performance within networks is certainly not straightforward.

In the study Clarke validate the reliability of data by comparing the results of similar respondents at different times. Provide that the same opinion poll or interview provides the same results to same respondents, in different times was considered as the accurate end result. This same Cronbach style of reliability of data is used in the study.

Nawab *et al* (2011) investigate the impact of manpower planning on job satisfaction among Pakistani university teachers. One of the study questions was regarding the association of manpower planning which shows a significantly positive association with each other. The finding shows that affective commitment was minimum but normative and continuous commitment was strongly related with the financial compensation, but non-financial compensation has a strong influence on affective

commitment on the employees. The literature suggested that organization can increase the degree of employees' organizational commitment by enhancing job satisfaction with compensation and work conditions.

On the other hand, Rashid *et al.*, (2013) in “*The influence of corporate culture and organizational commitment on financial performance in Malaysian companies*” examines the impact of manpower planning on performance of 202 managers in Malaysian companies and their research findings suggested that corporate culture and organizational commitment are interrelated, and both have far reaching impacts on the performance. They reveal that there is some definite relationship exists between manpower planning and employee's job performance.

The study underscored that the corporate culture of giving incentives to the employees who has impeccable attendance reduced the number of absenteeism employees clocked and had a positive effect on the manpower planning. On a same note this study shows that absenteeism have a negative impact on manpower planning and hinders the ground handler's organization reaching their efficiency and performance.

Chen *et al* (2016) studied the relationship of the manpower planning and job performance. Their research findings indicated that there are positive relationships between manpower planning and job performance. The study suggested that when an employee is rostered correctly such employee will have excellent job performance than those who are wrongly manned. This finding is captured in this study as well, underutilized employees affect not only their performance but organization performance as a whole.

Lee *et al* (2013) studied the relationship between manpower planning and job attitude in the tourism industry and its effect on service quality. A cross-sectional research conducted from a sample of 450 responded in Taipei. Their research findings established that biographical characteristics of the employees in terms of age, gender, job level, education level, and job status have an effect on job attitude and the employee commitment to work.

The study established that in many cases, employees who have stayed longer in the job develop a more negative attitude towards their jobs, which affects their commitment to their work; older employees also tend to assume a more negative job attitude because of many years of working in the same organization at the same level. The study concluded that motivation is the key to employees' success in the workplace. The more employees motivated, the more committed they become to the organization.

2.4.2 Empirical Literature Review in Africa

In examining the effects of manpower planning and development in Lagos state, the study by Igbokwe-Ibeto *et al* (2015) revealed that the nature of manpower planning and development plays a pivotal role on the Lagos state civil performance. The study also shows that manpower planning and development has a positive effect and helps Lagos to attain its state objective. The researchers recommended then that in order to achieve better performance, the manpower planning strategy should be improved manpower development curriculum should regularly be updated to meet global best practices. This study added insights to the current study because the main purpose of this study is to examine the effects of manpower planning in an aviation sector.

Also the conclusion Igbokwe's study is in correspondence with this study that manpower planning can be affected by time span to a certain extent, the longer the period covered the higher the tendency for variance to exist between forecast and actual situation and vice-versa.

Manpower planning plays a pivotal role in development of an organisation/firm. According to Gareth (2006) manpower planning plays a role as maintenance and improvement of the ability of the organisation to achieve its objective. Cole (2013) posits that manpower planning is a systematic approach to the acquisition, use and development of an organisation. These studies links manpower planning with business or organisation objective. Therefore, manpower planning is an integral part of organisation activities through which organisation performance depends on. This study accords same Cole and Gareth position in the significance of the manpower planning to Aviation industry on ground handling organizations.

Lumley *et al* (2010) explored the job satisfaction and organizational commitment of employees in the information technology environment. The objective of the study was to explore the relationship between employees' job satisfaction and organizational commitment a cross-sectional survey was conducted on a convenience sample of 86 employees at four information technology companies in South Africa. Whereas in some cases it has been also seen that job dissatisfaction create mental health disorder which includes, anxiety, alcohol, depression, abuse and many other serious kind on health diseases which ultimately affect the performance of employee. Absence of job satisfaction and presence of other opportunities in the organization ultimately leads to decrease in job performance and increase in turnover and absenteeism.

Relevant nature of work means the appointment of the right person, at right place and at right time. Employees prefer to work in their specialized fields, which give them opportunity to use their skills and abilities to get positive feedback from their team leader. Most of the organizations assign those tasks to their employees who are not relevant to their fields or interests or beyond their capacity, and this situation creates dissatisfaction among employees and the feeling of being underutilized but employees feel comfortable and perform much better assigned task if he work in his specialized field. Thus, the ideas by Lumley (2010) have paved the way to this study by providing insights about the effect of absenteeism and lack of skills in relationship to being manned according to the employee's knowledge. These variables are exhausted in this study.

Osa *et al* (2014) studied the impact of manpower planning on employee productivity in brewery company in Nigeria. They found that presence of organizational commitment to employees can be used to gain employees support for rganization and in turn maximize the benefits it receive from their employee with greater productivity and individual performance seems to increase in the same proportions. The study concluded that organizational commitment has significant impact on employee productivity and as such improves employee organizational performance and effectiveness.

2.4.3 Empirical Literature Review in Tanzania

Moyo, (2015) investigated the contribution of Human Resources Planning in public institution 's performance in Mlele District council. Using questionnaires and documentary review, a sample of 50 employees was assessed. Moyo used both

primary and secondary data; same method is used in this study. Random sampling technique was used for both Moyo and as well as in this study for selecting the study sample. This method is referred to as simple random samplings as there are no complexities are involved. All you need is a relatively small, clearly defined population to use this method. Its advantages are; firstly, the sample yields research data that can be generalized to a large population. Secondly it permits the application of inferential statistics to the data and provides equal opportunity of selection for each element of the population. Thirdly it provides an equal chance of being selected as a member of the sample size.

One of his research questions was what are the effects of poor human resource planning in public organization? Which coincide with this study variable (to examine the effect of the Human Resources (employees) scheduling plan and control affecting the ground handling operations in Tanzania aviation industry.) Results showed that poor planning of HR has an impact on organization performance as the response from the respondents showed inadequate priority for HRP; there exist a lot of problems during process of HRP as insufficient top management support, insufficient funds, as well as shortage of expertise. This is in line with the current study, which strives to assess the effect of manpower planning in ground handling services in Tanzania.

As part of HR planning, human resource succession is also important for the development of the organisation. In assessing the factors affecting human resource succession planning in the Tanzania public and private organizations, Mwemezi, (2011) revealed that human resource succession planning played an important role for the organization development. Hence, all organizations should understand the

paramount role played by human resource succession planning for their survival. The study also suggested some strategies of enhancing human resources succession plans including attracting and recruiting potential employees, Effective leadership and management development and improving budget was among the strategies identified in enhancing effective human resource succession planning in the surveyed organizations. Thus, the ideas by Mwemezi (2011) have paved the way to this study by providing insights about the importance of human resource succession planning.

