

# **OPERATIONS STRATEGIES IN KENYAN AIRLINES**

**BY**

**BOSIBORI FAINORA**

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## DECLARATION

This research project is my original work and has not been submitted for a degree award in any other university.

Signed:..... Date:.....

BOSIBORI FAINORAH,  
Registration Number: D61/9106/2006

This research project has been submitted for examination with my approval as university supervisor.

Signed:..... Date:..... Signed:..... Date:.....

Mr Nyamwange, S.O.  
Department of Management Science,  
School of Business  
University of Nairobi

Mr. Mulwa, L.M.  
Department of Management Science,  
School of business  
University of Nairobi

## **DEDICATION**

I dedicate this work to my beloved husband and friend Mr. Herbert Ratemo for his tremendous support and patience in the course of undertaking this MBA course. Much love and thanks to my dear daughter Shalom Nyaboke and son Michael Ratemo who endured my busy schedule in support of my vision.

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### **List of Abbreviations and acronyms**

AFRAA	African Airlines Association
ALS	Aircraft Leasing Services
EU-ETS	European Union Emission Trading Scheme
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IOSA	IATA Operational and safety Audits
JIT	Just-In-Time.
JKIA	Jomo Kenyatta International Airport
KCAA	Kenya Civil Aviation Authority
KLM	Koninklijke Luchtvaart Maatschappij, Royal Dutch Airlines
KQ	Kenya Airways
SWOT	Strengths, Weaknesses, Opportunities and Threats
TQM	Total Quality Management
USA	United States of America
WCO	World Class Operations.

# CHAPTER ONE: INTRODUCTION

## 1.1 Background of the Study

The business environment is affected by a range of factors including; economic system, political system, legal restraints, industry, labour relations, customer expectations, markets, competition, technology, culture, history, infrastructure, state of the economy, shareholders' demand, natural environment, labour conditions and so on (Waters, 2006). Changes in the environment often happen and cannot be controlled yet they influence the operational decisions made. Organizations strategically respond to any significant changes in the business environment in order to remain competitive. Strategy is described as what the organization wants to achieve and how it will achieve it while operations strategy is the specific actions and decisions that defines the role of operations in achieving the overall goal of the organization.

Operations strategy formulation requires an alignment between the market requirements and operational capabilities and these needs to be sustainable in the long-run for competitiveness (Slack, Chambers, Johnston, 2010). A well formulated strategy is comprehensive, coherent or consistent, correspondent and critical to the performance objectives being pursued by the operations function.

Slacks et. Al., (2010) suggested five basic operations performance objectives which apply to all types of organizations. Operations managers always have a task to deliver on quality, speed, dependability, flexibility, cost and currently innovation through effective use of the available resources. These results into reduced cost achieved through efficiency, customer satisfaction through good quality of service and reduced risk of operational failure.

Many models have been used to explore the area of operations strategy. One of the widely used models is the Hayes and Wheelwright model. The Hayes and Wheelwright model traces the progressive role of operations from the negative stage 1 to the mature stage 4. According to this model, organizations should seek to be in stage 4 (externally supportive) where operations provide foundation for competitive advantage (Slack, et. Al., 2010). Operations in stage 4 organizations are innovative and proactive and are driving the organization's strategy by being "one step ahead" of

the competition. This ought to be the ultimate position for organizations that aspire to be outstanding in their performance and competitiveness.

### **Operations Strategy Related Issues in the Airline Industry**

Airline industry is one of the heavily regulated sectors; no wonder it is generally perceived to be the safest mode of transport. According to International Air Transport Authority (IATA), aviation supports over \$3.5 trillion in economic activity annually, providing millions of jobs. Airlines need to understand the challenges of the past to build a stronger future for a safe and efficient air transport system (Airline international magazine, June AGM, 2010). IATA is on the forefront in airline performance putting operational strategies to mitigate challenges facing airlines today including cost control, access to capital markets, fleet replacement, industry losses and inconsistent profitability, irrational pricing and predator action by major airlines, high debt to equity ratios, poor strategy, poor airport infrastructure, high fuel prices, capacity issues, airport and airspace congestion, unfair competition, terrorism, globalization and many others. Tireless efforts have been put by the airlines and the regulatory authorities to improve and counter the challenges for a sustainable future.

Investments in product enhancements enable airlines to attract and retain customers. Comfortable leg-room, use of i-pads and mobile phones in-flight are some of the order winning criteria airlines have adopted to remain relevant and profitable to support world trade, economic growth, international investment and tourism.

There is a recent rise in the self service technology that enables passengers to easily search, reserve and purchase flights avoiding the long airport queues. Passengers are in full control of the journey, saving money and time. Reliable technology gives confidence to the passengers and can be used as alternative means to facilitate their air transport.

Safety and security has remained top priority of many airlines and other stakeholders in the aviation platform. Well managed safety and security program increases public confidence and customer loyalty. The IATA Operational and Safety Audits (IOSA) initiative helps airlines achieve best practice and continuous improvement. A recent ICAO report indicates 4 accidents per one million departures, a trend that has remained constant over the years. IATA recommends a proactive approach in

mitigating existing and emerging safety and security issues while efforts are put to put resources to areas of greatest risk. (ICAO Annual report of the Council, 2011).

There is immense emphasis on environmental care and protection by the regulators (IATA and ICAO) and airlines now have targets imposed by the regulator and the industry. Airlines have implemented fuel saving initiatives and aircraft manufacturers have a promising future that will increase aircraft efficiency. Biofuels have also been tested and found useful. Passengers now can participate in aviation effort to mitigate climate change by contributing to carbon offset programs set by airlines as they buy their tickets.

Baggage loss facilitated by high traffic volumes and complex hubs has been a challenge. According to IATA, mishandled baggage costs the air transport industry more than \$3billion a year. The IATA baggage improvement program and the world baggage tracing system, enhance efficient traceability of bags.

### **Airline Industry in Kenya**

Airline industry in Kenya started in 1929 by foreign carriers until the establishment of East African airways in 1946. Following the break-up of the East Africa community, Kenya airways was founded in February 1977 ([www.Kenya-airways.com](http://www.Kenya-airways.com)). The established airline industry in Kenya is regulated by the Kenya Civil aviation authority (KCAA). The domestic, civil and cargo air transport market is composed of several players that include: 748 air services, African Express Airways, Air Kenya Express, Aircraft leasing Services (ALS), Astral Aviation, Blue Bird Aviation (Kenya), CMC Aviation, Delta connection (Kenya), East Africa Safari Air, Fly 540, Jetlink, Kenya Airways (KQ) and Safarilink Aviation (sterling investment Bank, 2009). The major airlines operating scheduled passenger and cargo flights in Kenya are; Jetlink, Fly 540 and Kenya airways. The rest of the other airlines operate charter flights for both passenger and cargo in Kenya and the region.