Issa (2017) explored the human resource development function under the Public Sector Reform Program in Tanzania. He observed that the human resource development function was one of the important subjects of attention in the Public Sector Reform Program and this encompasses the development of the capacity to accept, adopt and implement specific elements of the program. His work also involved efforts to enhance and develop requisite abilities and aptitudes in terms of skills, knowledge, attitudes, and behaviors.

In addition, it entailed the enhancement of individual abilities of staff as well as introduction and improvement of systems and process. It demonstrated the synergy between the different human resource tools as tools and processes. It also shows how Competency Frameworks as practical tools to guide HR development had been given a pivotal position in order to provide a mechanism through which other HR development processes can be appropriately implemented. Furthermore, it is argued that the best way to develop staff in the Public Service is to adopt career sensitive system for HR development supported by a merit-based recruitment and supporting planning for succession. Nonetheless, the importance of on-job training is

underscored, and attention is drawn to the need to give it the recognition it rightly deserves.

Ahmad *et al* (2014) investigates the impact of manpower planning and Employee Performance on Employee Satisfaction. The study was conducted on 10 banking Sector in Tanzania that covers 110 employees. Correlation coefficient, Regression analysis and “ANOVA were tested for the data analysis. Results showed Positive relationship between Organizational commitment and employee satisfaction and similarly Employee Performance has Positive relationship with employee satisfaction.

On the other hand, Muhoho, (2014) on his study which was about challenges facing human resources succession planning in Tanzania's work organizations: The case of public and private work organisation based in Dar es salaam Region. Muhoho used both qualitative and quantitative approaches during data analysis. Statistical Package for Social Sciences (SPSS) and excel were used in data analysis and processing. The same data analysis method is used in this study. On data presentation Muhoho researched respondents' characteristic include sex, age, marital status, and the education level and working experience of each respondents in their respective organizations, the same classifications is used in this study.

One of his research questions was to find whether there is sufficient talent in pipeline and the effect of the same. On his study Talent of the employees was also considered in assessing factors influencing human resources succession planning in Tanzania work organizations. The respondents were asked to show their responses on the influence of sufficient talent pipeline in the surveyed organizations. The study

findings indicate that 19 (31.7%) of the respondents showed that sufficient talent pipeline in the organization surveyed very strongly influenced human resource succession planning. 19 (31.7%) of the respondents showed that sufficient talent pipeline in the surveyed organizations strongly influenced human resource succession planning in the company. 14 (23.3%) of the respondents indicated that sufficient talent pipeline in the organizations had a weak influence on human resource succession planning in the selected organizations. From the above findings, the study confirms that sufficient talent pipeline in the organization had a strong influence on the organizational human resources succession plan. This finding tally with this study that lack of skilled and trained labour has impact on the organization in reaching its objective and its efficiency.

The study recommended that human resource succession planning played an important role for the organization development and therefore, driven by top management commitment and consistent purposive continuous training programs, attracting and recruiting potentially capable employees, Effective strategic leadership, management development and improving budget were among the strategies identified to be suitable for enhancing effective human resource succession planning in the surveyed organizations. The same point was noted that manpower planning plays a vital role for the organization achievement of goals and its efficient and that management can tackle it at policy, operating and planning level.

2.5 Research Gap

By considering the above reviewed empirical literature it's evident that a good number of similar researches has been done, but there are a number of gaps left ranging from

geographical to time as well as nature of the organization studied. Khan et al (2010) conducted a research on the impact of manpower planning on employee job performance on sector of oil and gas in Kuwait. Despite the study relevance the research conducted in Kuwait where geographical attributes, political and socio culture values differ from Tanzania. (Chen *et al.*, 2016) studied the relationship of the organizational commitment, communication and job performance.

Therefore; their findings cannot be in favor of the Tanzania environment. Despite the fact that a number of research have been done to explore the manpower challenges in relation to work performance, most of them were carried in other countries particularly Asian countries. Few studies have been done in African countries including Tanzania. This study will fill the existing gap left by previous literature specifically on manpower planning and its impact to ground handling in aviation industry in Tanzania.

2.6 Conceptual Framework

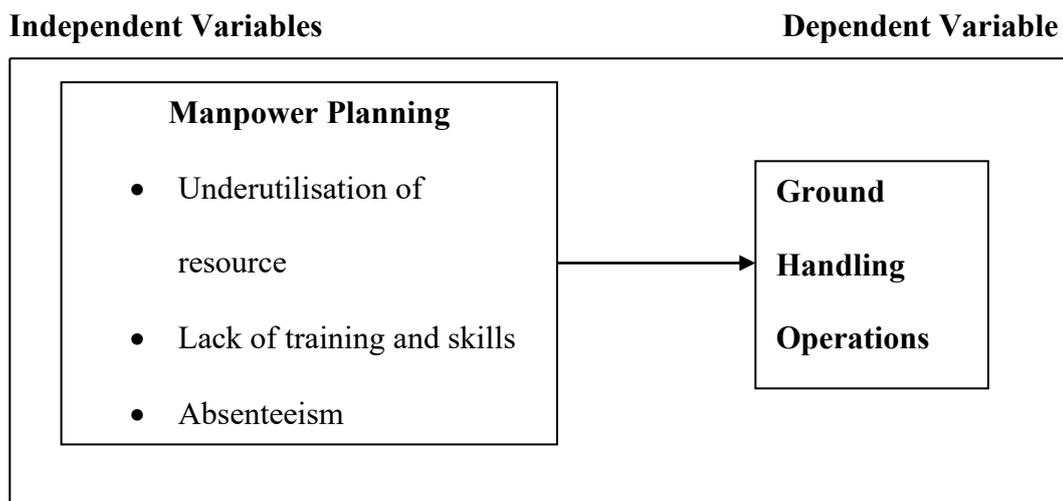


Figure 2.2: Conceptual Framework

Source: Researcher

2.7 Theoretical Framework

2.7.1 Manpower Planning

(i) Underutilization of Resources

Today most large airlines operate using a hub and spoke strategy. At hub airports the hub carrier attempts to optimize its flight schedule to minimize passenger transfer times for connecting flights. The result is a high number of flight arrivals and departures during the peak periods but only a few movements in off-peak periods. This imbalance means that infrastructure and personnel are used inefficiently.

(ii) Lack of Trained and skilled Labour

Airlines are under considerable pressure to consistently achieve on-time performance, while minimizing operational costs. It is estimated that for a large airline adding just five minutes to aircraft ground time can cost the airline up to \$35 million (USD) annually (John, 2017). A deciding factor in meeting on-time performance goals is the efficiency of the employees for ground handling operations. The reality is airlines and ground handlers face major challenges relating to ground handling. From the inefficiencies by the employees working for ground handlers, suboptimal airport designs and a lack of standardized procedures, to unexpected, costly aircraft ground damage and ineffective resource management, it is clear that ground handling requires better solutions.

It is said that in the next 5 years, airlines will have to add 250 flights movements a day with inauguration of the Terminal III. By 2020, ground handlers will need 500 new technical key employees to maintain these flights movements increasing by the day. Between 2005 and 2015, 23% of the Swissport traffic controller's population is

eligible for retirement. Simply stated, the demand for aviation professionals will exceed supply. Factors include: retirements in the current generation of aviation professionals, aviation professions not attractive enough to potential candidates, competition with other industry sectors for skilled employees, training capacity insufficient to meet demand, accessibility to affordable training, lack of harmonization of competencies in some aviation disciplines, and little awareness by the “next generation” of types of aviation professions available.