Passenger traffic in Kenya in 2010 grew by approximately 13% as compared to 2009 due to on-going recovery in the tourism business after the post-election violence in 2007. There is also increase in disposable income and desire to travel by middle-class in the country and in the region. (*East Africa Aviator, Oct-Dec 2011*). Business travel is also on the increase due to globalization of businesses. As a result, Kenyan airlines

are facing very stiff competition in the international, regional and domestic market with many players from Europe and Middle East wanting to operate flights into the region. Strategic alliances and partnerships are on the increase to enhance route coverage and customer satisfaction.

Kenyan airlines have adopted the hub-and-spoke model of operation that brings efficiency in connecting of passengers and gives variety of connecting option (Gowrisankaran, 2002). It also enhances efficiency in the use of aircraft than the point-to-point operations. Internally, the airlines have embarked on cost-reduction initiatives like the world class operations (WCO) and technology.

KQ has the biggest market share as a result of the rapport with customers, corporate and travel agents. In Nairobi, most of the travellers connect to other KQ flights and hence the passenger preference. For the tourist travellers destined for the game parks and other site seeing destinations, Fly 540 and the other smaller airlines dominate this market. The budget carriers have adopted a mixed fleet for flexibility to effectively compete in this market.

The reduction in domestic passenger fares in Kenya is attributed to the stiff price wars between the carriers. Up to 22% fares reduction was achieved in the year 2011 in the major routes including Mombasa, Kisumu and Malindi. Many Kenyan travellers are last-minute buyers and so they do not benefit from the early booking discounts from the airlines (East Africa Aviator, Oct-Dec 2011). The concept of use of travel agents for bookings is slowly picking up in the country.

## **1.2 Statement of the Problem**

The African continent has realised tremendous growth in the airline business in the recent past. There are many business opportunities that investors from the West now want to tap into. The many unexplored natural resources available in the African continent and the recent discoveries of oil in Kenya and Uganda for example have attracted many interested parties from America, Europe and China including airlines. Kenya has been particularly appealing to many investors in aviation because of its geographic location in Africa and relatively stable political and business environment. Kenya also has an established airline (KQ) which connects to over 40 destinations in

Africa and this helps the other international airlines to easily develop their markets. For many international airlines, Kenya forms a gateway to the African market.

Kenyan airlines are still struggling with key operational areas like on-time-performance which results from sub-optimal planning, system failure, aircraft breakdown due to lack of adherence to the maintenance schedules. There are also issues of baggage loss and mishandling (pilferage), less capacity to carry customer bags, long passenger queues due to unreliable on-line check-in system and less number of aircraft to operate the available routes. Quality of service sometimes falls below the customer expectations. On the other hand, foreign airlines are bringing on board capacity by operating wide-body aircraft, quality of service both on ground and in-flight as well as innovations.

Slack, et al (2010) and Waters (2006) in their cited case studies about Ryanair in Europe and Southwest airlines in the USA successfully implemented their operations strategy based on cost objective through efficient operations. The efficiency was driven by: short turn-rounds, uniform fleet for standardization of parts and maintenance, economies of scale due to manufacturer discounts, lowest fares, direct sale of tickets to customers avoiding travel agency costs and nil meals.

Oltra and Flor (2010) studied the moderating effect of business strategy on the relationship between operations strategy and firm's results, a case study of Spanish Ceramic Tiles firms. The study established that for an operations strategy to effectively contribute to an organization's competitive advantage, it needs to be in harmony with the business strategy. This will lead to improved performance which normally differs amongst organizations depending on the business strategy an organization has chosen to follow in the prevailing business environment.

Related studies have been done seeking to establish how an effective operations strategy can be formulated and implemented for competitiveness. Nyamwange (2001) investigated operations strategies applied for competitiveness of Kenya large manufacturing firms and found out that implementation and management of strategy is key and everyone has to be involved.

Kinyua (2010) in his investigation on the factors affecting operational productivity in small and medium sized manufacturing firms and Wanyiri (2010) in assessing the TQM practices in the thermal power plants in Kenya discovered that quality

management is achieved through waste reduction, leading to reduced cost of operations and increases performance. Mwangi (2011) did a study on cost priority in airline operations strategy. In his survey of air transport industry in Kenya, he established that cost objective contributes to an organization's competitive advantage.

Mukuhi (2005) did a survey of operations strategy practices of small scale export market farmers in Kenya, case of French beans farmers and using the Hayes and Wheelwright model and she discovered that many of these farmers were still in the first stage.

No known research has been done to evaluate operations strategies adopted by Kenyan airlines in order to survive and remain relevant given the competitive environment in which they operate. The researcher seeks to close this gap by establishing how best the Kenyan Airlines can strategically set up operational objectives that best suits their competitive environment in relation to the Hayes and Wheelwright model.

This study was guided by the following questions: what operations strategies are being applied by the Kenyan airlines in relation to Hayes and Wheelwright model? What challenges are the airlines facing in developing effective operations strategies?

### **1.3 Specific Objectives**

- i. To determine operations strategies applied by the Kenyan airlines in relation to Hayes and Wheelwright model
- ii. To establish the challenges faced by the Kenyan airlines in developing effective operations strategies.

### **1.4 Value of the study**

This study can be useful to various stakeholders in the aviation industry. The information is useful to airline management in determining the appropriate strategies to put in place to enhance customer satisfaction while meeting the overall business objectives.

Airline governing bodies like KCAA, AFRAA and IATA can know the kind of support the airlines need and offer relevant training to enhance appropriate strategy



development. Investors in the aviation industry, both current and potential and can get information trends in the airline industry as a result of strategy implementation.

Customers are able to know developments in the airline industry and they can be part of the future developments in the industry by actively giving their feedback which can form a basis of strategy formulation.

Travel agents are also made aware of the technology and other innovations in the low-cost framework adopted by some airlines. The Global Distribution System by IATA gives unbalanced product options which are made available to passengers who book direct with airlines via their websites. This is in itself an incentive to directly transact with the airline, leaving the future of travel agencies unpredictable.

This study is available to academician and researchers for reference. More research can however be done on effective operations strategy in the dynamic aviation industry. The study gives a base for future research thereby contributing to the existing body of knowledge.

## CHAPTER TWO: LITERATURE REVIEW

### 2.1 Introduction

This chapter seeks to elaborate the concept of operations strategy using other literature to underscore its development process, importance and the eminent challenges airlines face in its development and implementation. Evaluation has been done on airlines in Kenya with the main focus on the three major airlines: Fly 540, Jetlink and KQ.

Operations strategy is the pattern of decisions which shape the long term operational capabilities and their contribution to the overall strategy (Slack and Lewis, 2002). This requires consistency in strategic decisions and actions over time. Klassen et al., (2006) added that this operational decision must be aligned with the other internal processes (marketing, finance, human resources etc) and the external business environment (customers, suppliers etc). Waters (2006) emphasized the role of balancing external requirements and internal capabilities which Slack and Lewis described as a 'strategic reconciliation of market requirements with operational resources', otherwise referred to as a strategic fit. Wild (2002, 2003) also added to this concept referring to it as 'balancing the customer service objective with the resource utilization objective'

Lawson (2001), describes operations strategy as the strategic management of core competencies, capabilities, processes, technologies, resources and key tactical activities in the supply network, so as the value demanded by the customer is created. Of critical importance is the provision of what the customer truly wants to purchase than trying to make the customer buy what the organization offers for sale (Dilworth, 1992).

In the manufacturing situation, Nahmias (2001) describes operations strategy as the pattern of decisions on production, storage and distribution of goods. According to Dilworth (1992) the overall goal is to make value of the outputs considerably greater than the inputs through an efficient transformation system (process) to enhance customer value. Waters (2006) states that operations strategy mainly consists of all the directions, policies, culture, goals, resources, actions etc that relate to the long-term operational goals. Organizations achieve distinctive capabilities through well

communicated mission, goals and objectives, and plans and methods for achieving them. The ultimate goal is to help an organization achieve its purpose cascaded down from the mission, through the corporate and business strategies onto operations strategy and then finally to operations. Operations strategy gives the link between business strategy and operations to develop a competitive advantage. Therefore the most important thing is to first align the operational activities with the main business objective, giving of appropriate guidelines on its implementation (Slack et al, 2010).

## **2.2 Importance of Operations Strategy**

Operations strategy leads to efficient use of operating resources which results into competitive advantage and world class status (Klassen & Menor, 2006). The resources include land and buildings, fixed and moving machines and equipment, tools, raw materials, inventories and other current assets (Chase, et al, 2007). Operations strategy has to focus available resources to areas critical for operational success thereby preventing scarce resources from being diverted to where they are not required so much (waters 2006).

An operation strategy promotes efficiency (performance of the right tasks by the operations function) with the aim of performing tasks better than the competitor. Operational strategy normally forms the plan to compete in the market place. The alignment of operational efficiency and strategy ensures that operations function does not efficiently perform wrong task ([www.wiley.com/college/reid](http://www.wiley.com/college/reid)).

Operations strategy implements, supports and drives the higher strategies, using available resources and distinctive capabilities of the organization. It provides a 'strategic fit' in directing resources in a way that customer requirements are met while supporting the established business strategies (Hayes and Wheelwright, 1984; Miller and Roth, 1994). It ensures harmony between the short-term decisions and their respective long-term goals (St John and Young, 1992).

Operations strategy if effectively formulated and implemented leads to overall improvements in operational costs, profitability, competitive advantage, market share, resource utilization and also organizational image. This leads to overall organizational performance.

### **2.3 Operations Strategy Development Process**

The operations strategy is mainly influenced by the overall corporate strategy; It has to be in line with the corporate strategy. Organizations are now adopting operations strategies that offer competitive advantage along one or more dimensions of cost, flexibility, dependability and quality. An organization needs to understand its environment through environmental scanning, a process of monitoring the external environment considering an organization's mission and core competencies and SWOT analysis on the organization's Strength, Weaknesses, Opportunities and Threats (Waters, 2006). This helps an organization realize its threats and opportunities and come up with strategies to counter them using the internal capabilities and resources revealing gaps between what the customers need and what competitors are doing to meet those needs.

Waters 2006 developed an eight step process of developing an operations strategy including: an assessment of the current strategy, defining the purpose, goals and objectives of operations, analyzing the operations environment, analyzing the internal operations, listing of the alternative operations strategies, evaluate the alternatives and choose the best, amend the chosen strategy and implement the chosen strategy. Bottom line is that organizations must update their operations by continually looking for opportunities for further improvement and reacting to changes in the internal and external environment. The operations strategy development process has been discussed using different models which are independently discussed below:

#### **2.3.1 The Hayes and Wheelwright Four-Stage Model**

This model help to explain the role and contribution of the operations function. It traces the progress of the operations function from the negative stage 1 operations to stage 4 where it becomes the central element of competitive advantage, (Slacks et. Al., 2010). It also explains the role of operations strategy based on organization's attitude towards operations in providing competitive advantage as illustrated in Table 2.1 below. All organizations should aim to get to the highest level possible, ultimately stage 4 and remain there. This model helps managers to identify their current state of operations and define a direction to move towards.

Table 2.1 Four stage model of strategic role of operations.

stage	Summary
Stage1: Internally neutral	Organizations find it impossible to manage its operations strategically as its operations performance objectives are continually changing between low cost, increased flexibility, improved quality etc. Operations managers never have time to focus consistently on a set of objectives. Make limited contribution to the organization and struggle not to hinder progress by making too many mistakes. They are reactive towards operations and so operations do not provide a source of competitive advantage.
Stage2: Externally neutral	Organizations manage operations by seeking to emulate those of its competitors, copying best practices of its industry such as JIT, TQM etc. They adopt these techniques which they will have not developed same level of expertise in their application. These organizations develop operations strategies that may not match the main business strategy. It may not lead to competitive advantage.
Stage3: Internally supportive	An organization has an operations strategy that is linked to and derived from its business strategy. This means that its operations performance objectives are aligned with and supportive of its business objectives, offering the possibility that operations can provide the means of achieving competitive advantage. The organizations operations are likely to be the best in its industry.
Stage4: Externally supportive	Organization uses its operations excellence as the basis for its business strategy; an operations-based strategy. These organizations are at the fore-front of development in the best practice in that they set industry standards in ways that delight customers. To remain at stage 4, organizations need to learn how to make the most of its existing resources and competences to learn how to develop new capabilities.

Source: David Barnes (2008), *operations management, an int'l perspective* pg 106.

### **2.3.2 The Five Operations Performance Objectives**

In formulating an operations strategy, management has to focus its resources and internal capabilities in such a way that they can gain competitive advantage. There is a perception that organization cannot excel in all competitive dimensions due to the varied customer demands and the organization's overall strategy. Traditionally, there has to be a trade off; for example if an organization focuses on quality, then it has to trade off low cost. This concept was first proposed by Skinner (1969). He argues that operations can't be "all things to all people". An organization needs to identify one operational goal and work towards it having a clear focus of the set objectives.

Today, many successful organizations have competed in two or more strategic dimensions. Some scholars like Ferdows and de Meyer (1990) have rejected the concept of trade-off arguing that certain operational capabilities enhance one another enabling operations excellence. Meredith et al., (1994) adds that these dimensions are now being seen as synergistic where Performance improvement in one dimension often enhances performance of the others. Organizations today can "do it all" or "most of it anyway" (Knod and Schonberger, 2001).

Cost often implies offering a product at a lower price, relative to the price of the competing products in the same market as a result of low cost of production. Low cost-strategy can result into high profit margins even at competitive price. This does not mean low quality but rather efficiency, reduced waste and increased productivity ([www.wiley.com/college/reid](http://www.wiley.com/college/reid)). To improve cost performance, performance has to improve in the other operations objectives of quality, dependability, speed and flexibility.