Solutions must be globally-harmonized in nature and include human resource planning tools, accredited training and educational programmes adapted to the next generation, and wide-ranging cooperation among concerned stakeholders.

(iii) Absenteeism

Some of the most striking findings during this research were the degree of absenteeism for ground staff workers. These employees work long odd hours; physical work and lack of rest were the factors cited most for contributing to fatigue. Henceforth logging absenteeism for reasons of being sick or for no reasons at all. Among air traffic service workers, mental work was the most significant cause of fatigue hence most employees call sick or miss work. Working under constant pressure increased progressively between 2000 and 2017 due to introductions of new standards globally that all ground handlers needs to adhere to caused ground staff workers to become emotionally and physically drained. Significant associations were observed between constant pressure due to heavy workloads and ‘burnout’ (feeling completely used up) among ground staff. A majority of air traffic service workers reported having to work very fast and feeling used up at the end of the workday. All

these cause a high degree of absenteeism henceforth making a daily manpower planning a challenge.

(v) Human Resources scheduling (employees) Plan and Control

The planning of airport ground staff gives rise to a number of challenging optimization problems. Ground handling workloads are naturally represented as work tasks, e.g. for baggage unloading or passenger check-in. These workloads must be covered by appropriate employees. Staff scheduling is usually carried out in several stages: In demand planning, workloads are aggregated and analysed, in shift planning, appropriate shift duties are generated, and rostering consists in generating lines of duty for the workers. These phases are strongly interrelated, and different optimization problems have to be solved at each stage. If at any stage one criterion is missed the effect goes straight to the quality of services offered. And if information on flights as well as passenger and load figures is sufficiently exact, the ground handlers will be interested in directly covering individual work tasks hence tackling the man power control. Furthermore, shift scheduling and rostering approaches have regularly taken special assumptions or investigated simplified problems, limiting their practical applicability.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter gives a description of how the study was conducted and it describes the research design, the area of the study, study population, the sample size and sampling procedures used the sources of data and the data collection tools or instruments. It also addresses issues of validity and reliability of the instruments of data being used data analysis and the ethics adhered to by the researcher.

3.2 Research Design

According to Aaker (2002) a research design is a detailed blue print used to guide a research study towards its objectives. A research design is a detailed plan of work to be done to achieve the research objectives (Adam and Kamuzora, 2008). A research design according to Kothari, (2007) is taken to mean a blue print for the collections, measurement and analysis of data.

The research design used in this study is the exploratory research design and it is because the researcher explored and examined the effects of manpower planning on ground operational efficiency in Tanzania Aviation Industry.

3.3 Research Approach

The researcher employed mixed method i.e. quantitative and qualitative method in this study. Krueger (2010) tried to highlight the differences between qualitative and quantitative approaches by stating that while qualitative approaches concentrate on

words and observations to express reality and attempts to describe people in natural situations; the quantitative approach grows out of strong academic tradition that places considerable trust in numbers that represent opinions or concepts. The two approaches were suitable in this study as it assesses the effect of manpower planning in ground handling operations in Tanzania Aviation Industry.

3.4 Area of the Study

The study area reflects both the geographical study area and the field of academic discipline. Academically, the study lies within the field of manpower planning, governance and leadership justifying the fact that the study was dealing with unveiling the manpower planning challenges being faced by the ground handling agents/companies. The location of the study was JNIA in Dar es salaam where key stakeholders in the Aviation Industry are found. Availability of sufficient data for the study is the justification of selecting the area.

3.5 Population of the Study

A study population refers to the totality of all respondents, items or groups from which data is to be collected or items under investigation (Adam and Kamuzora, 2008). For this study, population of the study was 78 staff working in ground handling companies at JNIA.

3.6 Sample Size and Sampling Design

3.6.1 Sampling Design

In the course of the study, the researcher used both simple random sampling and the non-probability sampling (purposive sampling) in the sampling process to obtain

information or the relevant data from the study population (Adam and Kamuzora, 2008). Simple random sampling was used to select fifty nine (59) staffs of grounding operation in order each one to have equal chance of being selected. Purposive sampling was used to select people for special purpose. This is justified by the fact that this type of sampling does not provide any basis for estimating on the probability that each item or entity in the study population has a chance of being included in the sample size. It is done by judgment of the researcher depending the reason for selection.

3.6.2 Sample Size

Sample size is specific number of people to be included into the study as key information (Kothari 2007). The target population for this study was 78 staff at JNIA from which a sample size of 65 respondents was drawn. Given the total number of 78 populations, the researcher used Yamane's (1967) formula for sample size determination to find a suitable sample size for the study with 95 per cent confidences level (95%). The formula is gives as follows;

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

Where n = sample size

N = Population of the study

e = Sampling error (in this case 5percent)

$$n = 78 / (1 + 78 \times 0.05^2) = 65$$

The sample size was larger in order to give a confidence interval of desires width and as such size of the sample must be chosen by some logical process before sample is

taken from the universe (Kothari 2007). The sampling unit was managers, heads of departments and subordinate staff.

Table 3.1: Sample Size

Sampling frame	Total Number	Sample size (N)	Sampling Techniques	Data collection tools
Ground handling companies staff	60	59	Random	Questionnaire
Tanzania Airport Authority (TAA) staff	6	2	Purposive	Interview
Tanzania Civil Authority (TCAA) staff	6	2	Purposive	Interview
Julius Nyerere International Airport (JNIA) staff	6	2	Purposive	Interview
Total	78	65		

Source: Researcher

3.7 Data Collection Methods

The researcher used both primary and secondary data collection methods in order to counterbalance shortcomings from each technique (Saunders et al., 2012). The aim was to use multiple methods in collecting data (triangulation) so as to ensure validity of data because one method complemented the other (Saunders et al., 2012).

3.7.1 Primary Data

Primary data refers to the information collected afresh and for the first time and thus happen to be original in character. They are named primary because they are unsullied and have not been manipulated by any other person (Kothari, 2007). The researcher collected data from staff from ground handling companies at JNIA. Moreover, the researcher collected primary data from managers and head of departments of Tanzania

Airport Authority (TAA), Tanzania Civil Authority (TCAA) and Julius Nyerere International Airport (JNIA)

3.7.2 Secondary Data

Secondary sources contained data, which have been collected and compiled for several purposes. It contained some of the data collected and compiled by organizations and may include details on the payroll, income statement and copies of letters and minutes of meetings, newspapers, journals and textbooks (Saunders et al, 2012). In this study the researcher collected secondary data from files, company reports of JNIA (2016 and 2017), books, journals and where necessary, internet.