Quality is the ability to offer a product as per specifications without error (Barnes, 2008). This enhances customer satisfaction and easier operations. Bottom line is products have to be designed to meet customer needs and the process needs to be designed to produce the intended products consistently without error (<http://www.wiley.com/college/reid>). This reduces cost and increases dependability since less time will be required to correct mistakes and less confusion and irritation to the customer. Airlines have now embraced continuous improvement initiatives aimed at eliminating non-value adding processes through benchmarking, the six sigma approach and the ISO 9000 standards implementation. Total Quality Management

(TQM) initiatives that involve everybody in the business has been greatly embraced by many airlines in Kenya.

Dependability is the ability to deliver to the customer on time or as promised to save time and money. This ensures stability and no surprises.

Speed involves minimizing the time between a customer asking for products or service and the customer receiving them. This assures availability and results to speed advantage. This often calls for operational efficiency, eliminating processes that do not save time. Technology has been instrumental in this together with flexible workforce to meet peak demand periods (<http://www.wiley.com/college/reid>).

Flexibility is essential to accommodate rapid environmental changes including customer needs and expectations. Flexible system are able to add new products that may be important to a customer or drop the products that are not doing well (product flexibility) and can also increase or decrease the amount produced to accommodate changes in demand (volume flexibility). Organizations competing on flexibility find it hard to compete on speed as well because they need time to custom-make products to customer specifications. They cannot also compete on cost because it may take more resources to customize (<http://www.wiley.com/college/reid>).

The operations strategy will deploy organizational resources in form of structures (decisions related to the design of production process; facilities, technology etc) and infrastructure (decisions related to planning and control of processes) to support operations function. The structures and infrastructures are then aligned to the long-term plan of the organization (Barnes, 2008).

Organization need to know the market needs and establish ways of meeting those needs, focusing on cost, quality, speed, flexibility and adaptability. When customer buy a product, they decide what features they want in the product (order qualifiers), then they look at the alternatives and choose the best one (order winners). An organization only remains competitive if its products have the main qualifying factors (so that it is shortlisted) and many of the order winning factors (so that it wins many orders) (Waters, 2006). Order winners and qualifies change over time so should the operations strategies (Barnes, 2008).

From the above two models, operations strategy requires to be in sync with the business strategy. The market requirements must be factored in the operations strategy. Appropriate resources have to be developed and deployed in such a way that operational excellence is achieved. Organizations also need to articulate well its set objectives so that the operations functions can work towards achieving them.

#### **2.4 Challenges of Operations Strategy by Kenyan Airlines.**

An organization may know the strategies to put in place, but they fail to understand how to put them in place (Brown et al., 2005). They fail to direct the required strategic resources in the right direction and easily shy away if hefty monetary investment is required. At times it becomes political and it is easily challenged by the government.

Attitude of “you have never had it so good” in the 1950s, due to easy market environment slows down organizations from employing quality improvement practices and productivity growth (Brown et al., 2005). We see this even in our organizations today especially monopolies.

Lack of resources for some airlines stand as a hindrance to operations strategy. As seen earlier, operations function puts to use all the company resources to produce goods and services to satisfy customer requirements. In some cases, the resources might be there but they are not directed to the key areas to realize the objective of an organization.

Poor participation of top management in the formulation and implementation of operations strategy especially those originating from the bottom-up because many times, they are reactive to the environment and they do not match the business strategy. They are bound to fail without the management support.

Lack of innovative culture to come up with unique ways of doing things in airlines. Many airlines wait until they can see that a product is successful elsewhere and then adopt and adapt it to their own requirements, waters (2006), merely to survive.

Dealing with a changing external business environment including government regulation, inflation, terrorism and travel advisories, political instability (Aquilano et al., 1991). Poor infrastructure leads to expensive decisions. For example, when



visibility is poor, the airplanes end up diverting to other airports, inconveniencing the passengers and it adds up to the cost of operating that flight. A slight improvement for example, an additional runway, upgrade of the category of the airports to allow landing at lower minimums would improve operations.

## **2.5 Studies in Operations Strategy in Airline Industry**

Many studies have been done both locally and internationally in the area operations strategy as a means to competitiveness.

### **Oversees**

A few studies have been done in the area of operations strategy in the airline industry in the different regions of the world. The researcher came across the following: Chang and Shao (2011) studied on the cost control strategies for airlines in Taiwan.

### **Local**

No studies have been done locally on the operations strategies adopted by Kenyan airlines but there are related studies. Nyamwange (2001) investigated operations strategies applied for competitiveness of Kenya large manufacturing firms while Mukuhi (2005) did a survey of operations strategy practices of small scale export market farmers in Kenya, case of French beans farmers. Theuri (2010) investigated the operations strategies of managing drought on hydropower generation-KENGEN Mwangi (2011) did a study on cost priority in airline operations strategy. No study has sought to investigate operations strategies adopted by Kenyan airlines in gaining competitive advantage in this very dynamic industry.

### **2.5.1 Knowledge Gap**

Based on the previous studies done, no research adequately covered the area of operations strategies by Kenyan airlines. This therefore represents a research gap which this study seeks to address and also provide a basis for future studies in the area of operations strategy. The managers will be able to know their current state of operations and which direction they need to move towards to attain competitive advantage. The eminent challenges associated with developing appropriate operations strategies in the airline industry will also be addressed. Kenyan airline managers will

know what their customers give priority to when buying a ticket which may form a basis of their operations strategies.

## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.1 Research Design**

The research design used was the descriptive survey. It was used to determine the attitudes, opinions and the organizational practices. Descriptive approach was considered the most appropriate in this case because this report things the ways they are at present, (Mugenda & Mugenda, 1999).

### **3.2 Population and Sampling**

As at August 2012, there were 13 registered airlines in Kenya as in appendix 2, but for this study, a convenient sample of three airlines (Jetlink, Fly 540 and KQ) was used since they compete in the domestic and regional front, operating scheduled passenger flights. The sample selected in table 3.1, apply across all the organizations but where there are more than one person holding the position, more than one questionnaire was administered. So a sample size of 15 was considered from each of the three airlines and respondents were drawn from the offices indicated in table 3.1.

### **3.3 Data Collection**

Primary data was used. Semi-structured questionnaires comprising of both open and closed ended fact-oriented, information gathering questions were administered (Cooper and Schindler, 2003). The questionnaire had two sections: general information of the respondent and the organization, operations strategies adopted by Kenyan airlines and the associated challenges and benefits. Model(s) used by the airlines in developing operations strategy will be determined. The Likert Style rating scale was used in most of the closed questions. Standard questions were used assuming same interpretation by all respondents (Robson, 2002). The questionnaires were administered to key operational personnel (as listed on table 3.1) of the three major competing airlines in Kenya. The questionnaires were delivered by hand to the individual offices in the different airlines at the airport and in their head offices. A research assistant was engaged.