3.8 Data Collection Tools

The researcher used three types of data collection tools

3.8.1 Questionnaire

Questionnaire refers to questions printed or typed in a definite order on a form or set of forms, the respondents have to answer the questions on their own (Kothari, 2007). The researcher employed self-administered semi-structured questionnaire with open ended questions. Self administered questionnaires were distributed to fifty nine (59) respondents (Ground handling companies staff) who filled them and the researcher administered them. This study employed semi structured questionnaire with open ended questions and some with close ended questions. The researcher administered filling of the questionnaires. Questionnaires were distributed to key stakeholders in the Aviation Industry. Fifty nine (59) questionnaires were distributed to informants (Ground handling companies staff) from among the following companies; Swissport,

EQUITY, Africa Flight Services (AFS), National Aviation Services (NAS-DAR AIRCO), selected list of Airlines; staff from Tanzania Airport Authority (TAA), Tanzania Civil Aviation Authority (TCAA) and Julius Nyerere International Airport (JNIA). Only 57 questionnaires were collected. Two questionnaires were not responded.

3.8.2 Key Informant Interviews (KIIs)

Interview is a set of questions administered through oral or verbal communication between the researcher and the interviewee respondent (Kothari, 2007). In this study, the researcher employed semi-structured interviews to collect data from the six (6) respondents (branch managers) and heads of departments of Tanzania Airport Authority (TAA), Tanzania Civil Authority (TCAA) and Julius Nyerere International Airport (JNIA). For simplicity, the researcher prepared interview schedule and asked questions on the same order to each participant. Through this method six (6) respondents - management staffs from the sample were interviewed.

3.8.3 Documentation

Documentation is one of the techniques, which are used to obtain various information from various literature including books, journals, research papers and other documentary source relating to a certain field of study. Normally documentation helps to gather qualitative data and measure the consistency of information obtained through other techniques (Kothari, 2007). In this study the researcher used reports of employees, human resource inventory files, department reports present at the company's headquarters. The researcher also employed other documents from

libraries of Open University of Tanzania (OUT), UDSM library and other relevant materials from internet that had relevant information to the study.

3.9 Data Reliability and Validity

Reliability and validity tests were employed to test the research instruments.

3.9.1 Data Reliability

Reliability refers to the consistence, stability, or dependability of the data. The reliability of an instrument is increased by identifying the precise data needed and repeated use of the instrument in field testing (Kothari, 2007). In order to ascertain reliability of this study a pilot study was conducted to some of the staff of ground handling companies. In order to ascertain reliability of the study, a pilot study was conducted whereby questionnaires were distributed to 20 respondents in order to identify questions that might be unclear or ambiguous to them.

The pilot study also helped the researcher to identify any non-verbal behaviour of respondents that could have possibly shown discomfort or embarrassment about the content or wording. The questions that gave ambiguous answers were revised and formatted again so that they gave reliable answers during the final process of data collection.

A reliable measuring instrument is one which gives researcher the same measurements when they repeatedly measure the same unchanged objects or events, Cronbach's alpha is a statistic that measures the degree of internal consistency among items on a scale.

Table 3.2: Data Reliability Statistics

Reliability Statistics	
Cronbach's Alpha	N of Items
.960	20

The result of Cronbach's alpha is .960, which is known as excellent one for processing the data for further statistical tests.

3.9.2 Validity

Validity refers to the extent to which a measurement does what it is supposed to do (Kothari, 2007). If a measurement is valid, it is also reliable but if is reliable, it may or may not be valid. In this study data was checked for its accuracy to make sure that they gave valid results. To make the data collection instruments, which in this case were questionnaires valid and worth, twenty questionnaires were distributed to five respondents. The pre-test aimed at testing understandability of the questions presented in the questionnaires. As regards external validity the researcher assumed and believed that each respondent chosen had rich information. The researcher also explained the purpose of the exercise.

3.10 Data Analysis and Presentation

Data were collected, summarized and analyzed using Ms Excel (2007) and Software Package for Social Scientist (SPSS) version 19. The research findings were organized and presented in form of words and numbers by using frequency tables and simple percentage method. During the data collection, the researcher was ensuring strict adherence to the high quality from the field by reviewing each survey for

completeness and consistence at each data collection site before leaving the site. Data was verified to eliminate data entry errors and entered SPSS. The data entry program was also having control checks to ensure proper skips and logical values. The qualitative data is examined basing on the themes; to ensure that information is well intertwined for a better analysis and interpretation.

3.11 Ethical Considerations

For ethical requirements in the conduct of the study respondents were duly informed of the fact that the study was for academic purpose and that they were under no compulsion to respond to the questionnaire. The respondents were asked to participate voluntarily whilst assuring them of anonymity and confidentiality on the information given. In order to avoid plagiarism, all sources of information were duly acknowledged.

CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSION

4.1 Introduction

This chapter presents findings of the study and interpretations basing on the research objectives, which focused on the factors influencing performance of ground handling operations in the aviation industry. The research objectives were: to examine the effects of underutilization of manpower on performance of ground handling operations in Tanzania; to examine the effects of lack of trained and skilled staff on performance of ground handling operations in Tanzania; to examine the effects absenteeism of staff on ground handling operations performance in Tanzania and to determine the challenges facing performance of ground handling operations in Tanzania aviation industry.

4.2 Demographic Profile of respondents

Before examining the factors influencing the performance of handling operations, the researcher wanted to know the demographic characteristics of respondents.

4.2.1 Demographic Characteristics of Respondents

Among fifty nine (59) questionnaires distributed to respondents only fifty seven (57) were received which is (96.6%) of the respondents in the sample of the study.

Table 4.1 indicates the demographic characteristics of the respondents.

4.2.2 Age

The study found that most (53.8%) of the respondents were belonging in the age group of 20-30 years, followed by those (33%) who are in the age group of 31-40

years (Table 4.1). A few of the respondents (15.4%) belongs to the age group of 41-50 years. The minimum and maximum age of respondents was 20 years and 50 years. Participants had the average age of 30years.

Table 4.1: Respondent’s Biographical Data (N=57)

Description	Frequency (N)	Percentage (%)
Gender		
Male	25	44.6
Female	32	55.4
	57	100
Age		
Below 20 years	2	3.0
20-30	30	53.8
31-40	15	26.3
41-50	9	15.4
51-60	1	1.5
Above 60 years	0	0
	57	100
Academic Qualification		
“O” level certificate	5	9.2
‘A’ level certificate	4	6.2
Diploma education	20	35.4
Bachelor Degree	25	44.6
Masters degree	3	4.6
	57	100
Marital Status		
Single	27	47.6
Married	22	38.5
Divorced/Divorcee	4	6.2
Widow/Widower	4	7.7
	57	100
Job Experience		
Less than 4 years	18	30.8
5-10 years	27	47.6
11-15 years	8	15.4
Above 15 years	4	6.2
	57	100

Source: Field data

4.2.3 Sex and Marital Status

The distribution of respondents based on sex show that majority of the respondents were females (55.4%). Only 44.6% of the respondents were males. On the other hand,

singled respondents constituted the majority (47.6%) of survey participants, followed by respondents who are married (38.5%) as shown in Table 4.1. Other marital statuses composing widows and divorce constituted only 13.9% of the survey participants.