**Table 3.1. Population**

	Office	Number of people
1	Head of operations	1
2	Manager operations control	1
3	Duty manager operations	1
3	Maintenance control manager	2
4	Hub control manager	1
5	Crew planning manager	1
6	Revenue manager	1
7	Marketing manager	1
8	Operations analyst	1
9	Management accounting	2
10	Operations officer	3

### **3.4 Data Analysis and Presentation**

Content analysis was used to analyze open-ended questions. Statistical package for social science (SPSS) was also applied. Mean was used to determine the average score for each airline. Standard deviation determined the variations from the expected state. The mean was used to fit the operational strategies adopted by Kenyan airlines with the Hayes and Wheelwright model. Chi-square was used to rank the challenges. Tables representing the questionnaire feedback, bar charts, frequency tables and comparative pie charts were used to present the results.

## **CHAPTER FOUR: DATA ANALYSIS, FINDINGS AND DISCUSSIONS**

### **4.1 Introduction**

This chapter presents the data analysis and findings of the study in line with the study objectives. Primary data was used, obtained from semi-structured questionnaires that were administered through the drop-and-pick-later method since the sample population was well versed with the issue of operations strategy. The data was collected from Kenyan airlines with a convenient sample from KQ, Fly 540 and Jetlink. 15 questionnaires were administered in each airline making a total of 45. A total of 32 questionnaires were returned duly completed and this presented a response rate of 71% which was considered sufficient for this study.

### **4.2 General Information**

Respondents were asked to state the number of years worked in the airline since this would give the likely level of understanding of the concept of operations strategy. The respondents were given a range of years to choose from.

**Table 4.1 Airline Experience**

<b>Years worked</b>	<b>Frequency</b>	<b>Percent</b>
0-5yrs	18	55
6-10yrs	11	33
11-20yrs	2	6
over 21yrs	2	6

*Source: Research project*

According to table 4.1, about 55% of the respondents stated that they had worked in the Kenyan airlines for a period of less than five years while about 6% of the respondents indicated that the longest serving employee had worked for over 21 years. Experience in the airline industry may be an indication of the employees' level

of understanding of the issue of operations strategy as indicated in figure 4.2 where 28% of the respondents did not know of the specific approach used in the operations strategy formulation.

### **Market Share**

In this case, respondents were asked to indicate the percentage of flights that were domestic in their network in order to determine the market share. This would be a good source of information for operations strategy formulation. Table 4.2 gives an indication of the stiff competition and price wars among the Kenyan airlines over the domestic market where over 60% of the respondents indicated that the domestic market served over 50% of the network operated by Kenyan airlines. Less than 30% of the respondents indicated that only 24% of flights were domestic while 6% of the respondents showed that the domestic market was only about 10%.

The general indication is that the Kenyan airlines have a big domestic market as compared to regional and international markets. The increase in the domestic market is attributed to the increase in disposable income among Kenyans and the desire to travel by middle-class in the country both for leisure and business. The competitive pricing has also given leverage to the potential and existing domestic passengers in choosing the least priced airline to fly to a certain destination

**Table 4.2      Market Share**

	<b>Frequency</b>	<b>Percent</b>
less than 10%	2	6
11-30%	8	24
31-49%	3	9
above 50%	20	61

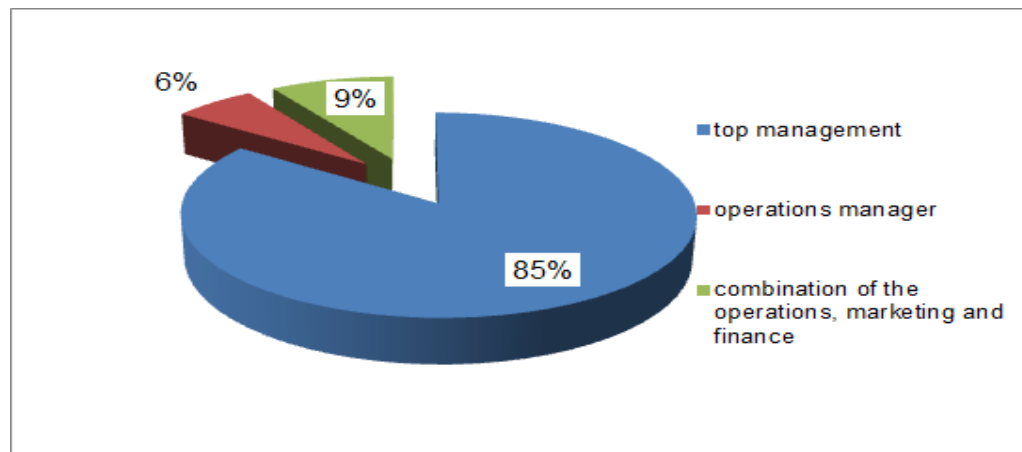
*Source: Research project*

## Operations Strategy Formulation

Respondents were asked to select the category of employees who made the long-term operational decisions in their organizations. The categories included; top management, operations manager, marketing and strategy, finance or combination of operations, marketing and finance. As illustrated in figure 4.1, 85% of the respondents indicated that operations strategy formulation and implementation was driven by top management while 6% of the respondents indicated that the operations manager drove the operations strategy formulation process. Only 9% of the respondents affirmed that operations strategy formulation was combined force between operations, marketing and finance because they inform one another.

This implied that the top-bottom approach was being used in the strategic decision making. Top management then cascades the decisions downwards to middle level managers who then further translate them into specific tasks which are undertaken at the functional level.

**Figure 4.1** Strategy Formulation Process

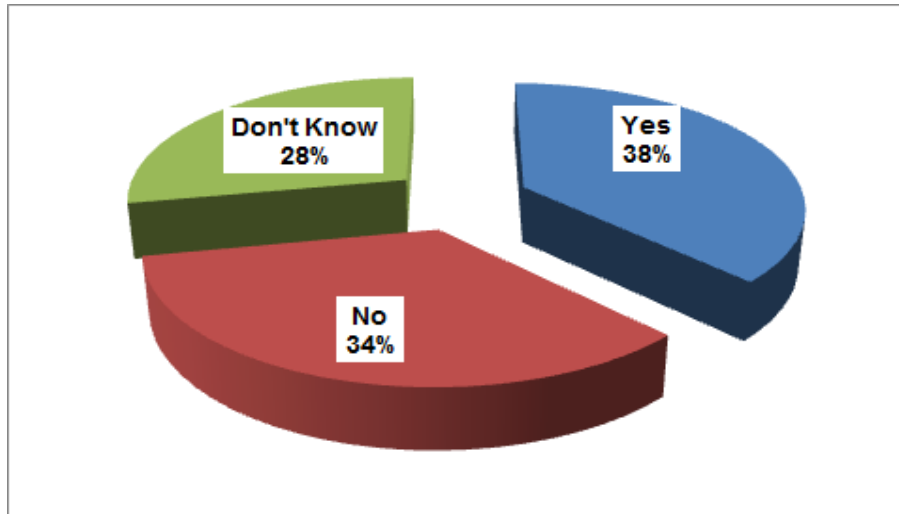


*Source: Research project*

Respondents on the other hand were asked to indicate if there existed any specific model or approach in developing an operations strategy in a “yes” or “no” manner. 28% of the respondents did not know of any specific approach to their organization’s operations strategy while 38% of the respondents knew the specific model of

approach and 34% denied there being any known approach to operations strategy formulation. This is illustrated in figure 4.2. There is general feeling that the respondents were not well versed with this subject and hence the need for training and more staff involvement in the operations strategy process.