4.2.4 Level of Education

There was a variation of level of education among the respondents as shown in Table 4.1. The study revealed that most of the respondents had bachelor degree (44.6%). Other respondents had diploma level of education (35.4%) while others have 15.4 (O level and A level). However, none of the respondents identified to be possessing non-formal education since all of the survey participants had attended school.

4.2.5 Job Experience

The survey of job experience revealed that majority (47.6%) of the respondents worked in Julius Nyerere International Airport (JNIA) for 5 to 10years (Table 4.1). On the other hand, 30.8% of employees spent less than 4 years working at Julius Nyerere International Airport (JNIA) and the rest (6.2%) of employees had more than 15 years job experience. The minimum years' job experience was 1 year and the maximum years' job experience was 18 years. The average years of job experience of employees who participated in the survey was 12 years.

4.3 The Effects of Underutilization of Human Resources on Ground Handling Operations Performance on the Aviation Industry

In this objective, the impacts of underutilization of human resource on ground the performance of the ground handling operations were asked. In this case, all respondents (N=57) participated in providing responses. Generally, relationship between underutilization of hr resource and ground handling operations were asked

and factors such as such as poor management, business condition, organization structure and expansion were asked by the researcher. The findings are indicated in the Table 4.2.

Table 4.2: Effects of Underutilization of Human Resources (Manpower) on Ground Handling Operations Performance

Effects	Strongly disagreed	Agreed	Undecideds	Agreed	Strongly agreed
To the employees					
Lack of consistency.	10 (17.5%)	7 (12.2%)	4(7%)	28(49.1%)	8 (14%)
Low productivity.	15(43.8%)	7(0.19%)	3(8.7%)	18(17.5%)	14(10.5%)
Feeling of not being valued	7(0.19%)	15(43.8%)	3(8.7%)	18(17.5%)	14(10.5%)
Reduces creativity.	7(12.2%)	9(15.7%)	5(8.7%)	24(42.1%)	12(21.0%)
Enhances boredom.	6(10.5%)	10(17.5%)	5(8.7%)	25(43.8%)	11(0.19%)
To the employer					
High turnover.	8 (14%)	7 (12.2%)	4(7%)	28(49.1%)	10 (17.5%)
Unhappy employee.	4 (7%)	9 (15.7%)	4(7%)	30(52.6%)	10(17.5%)
Low productivity	5 (8.7%)	6(10.5%)	2(3.5%)	31(54.3%)	13(22.8%)

Source: Field data

From the above findings of the Table 4.2, most of respondents strongly agreed and agreed that underutilization of manpower causes lack of consistency to the employees, creates low productivity as most of the respondents agreed, creates feeling of not being valued by percentage shown, reduces creativity and enhances boredom. There are also effects to employer as indicated, causes higher turnover shown by percentage of respondents who agreed and strongly agreed and brings unhappy employees and lastly causes low production.

4.4 Effects of Lack of Trained and Skilled Labour on the Ground Handling Operations Performance in the Aviation Industry

This objective intended to identify the effects of lack of educated and skilled labour on the ground handling operations, Questions were asked on the respondent of the study to point out the effects of lack of trained and skilled staff on ground work operations.

Table 4.3: Effects of Lack of Trained and Skilled Labour on the Ground Handling Operations

ITEM/ISSUE	S/Disagreed	Disagreed	Don't know	Agreed	S/Agreed
Lack of sensitivity to problem	10 (17.5%)	7 (12.2%)	4(7%)	28(49.1%)	8 (14%)
Lack of working techniques for staff	4 (7%)	9 (15.7%)	4(7%)	30(52.6%)	10(17.5%)
Technological change leave unawareness to staff	5 (8.7%)	6(10.5%)	2(3.5%)	31(54.3%)	13(22.8%)
Complexity of Organisation make unknown to staff	3(5.2%)	8 (14%)	5(8.8%)	20 (35%)	21 (36.8%)

Source: Field data

From the above findings of the Table 4.3, 28 (49.1%) of respondents agreed that lack of trained and skilled staff can results in lack of sensitivity to the problem 8 (14%) strongly agreed on that and 4 (7%) responded "I don't know." 10 (17.5%) strongly disagreed, while 7(12.2%) of respondents disagreed. In respect to whether lack of trained and skilled staff can results in lack of working techniques for staff, 10 (17.5%) strongly agreed, 30 (52.6%) agreed, while 9 (15.7%) disagreed. and 4 (7%) strongly disagreed. 13 (22.8%) of respondents strongly agreed that lack of trained and skilled staff can leave staffs unaware of changes in technology, 31 (54.3%) of respondent agree, 13 (22.8%) of respondent strongly agree, another 6 (10.5%) disagreed, 5(8.7%) strongly disagreed, while2 (5.7%) declared of not being aware of that.

In the same vein, regarding the fact that lack of educated and skilled staff have complexity in the organization, nearly (71%) agreed while about (19%) of the respondent disagreed leaving 5 (8.8%) unaware of what is going on.

4.5 The Effects of Absenteeism of Staff on Ground Handling Operations Performance in the Aviation Industry in Tanzania

This objective intended to examine the effects of absenteeism of staff on ground operations performance. Questions were asked for the respondents to mention the effects of absenteeism on groundwork operations. The following are the effects mentioned by the respondents as shown in Table 4.4.

Table 4.4: The Effects of Absenteeism of Manpower on Ground Handling Operations Performance

S/N	Effect/Item/Issue	S/Disagreed	Disagree	Don't Know	Agreed	S/Agreed
1	Reduction on level of organizational productivity	4 (7%)	9 (15.7%)	4 (7%)	30 (52.6%)	10 (17.5%)
2	Reduces the promptness of meeting customer's demand	3(5.2%)	8 (14%)	5(8.8%)	20 (35%)	21 (36.8%)
3	Negatively affect the level of quality service delivery	5 (8.7%)	6 (10.5%)	2 (3.5%)	31 (54.3%)	13 (22.8%)
4	Reduces the level of profitability of the organization	10 (17.5%)	7 (12.2%)	4 (7%)	28 (49.1%)	8 (14%)

Source: Field data

From the above findings of Table 4.4, 30(52.6%) of respondents agreed that absenteeism can result in ineffective reduction of level of organizational productivity while 9 (15.7%) disagree on that and 4 (7%) responded "I don't know." 21 (36.8%) strongly agreed that absenteeism reduces the promptness of meeting customer's demand, 20 (35%) of respondents agreed, while 8 (14%) of them disagreed and 5 (8.8%) said "I don't know", 3(5.2%) strongly disagreed. In respect to whether absenteeism negatively affect the level of quality service delivery 31 (54.3%) strongly

agreed, 13 (22.8%) agreed, while 6 (10.5%) disagreed. and 5 (8.7%) strongly disagreed. 8 (14%) of respondents strongly agreed that that absenteeism reduces the level of profitability of the organization, 28 (49.1%) of respondent agree another 3 (4.62%) disagreed, 10 (17.5%) strongly disagreed, while 4 (7%) said “I don’t know.”