**Figure 4.2: Model for Operations Strategy Formulation**



*Source: Research project*

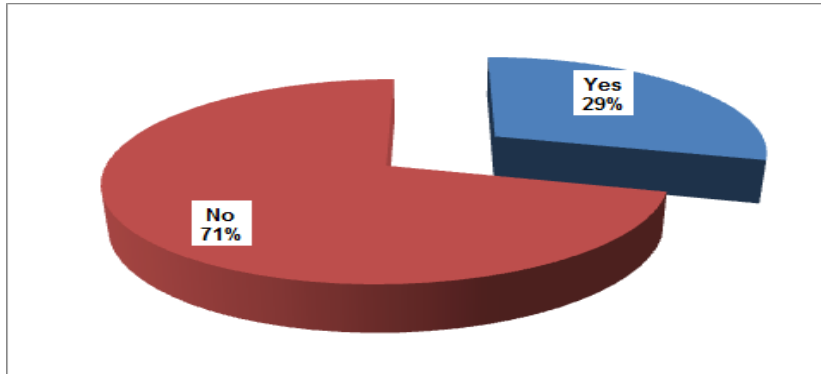
### **Environmental Protection**

Respondents were asked to indicate if their organizations had any carbon offset program in a “yes” or “no” manner. 71% of the respondents indicated that there was no carbon offset program employed by the Kenyan airlines to conserve the environment while 29% indicate that there were indeed efforts to protect the environment from depletion as illustrated in figure 4.3. Environmental conservation has become a global issue and has received a lot of attention in the recent past from all industries to reduce the greenhouse gas emissions. Kenyan airlines have engaged in programmes like the European Union Emission Trading Scheme (EU-ETS) and tree planting initiatives to reduce the carbon footprint but this is to a very small extent. In the other parts of the world, airlines have formulated operations strategies around this concept. Airlines and airplane manufacturers have chosen to invest in environmentally friendly airplanes with high fuel efficiency and low noise levels. This



has seen the manufacture and huge orders from airlines for the purchase of B787 and the A380.

**Figure 4.3 Environmental Protection Initiatives**



*Source: Research project*

#### **4.2 The Role of Operations Strategy**

The researcher sought to establish the strategic role of the operations function in the organizational success. Respondents were asked to rank the applicability of the statements in their companies using the Likert scale whether to a very large extent (1), to a large extent (2), to some extent (3), to a small extent (4) or not at all (5). This was to determine the stage in which the Kenyan airlines fall under in the Hayes and Wheelwright four-stage model.

The aggregate mean of 2.85 from table 4.4 shows that the Kenyan airlines are on the second stage of the Hayes and Wheelwright four-stage model. They are externally neutral. At this stage, organizations are guided by industry standards, benchmarking and best practices with the aim of being at par with the competition. However, there are all manner of indications that these airlines have characteristics of being internally neutral (first stage) as shown by the standard deviations in table 4.3. This means that these airlines have improved performance to the point of comparing with competitors although operations do not give significant competitive advantage but at least they allow organizations to compete effectively. They need to be aggressive and proactive in their operations strategy formulation rather than implementing what the other airlines have implemented in the hope of reducing their operational risks.

**Table 4.3 The Role of the Operations Function**

<b>Stage 1: Internally neutral</b>	<b>Mean</b>	<b>Std dev.</b>
airline does not find operations to be inward looking, reactive with little contribution to positive success	3.00	1.078
managers from other functions do not see operations as limiting their ability to work and compete effectively	2.94	0.948
airline prefers to implement what other airlines have implemented to reduce risks	2.91	1.058
airline find it impossible to manage its operations strategically as operational performance objectives are continually changing between low cost , increased flexibility and improved quality	2.41	0.756
airline is able to meet the standards imposed by their major competitors	2.41	0.875
My airline operations managers look for improvements by tackling the cause of the biggest problem	2.38	0.871
<b>Aggregate mean</b>	<b>2.68</b>	
<b>Stage 2: Externally neutral</b>		
My airline does not buy parts, materials and equipment from the same suppliers that the competitors use.	3.94	0.759
Operations strategies do not always match the business strategy since they change with the prevailing competitor environment	3.25	0.762
My airline seeks to emulate operations of the competitors by copying the best practices in the industry	2.47	0.950
My airline adheres to industry practices and standards	1.75	0.718
<b>Aggregate mean</b>	<b>2.85</b>	
<b>Stage 3: Internally supportive</b>		
My airline operations function interacts on equal terms with the other functions.	2.63	0.707
Operations give credible support to the business strategy by providing appropriate operational resources	2.38	0.976
My airline operations have overtaken those of the competitors and are now the best in the industry in Kenya and in the region.	2.34	0.827
Operations strategy is linked and derived from its business strategy	2.29	0.739
Operations performance objectives are aligned and supported by the business objectives	2.22	0.870
<b>Aggregate mean</b>	<b>2.37</b>	
<b>Stage 4: Externally supportive</b>		
Operations managers are involved in major decisions of other functions since they are responsible for continuous success.	2.78	1.099

Airline operations are proactive and innovative in driving the airline's overall objective and are one step ahead of the competition.	2.53	0.983
Airline operations is on the forefront developing best practices setting industry standards in kenya and abroad	2.47	0.983
Operations provide foundation for competitive success	2.41	0.946
Airline operations forecast likely changes in the market and develop operations-based capabilities required to competent in future market conditions.	2.34	0.745
My airline seeks to be better than the competitor and not simply copying	2.09	0.818
<b>Aggregate mean</b>	<b>2.44</b>	

*Source: Research project*

**Table 4.4 Summary of the Role of Operations Strategy**

<b>Stage</b>	<b>Aggregate mean</b>
Stage 1: Internally neutral	2.68
Stage 2:Externally neutral	2.85
Stage 3: Internally supportive	2.37
Stage 4: externally supportive	2.44

*Source: Research project*

### **4.3 The Five Operations Performance Objectives**

The researcher sought to establish what operational performance objectives that the Kenyan airlines have adopted whether cost, quality, dependability, speed or flexibility. The respondents were asked to rank the applicability of the performance objectives in their organizations using the Likert scale whether to a very large extent (1), to a large extent (2), to some extent (3), to a small extent (4) or not at all (5). From the figure 4.5, the mean ranges from 2.20 to 2.76 and small standard deviations meaning that the respondents generally agree with the statements and that their performance objects are around the areas of cost, quality, speed, dependability and flexibility. Dependability ranks the highest meaning that the airlines would rather first deliver on their promises, then look into their cost, flexibility, speed then quality in that order so as to enhance repeat business due to the competition.