4.6 Findings from Interview

Objective number four of this study sought to know the challenges facing Operational performance on ground working operations. In order to know these challenges asked one of the airport manager to explain some of the challenges facing the industry. One of the respondents said:

“One of the common challenges is the complexity and variability of the service offerings required by the different customers of a ground handling agent. For example, a typical ground handler with a certain number of airline needs ground handling services which include all the services an aircraft needs during the period it remains on the ground. Some airlines receive these services from a ground handling Services Company while others prefer to use their own equipment. Under normal circumstances the company provides ground handling services in the following operational areas: ramp services; passenger services; cargo and mail services; load control, communication and flight operations services; representation and supervision services. If for one reason or another things do not done the way it is required, the customers quit.”

Another respondent said;

“Ground activities performed under passenger services category include incoming passenger acceptance and guidance to baggage claim areas and terminal exit, lost, damaged and transfer baggage processes of incoming passengers (if any), outgoing passenger acceptance for flight and baggage processes, safe acceptance of outgoing passengers to the aircraft, Incoming and outgoing very important personnel (VIP), unaccompanied children and special care passenger services, special trained personnel for disabled passengers. If any of these sections did not work well the customer complaints are inevitable.”

Another respondent commented:

“The profile of the work force is constantly changing when it comes to such things as sex, age, technical skills, social backgrounds, and literacy levels. All of these will have serious implications for the labor force of an organization and the human resources department should be able to respond effectively through its manpower planning.”

The last respondent replied:

“The pressure groups including politicians, unions, presents pressure to our management in terms of such things as internal recruitment and promotion policies, the treatment of the employees’ families, and so on. “

4.7 Discussion of the Findings

This part discusses the findings of the study. The findings of this study are based on the prior stated objectives as presented on chapter four. The study had four specific objectives including (i) the effects of underutilization of resource of manpower on ground handling operations in the aviation industry; (ii) the effects of lack of trained and skilled staff on ground handling operations performance in the aviation industry; (iii) the effects of absenteeism of staff on ground handling operations performance in aviation industry; and (iv) the connection between degree of absenteeism and ground handling operations in the aviation industry in Tanzania.

4.7.1 Effects of Underutilization of Manpower on Ground Handling Operations Performance in the Aviation Industry

The first objective examined the relationship between underutilization of resource of manpower and ground handling operations in the aviation industry. It has been revealed that underutilization of manpower is a main problem to ground handling in aviation industry in Tanzania. 90% of respondents agreed that poor staff management skills can results in ineffective staff utilization, economic factors and general business

conditions will help determine manpower needs, in respect to organization structure, the nature of organizational structure helps to determine manpower needs and business may be small now, but you might have plans for future expansion which require the assessment of company needs.

4.7.2 Effects of Lack of Trained and Skilled Staff and on Ground Handling Operations Performance in the Aviation Industry

The second objective examined the influence of education and skilled labour on ground handling operations. Under this objective, in order to examine the effects of lack of trained and skilled staff on the ground handling operations, some questions were asked on the respondent of the study points out effects. The finding of this question was consistence with the findings of the study conducted by Chodisetty (2015) who on assessing the impact of lack of trained staff caused low level of productivity at Sukhjit Starch Mills at Nizamabad.

4.7.3 The Effects of Absenteeism of Staff on Ground Handling Operations Performance in the Aviation Industry in Tanzania

This study sought to examine the effects of workers' absenteeism on ground handling operations in the aviation industry. It was found that absenteeism was very high on the study area and had been increasing since the last few years. Results also showed that absenteeism significantly affects corporate performance. This result was confirmed based on the results of the analysis of the determinant variables which showed that absenteeism reduces the level of organizational productivity, profitability, quality service delivery and promptness of meeting customers' demand. Results of this particular objective are in line with those of Chodisetty (2015) who on assessing the

impact of absenteeism on productivity at Sukhjit Starch Mills at Nizamabad, found that absenteeism results into low productivity and it increases costs to the company.

4.7.4 The Effects of Poor Human Resources (Employees) Scheduling Plan and Control on Ground Handling Operations Performance in the Aviation Industry in Tanzania

This study sought to examine the effects of planning of on ground handling operations performance in the aviation industry in Tanzania. It was revealed that the airport ground staff gives rise to a number of challenging optimization problems. Ground handling workloads are naturally represented as work tasks, e.g. for baggage unloading or passenger check-in. These workloads must be covered by appropriate employees. Staff scheduling is usually carried out in several stages: In demand planning, workloads are aggregated and analysed, in shift planning, appropriate shift duties are generated, and rostering consists in generating lines of duty for the workers. These phases are strongly interrelated, and different optimization problems have to be solved at each stage.

CHAPTER FIVE

SUMMARY THE MAIN FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of main findings, conclusion, recommendations and areas for further study. The main findings section presents the overall results presented on chapter four. The conclusion section presents researchers conclusion of the findings in a summary form. Then, recommendations mainly focus on key areas that should be considered when planning for manpower in ground handling operations in Tanzania aviation industry. Finally, the chapter presents issues for further research. These will help future researcher who may have interest on either manpower planning or ground handling operations in Tanzania or elsewhere in the world.

5.2 Summary of the Main Findings

The overall objective of this study was to assess the effects of manpower planning on ground handling operations in Tanzania aviation industry. Under this objective, the effects of underutilization of resource of manpower on ground handling operations in the aviation industry, the study revealed that underutilization of human resource is a key factor for failure of company. It has been shown that the highest percentage of respondents showed that low productivity, reduced creativity, high turnover and unhappy employee is the results of underutilization of resources. Under the objective of the effects of lack of education and skilled labour on ground handling operations in the aviation industry.

Under the Affiliation between Manpower control and review and ground handling operations in aviation industry, the human resource is critical and difficult to manage. It is because human behaviour is highly unpredictable. It differs not only from individual to individual but often on the part of same individual at different points of time. This objective sought to identify the extent to which ground handling services can be enhanced through manpower control and review. This objective intended to identify the affiliation between manpower control and review with the ground handling operations. The study revealed that some organizations do not have sufficient records and information on manpower. Several of those who have them do not have a proper retrieval system. Even the existing technologies in this respect are not optimally used.

The connection between degree of absenteeism and ground handling operations in the aviation industry in Tanzania. This objective has pointed out the impact of absenteeism on performance of an organisation. Absenteeism is a vital issue that requires immediate attention by both employees and employers. Being absent means less work done and hence declining in productivity and efficiency of the company.

5.3 Implication of the Study Finding

5.3.1 Implication for Policy Markers

This study may be used in policy decision-making, formulation and implementation. For example, to curb underutilization of manpower the government policy makers may reform the Labour Law especially on the employment contracts by allowing adjustment in the hours of work and casual laborer's so as to accommodate an employee to be fully used even at off peak hours than the peak hours only. The

Government can put a right way educations like building the universities and encouraging the investors to invest in Aviation college so that the education given may not only curb the lack of skilled labour in the aviation industry and reduce the high costs that the Ground Handlers incur in training new employee but also boost efficiency of the manpower which will in turn attract more investor to invest in Tanzania hence economic growth. Ultimately, this research is essential to economic and social development of our globalized society, forming the foundations governmental policies in Tanzania and around the world.

5.3.2 Implication for the Industry

This study will help the organization forecast for the future employees, plan for the same so that it can have the right number of employees with right and competences, doing a right job at a right time hence minimizing the costs of training and the payroll costs. The organization may find ways to reduce the absenteeism like placing incentives to impeccable employees attendance of the month or year and this can motivate employees to be at work place rather than to clock absenteeism. The organization may find ways to schedule properly its employees so as to avoid not only the underutilization of its human resource but also increase efficiency, productivity and competitiveness.

5.3.3 Implication for Academician

This study, being of an exploratory and interpretive nature, raises a number of opportunities for future research, both in terms of theory development and concept validation. More research will in fact be necessary to refine and further elaborate the research novel findings. Much more has been accomplished as a result of this lengthy,

comprehensive, and coherent research effort than can be reflected here. Nonetheless, of course, much remains to be done. The work reported here is limited to Julius Nyerere International Airport, and there is a to explore to what degree it is relevant to the manpower challenges facing Kilimanjaro International Airport, Mwanza Airport, Songwe International Airport, Zanzibar Airport as well as expand it not only to ground handlers but also Airlines. Henceforth this research paves way for other academicians to further more researches. The model, the methods of data analysis, findings and recommendations can be a contributory factor to the body of knowledge.

5.4 Conclusion

The human assets change like weather, hence passing a serious challenge to the study. Since human beings cannot be reduced to laboratory test and they constitute a key success factor, planning targets and aches, as a matter of necessity have to be adjusted and reviewed continuously as the occasion demands.

Manpower planning can be affected by time span to a certain extent, the longer the period covered the higher the tendency for variance to exist between forecast and actual situation and vice-versa. Remembering that the aim of most manpower plans is to avoid minimize uncertainty of demand and supply of human resources, which is affected by changes occurring within the general and specific environment of organization. In conclusively, Underutilization of manpower is the biggest obstacle in case of manpower planning is the fact that the Aviation industry in general are not making optimum use of their manpower and once manpower planning begins, it encounters heavy odds in stepping up the utilization. The industry has to seek ways on how to optimize their human capital. The Degree of Absenteeism is quite high and has

been increasing since last few years and this cause inefficiency of service delivery. The industry has to create motivations programs and incentives to curb the current status.

On the other and, the extent of illiteracy and the slow pace of development of the skilled categories account for low productivity in employees. Low productivity has implications for manpower planning. Lastly Management must use the growing technology for example the use of scheduling software over the manual scheduling of the employees, this will improve the manpower planning henceforth create room for growth for both an employee and the company at large.

5.5 Recommendations

Based on the findings, the following recommendations are hereby suggested that manpower planning activities can be visibly identified at three levels. These are policy level, planning level and operating level.

Policy Level

The various skill to be recruited and the method to be adopted for such recruitment exercise are formulated at this level other decision and activities include recommending method for generating storms and retrieving manpower information (i.e. manpower information system), formulating and developing a frame work for internal transfers, promotions, discipline and termination of employee and appointments and sourcing and allocating the required financial resources to execute manpower programmes and activities.

Planning level

This level involves activities like establishing recruitment system of the organization. Setting the standard criteria for selection of candidates fitting in place administrative procedure for provision of central information; and establishing systems for dealing with issues like internal transfer, promotions, discipline and termination of appointments.

Operating level

This level is actually responsible for implementation of issue decided at the policy level through the use of systems framework and settings established at the planning level. It includes interviewing both applicants for employment and existing employee, administering and conducting test of skill and aptitudes designing and placing advertisement for available job vacancies; establishing relationships with external sources of manpower supply' and compiling human resources planning date.

5.6 Limitations of the Study

Despite valuable insight uncovered by this study, it should be read with few limitations. First, data was collected from a single centre of Julius Nyerere International Airport (JNIA). The sample size is small which does not represent population of all staff. In future, larger sample may be opted. Second, some employees were reluctant to fill questionnaires they deemed unsafe when reporting exactly answers. This posed a great challenge to the research as the researcher had to take a longer time to find employees who were willing to give out adequate information.

5.7 Areas for Future Research

The study assess the effect of Manpower planning in ground handling operations in Tanzania Aviation Industry. Based on this research, I suggest that other researchers should consider investigating the effect of Manpower planning in ground handling operations in Tanzania Aviation Industry. in other regions for the purpose of making comparative study on the findings.

REFERENCES

- Aaker, D. A. (2002). *Tanzania Transport Sector Review*. Dar es Salaam: African Development Bank Group.
- Adams, J. S., & Kamuzora, J. (2008). Inequity in social exchange. In L. Berkowitz (Ed.), *Advances in experimental. Journal of Personality and social psychology* 51(3), 1173-1183.
- AfDB, (2017). *Maintaining Aviation Industry in new Arena*. Paper Review. Nairobi, Kenya.
- Ahmad, A., & Aron, E. N. (2014). *Statistics for psychology. (2nd ed.)*. New Jersey: Prentice-Hall International, Inc.
- Chen, L., Silverthron, S., & Clarke, D. (2016). *Capitalizing on a generation gap. Management Review*, (June), 62-63.
- Clarke, D., Chen, L., & Silverthron, S. (2016). *Capitalizing on a generation gap. Management Review*, (June), 62-63.
- Clausen, D., Tommy, H., Pisinger, D., & Adams, T. (2010). *Airport Ground Staff Scheduling*. Technical University of Denmark Management.
- Cole, (2013). *Personnel Management: Theory and Practice*. London: Heinemann Press.
- Gareth, P. A., (2006). *Human Resource Management in South Africa*, (second Ed). UK London: Cornwall Institute of Management.
- Guillance, Joseph de La Landalle (1893). *Aviation Industry in the world*. New Age International Publishers, New Delhi

- Igbokwe-Ibeto, C. J., Osakede, K. O., Anazodo, R. O. (2015). *The Effect of Manpower Planning and Development in Lagos State (Nigeria) Civil Service Performance*. Africa's Public Service Delivery & Performance Review.
- Issa, H. H. F. (2017). *Reforming Human Resource Development in Tanzania –Issues, Challenges and Lessons*, Public Service Management, Tanzania.
- John, P., Allen, N. J., & Meyer, J. P. (2017). Testing the Side-bet Theory of Organizational Commitment: Some Methodological Considerations. *Journal of Applied Psychology*, 69,432-8.
- Julius Nyerere International Airport (2017). Annual Report of the Julius Nyerere International Airport. Dar es Salaam, Tanzania.
- Khan, K., Garavan, T. N., & McGuire, D. (2010). Human resource development and society: Human resource development's role in embedding corporate social responsibility, sustainability, and ethics in organizations. *Advances in Developing Human Resources* 12(5), 487-507.
- Koltnerova, K., Chlpekova, A., & Samakova, J. (2012). The Importance of Human Resource Planning in Industrial. International Conference Paper on Eurasian Economies held January 2015 in Turkish.
- Kothari, C. R. (2007). *Research Methodology; Methods and Techniques*. New Delhi: New Age International Publishers Limited.
- KPMG International Cooperative, (2016). Ground Handling-. India Aviation annual report. New Delhi, India.
- Krueger, M. G. (2010). Linking Strategic Planning and Management Manpower Planning. *California Management Review*, 25(1), 48-56.