There is some response towards quality control and quality assurance. The airlines have set up quality management systems and are involved in various initiatives to cut cost and reduce waste like the world-class operations and six sigma initiatives.

The analysis shows a somewhat simultaneous implementation of the five operations performance objectives. These performance capabilities enhance one another enabling operational excellence to be built in a cumulative manner. The airline industry is very dynamic in nature, highly regulated and competitive and so this synergistic approach to the performance objectives as seen by the Kenyan airlines is crucial.

**Table 4.5 The Performance Objectives**

<b>Cost</b>	<b>Mean</b>	<b>Std d</b>
My airline offers product at lower price than competitor most of the time.	2.72	1.301
My airline eliminates waste to achieve low cost and reduce the operating cost	2.16	0.920
<b>Aggregate mean</b>	<b>2.44</b>	
<b>Quality</b>	<b>Mean</b>	<b>Std d</b>
My airline uses six sigma to eliminate defects for customer satisfaction	2.68	0.832
My airline offers products and services as per specification without error	2.48	0.851
My airline has eliminated non-value adding processes to speed up processes and reduce cost.	2.44	0.801
My airline has a culture of continuous improvement through continuous learning	2.31	0.738
My airline is keen to adopt new technological innovations for process improvement	2.21	0.774
Everybody is involved in the effectiveness of QMS through training and development	2.06	1.014
My airline has a quality management system (QMS)	2.03	0.897
My airline has regular quality audits to enhance effectiveness of the QMS program.	1.84	0.808
My airline is concerned about excellent customer service.	1.71	0.693
<b>Aggregate mean</b>	<b>2.20</b>	
<b>Dependability</b>	<b>Mean</b>	<b>Std d</b>
My airline offer products and services consistently as expected by the customer	3.38	1.129
My airline seeks to deliver its services reliably just as promised	2.13	0.871

<b>Aggregate mean</b>	<b>2.76</b>	
<b>Speed</b>	<b>Mean</b>	<b>Std d</b>
Our flights always achieves on time performance	2.44	0.716
My airline has excelled in quick turn-rounds and minimal delays	2.19	0.821
<b>Aggregate mean</b>	<b>2.32</b>	
<b>Flexibility</b>	<b>Mean</b>	<b>Std d</b>
My airline has a flexible workforce to manage peak demand periods	2.63	0.707
My airline frequently introduces new routes and even new aircraft	2.50	0.803
My airline customizes products and services to meet unique customer needs	2.34	0.787
My airline has a wide range of locations where customers can be served	2.25	0.762
My airline changes volume or frequency of service as demand changes	2.16	0.808
<b>Aggregate mean</b>	<b>2.38</b>	

*Source: Research project*

**Table 4.6 Summary of Performance Objectives**

<b>Operation competitive priorities</b>	<b>Aggregate mean</b>
Dependability	2.76
Cost	2.44
speed	2.32
Flexibility	2.38
Quality	2.20

#### **4.4 Challenges Faced by Kenyan Airlines**

The respondents were asked to indicate if there were any hindrances towards effective formulation and implementation of operations strategies. The respondents were asked to rank the challenges they face as regards operations strategies in their organizations using the Likert scale whether to a very great extent (1), to a great extent (2), to moderate extent (3), to a small extent (4) or not at all (5). The challenges were further broken down into internal and external environmental challenges, economic, social and technological. The chi-square method was used to rank the various challenges. The test statistics was used to determine whether to reject or accept the null hypothesis. The p-value measures the statistical significance of the null hypothesis testing such that if it is less than 0.05, then the null hypothesis is rejected.

**Table 4.7 Challenges on Operations Strategy Development**

<b>Internal environment</b>	<b>X<sup>2</sup></b>	<b>sig</b>
Change management ‘we have always done it this way’ attitude.	16.2 <sup>a</sup>	.001
Lack of innovation culture in the organization	8.6 <sup>b</sup>	.071
Operational efficiency, performance of the right tasks by operations function	12.9 <sup>b</sup>	.012
Consistence with the business strategy (operations strategy is consistent with the business strategy)	12.8 <sup>b</sup>	.012
Consistence with the other functional strategies e.g. marketing, finance e.t.c.	7.5 <sup>b</sup>	.113
Little or no top management support of the operations strategy	8.2 <sup>b</sup>	.083
Change of company ownership and top management	12.1 <sup>b</sup>	.017
<b>Economic</b>	<b>X<sup>2</sup></b>	<b>sig</b>
Poor resource deployment and appropriate management of the same to support operations strategy.	14.4 <sup>b</sup>	.006
Matching market needs with the available operational resources	6.4 <sup>a</sup>	.098
When hefty monetary investments are required and the airline is not able	7.1 <sup>b</sup>	.132
Globalization of the airline market, opening of hubs in other regions.	5.2 <sup>b</sup>	.272
State of the economy of the country of operation	5.1 <sup>a</sup>	.166
<b>External environment</b>	<b>X<sup>2</sup></b>	<b>Sig.</b>
Government interference in the implementation of operations strategy	11.7 <sup>b</sup>	.020
Demands from strategic alliances and partnerships airlines	5.5 <sup>b</sup>	.236
Poor infrastructure sometimes leads to expensive decisions (diversions)	7.8 <sup>a</sup>	.049
Natural disasters like adverse weather conditions e.g. earthquakes, volcanic ash e.t.c	7.5 <sup>b</sup>	.113
Bilateral agreements with other governments hinders launching of some profitable routes or sustaining operations.	14.8 <sup>b</sup>	.005
<b>social</b>	<b>X<sup>2</sup></b>	<b>Sig.</b>
The labor relations within the organization and in the country.	10.5 <sup>b</sup>	.032
The prevailing political climate	7.8 <sup>b</sup>	.097
Terrorism threats and terrorism activities in Kenya and its borders	6.3 <sup>a</sup>	.098
Language barrier arising from globalization of organizations (need to employ extra manpower to address the need)	12.1 <sup>b</sup>	.017
<b>Technological</b>	<b>X<sup>2</sup></b>	<b>Sig.</b>
Internet and technological changes and improvements	10.5 <sup>b</sup>	.032

- a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 6.5.
- b. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 5.2

*Source: research project*

H0: challenges faced by the Kenyan airlines do not affect the effectiveness of the operations strategies implemented.

H1: challenges faced by the Kenyan airlines affect the effectiveness of the operations strategies implemented.