- Lumley, P., Teodorovic, D., & Khan (2010). Simulated annealing for the multi-objective aircrew rostering problem. *Transportation Research Part A: Policy and Practice Elsevier*, 33(1), 19–45.
- Lee, N., & Suliman, P. (2013). Manpower requirements forecasting: A case example, in Human Resource Forecasting and Modelling, ed D Ward, T P Bechet and R Tripp, (Unpublished) dissertation in Human Resource Planning Society, New York , USA.
- Moyo, T., & Kuchinke, K. P. (2015). Human development as a central goal for human resource development. *Human Resource Development International* 13(5), 575-585.
- Muwowo, K. (2014). The Flexibility of Manpower Planning System, Unpublished Dissertation, Dar es Salaam University.
- Mwemezi, I. (2011). Recent developments and future prospects on sustainable human resource management: Introduction to the special issue. *Management Revue* 23(3), 221-238.
- Nawab, M., Farijal, A., Mathis, R. L., & Jackson, J. H. (2011). Human Resource Management. (13th ed.). South-Western College Pub. Systems. *International Journal of Information Management*, 17(1), 35-53.
- Osa, P., Janes, T., & Ashraf, G. (2014). *Guide to Workforce Planning in Local Authorities, Employers Organization for Local Government*. London: Birmingham City Council.
- Predeesh, S., & Scholz, D., & Vevegopalan, Z. (2011). Master Thesis Department of Automotive and Aeronautical Engineering Ground Handling Simulation with CAST Author : Sara Sanz de Vicente, 1–84.

- Rashid, Z., Sambasivan, M., & Johari, J. (2013), "The influence of Corporate Culture and Organizational Commitment on Performance", *The Journal of Management Development*, 22(7/8), 708-728.
- Saunders, M., Lewis, P., & Thornhill, A. (2012). *Research methods for business students*. 6thed. London: Prentice Hall.
- Scholz, N. (2010). Rise of the baby-boom bosses. *Business Review Weekly*, 28-34.
- Scholz, N., & Gomez, A., & Zafar, H. (2009). Rise of the baby-boom bosses. *Business Review Weekly*, 3(1), 1-22.
- Suliman, M., & Kramar, R. (2014). "Beyond strategic human resource management: is sustainable human resource management the next approach?" *The International Journal of Human Resource Management*, 25(8), 1069-1089.
- URT, (2017). City Profile for Dar es Salaam; Annual report, 2017/2018. Dar es Salaam. Tanzania.
- Vandel, S., Tang, T. T., & Igbokwe Y. P., (2014). Optimal construction of airline individual crew pairings, *Computers and Operations Research* 29, 341–363.
- Venugopalan, B., Predeesh, S., & Nawab, D. (2011). 'Equipment Damage and Human Injury on the Apron: Is it a cost of doing business?' Paper presented at ISASI Seminar, Gold Coast, and Queensland, Australia.
- Yamane, T. (1967). *Comprehensive Research Methodology*, 2nd Edition. New York: Harper and Row.
- Zafar, H., Lumley, E. J., Coetzee, M., & Tladinyane, R. (2010). Job Satisfaction and Organizational Commitment of Employees in the IT environment, *Southern African Business Review* 15, 100-118.

APPENDICES

Appendix I : Questionnaire s

Part 1: Introduction

Dear respondent, my name is **Ms. Neema Mwang'amba**, a Master of Human Resource Management student at the Open University of Tanzania. I am carrying out a research on **“Examination of factors affecting the performance of ground operations at Aviation industry in Tanzania. A case of Julius Nyerere Airport”** as part of the requirement for the award of MHRM. You are sampled as a person suitable to provide the information required. I request you to spare part of your valuable time to fill this questionnaire. The information you provide will be treated ethically with the degree of anonymity and confidentiality it deserves.

Part 2: Questionnaires- Personal information

1. Your age (please tick the appropriate answer)
 - a. Below 20 ()
 - b. 20-30 years ()
 - c. 31-40 years ()
 - d. 41-50 years ()
 - e. 51-60 years ()
 - f. 60 + ()

2. Gender (please tick the relevant answer)
 - a. Male ()
 - b. Female ()

3. Marital Status (circle the relevant answer)
 - a. Single ()

- b. Married ()
- c. Divorced/Divorcee ()
- d. Widow/widower ()
4. Academic qualifications (please tick the relevant answer)
- a. "O"level Certificate ()
- b. "A" level certificate ()
- c. Diploma ()
- d. Undergraduate degree ()
- e. Master's degree ()
5. How long have been working at this industry/organization? (circle the relevant answer)
- a. Less than 4 years ()
- b. 5-10 years ()
- c. 11- 15 years ()
- d. Above 15 years ()

Part 3: The effects of underutilization of staff on the ground handling operations performance

On the scale from (1= strongly disagree, 2 = disagree, 3= neither agree nor disagree, 4= agree, 5 = strongly agree) express the extent to which you agree/disagree with the following statements of your attitude towards the organization you work for. Kindly circle the number which you choose.

Effects	1	2	3	4	5
To the employees					
Lack of consistency.					
Low productivity.					
Feeling of not being valued					
Reduces creativity.					
Enhances boredom.					
To the employer					
High turnover					
Unhappy employee					
Low productivity					

Part 4: Effects of lack of trained and skilled Labour on ground working operations

On the scale from (1= strongly disagree, 2 = disagree, 3= neither agree nor disagree, 4= agree, 5 = strongly agree) express the extent to which you agree/disagree with the following statements of your attitude towards the organization you work for. Kindly circle the number which you choose.

EFFECT/ITEM/ISSUE	1	2	3	4	5
Lack of sensitivity to problem					
Lack of working techniques for staff					
Technological change leave unawareness to staff					
Complexity of Organisation make unknown to staff					

Part 5: Effects of absenteeism of staffs on ground working operation performance

On the scale from (1= strongly disagree, 2 = disagree, 3= neither agree nor disagree, 4= agree, 5 = strongly agree) express the extent to which you agree/disagree with the following statements of your attitude towards the organization you work for. Kindly circle the number which you choose.

S/N	ITEM	1	2	3	4
1	Reduces level of organizational productivity				
2	Reduces the promptness of meeting customer's demand				
3	Negatively affect the level of quality service delivery				
4	Reduces the level of profitability of the organization				

Part 6: Working Performance at Ground operations

On the scale from 1 to 5 rate the following statements as they relate to your working performance. (1= very low, 2 = low, 3= moderate, 4= high, 5 = very high)

S/N	Issues	(1)	(2)	(3)	(4)	(5)
1	How would you rate your overall work performance compared to your peers' with the same experience doing work similar to yours here at Ground operations?					
2	Do you face any challenges in your daily work activities in the industry?					
3	How would you rate the quality of your work compared to that of your peers' doing work similar to yours?					
4	How would you evaluate your productivity level with respect to time compared to that of your peers' doing work similar to yours?					

Thank you for your time and co-operation. Your opinions are highly valued. Please be assured that your answers will remain anonymous.

B : INTERVIEW QUESTIONS

What are the challenges facing Operational performance on ground working operations ?

Thank you for your time and co-operation