From the cross classification table 4.7, the internal and external environment and the technological changes most affected the effectiveness of operations strategies. The other specific challenges that had statistical significance from table 4.7 were: government interferences, poor airport infrastructure, bilateral agreements with other governments and poor labor relations among the Kenyan airlines.

#### **4.5 Benefits of an Effective Operations Strategy**

The researcher sought to establish if there are any benefits to an effective operations strategy. The respondents were asked to rank the benefits so far realized by stating the extent to which they agreed with the statement using the Likert scale; whether to a very great extent (1), to a great extent (2), to moderate extent (3), to a small extent (4) or not at all (5) as a result of implementing effective operations strategies. The mean of the respondents range from 2.31 to 2.63 meaning that the respondents generally agree that they have indeed achieved great benefits.

**Table 4.8 Benefits of Effective Operations Strategy**

	<b>Benefits</b>	<b>Mean</b>
1.	My airline has achieved increased profits	2.63
2.	My airline has achieved operational efficiency	2.56
3.	There is improvement of the organizational image	2.50

4.	My airline products are considered superior to those of the competitor	2.47
5.	My airline has had increased market share	2.44
6.	My airline has achieved reduced operational costs	2.31

*Source: research project*



## **CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

### **5.1 Introduction**

This research study sought to establish the operations strategies implemented and the stage where the Kenyan airlines are in relation to the Hayes and Wheelwright four-stage model; whether at the infant first stage or at the mature and competitive stage four. Below is the summary of the findings and the recommendations on the study.

### **5.2 Summary of the Findings**

Airline industry in Kenya is dominated by people who have worked for less than five years as per table 4.1. The airline experience is important in the understanding of operations strategy and that is why 28% of the respondents did not know of any approaches used in the formulation of operations strategies.

Kenyan airlines still practice the traditional top management approach towards strategic decisions. Other specific models that guide operations strategy formulation include; competition, world-class organization strategies, liaison with partner airlines to adopt best practices and operations benchmarks, anticipated aviation market environment changes and simply reacting to the market demands.

More effort need to be put by Kenyan airlines towards environmental conservation since only 29% of the respondents agreed that there were some initiatives going on while 71% of the respondents indicated that there were no environmental protection initiatives. It is a subject that is widely spoken about in the West and a lot of programs are being run to improve the environment.

The Kenyan airlines were found to be in the second stage of the Hayes and Wheelwright four-stage model; they are externally neutral with a mean score of 2.85 as compared to a mean score of 2.37 for the internally supportive stage three. However, a mean score of 2.68 was obtained for the internally neutral first stage which is very close to the mean of the second stage. The operations function seems to

have characteristics almost from every stage and therefore they need to be specific on the operations strategy adopted so as to gain competitive advantage.

Analysis of the five performance objectives shown in figure 4.5 indicated a mean ranging from 2.20 to 2.76. This means that the respondents generally agree that performance objectives of cost, quality, dependability, speed and flexibility are indeed applicable in their organizations and a simultaneous approach to the objectives may yield better performance results.

There are many challenges that are facing Kenyan airlines in formulating effective operations strategies but of the greatest impact are the environmental and technological challenges. Despite the challenges, Kenyan airlines have experienced growth in profitability although still struggling with operational cost reduction. They have also achieved operational efficiency and improved organizational image as illustrated in table 4.8.

### **5.3 Conclusions**

The success and competitiveness of an organization depends to a very great extent on the operations strategy employed and its effectiveness. But unfortunately many organizations lack this understanding.

Kenyan airlines have not put substantial efforts to protect the environment and its effects on human beings. Organizations need to be involved in initiatives like tree planting to offset the carbon footprint. A good budget should be set aside for environmental conservation.

All the operational performance objectives of cost, quality, speed, flexibility and dependability are important because they have mutual effect to organizational performance. They should be simultaneously implemented to gain leverage from the ones thought to be less important.

In analyzing the role of operations strategy, the Kenyan airlines seem to borrow characteristics from all the four stages as indicated by very close means. Stage one mean (2.68) was particularly very close to stage 2 mean of 2.85. This model was

therefore found not to distinctively identify the strategic role of operations in a coherent manner.

Kenyan airlines should develop strategies to effectively mitigate the eminent challenges faced. They need to keep abreast with the current technologies including e-ticketing, online check-in and the self service kiosks also for check-in. This requires capital spending but with appropriate strategic moves, it can be achieved.

Bilateral agreements with other governments especially in Africa has hindered the launching of some profitable routes. Incentives and good relationships can be built to create improvement in this area. Government interference in airline matters is very common and this hinders growth and performance. Together with this is the ever rising government levies and taxes which increase the airlines' operating costs. The poor airport infrastructure which is not in line with the growth strategies by some Kenyan airlines hinders the success of the operations decisions. There needs to be an upgrade of the infrastructures to allow for competitiveness and better services to the customers. The airlines should also share with the government their long-term plans so that they can move at the same pace. The internal environment needs to be well managed to enhance efficiency and improved performance of the Kenyan airlines. External environment should also be managed to mitigate its effects.

#### **5.4 Recommendations**

In order to leverage the benefits of effective operations strategy, employees should be thoroughly trained and involved in the development of operations strategies. Organizations should also review their operations strategies from time to time to remain relevant in their market by adapting best practices that will lead to competitiveness. Appropriate business forecasting should be done in the markets and develop operations-based capabilities required to compete in the future markets.

More research needs to be done on the area of operations strategy and perhaps training to enhance a good understanding of the subject. This is because operations strategy is not clearly defined for the understanding and participation of staff in the lower cadre. This brings a disconnect between top management and the functional teams. Involvement of staff in the formulation of operations strategies will lead to

effective implementation. The bottom-top (emerging strategy) approach which is operations-based will probably yield better results because in this manner, organizations will be operating in a more externally supporting manner and operations function will result into competitiveness.

### **5.5 Limitations of the Study**

One of the limitations of this study was that most of the respondents work on shift pattern and this made it difficult to distribute and collect the questionnaires as expected. It took a lot of time and effort to get the questionnaires back.

The study only focused on a convenient sample of three Kenyan airlines out of the possible 14 airlines. The three airlines were chosen because they operate scheduled passenger and cargo flights both in the domestic and regional fronts. Also, access to the airlines' operational areas is usually restricted, and so to save on time and money, the research was only done on the three main airlines. A better picture on the issue of operations strategy would have been obtained if the research was done on all the 14 airlines.

To some extent, some respondents were not able to respond to the questionnaire appropriately due to lack of good understanding of the area of operations strategy. There was also fear that they might give information that the competitors might use against them. However, much effort was put to mitigate the effects of the experienced shortcomings.

### **5.6 Suggestions for Further Research**

From this study, it is worth noting that further research on this subject is required. Some of the things that this study did not explore include:

1. The operations strategies adopted by the smaller (charter) airlines in Kenya.
2. Operations strategies adopted by the aviation industry in Kenya as compared to other countries in the region.
3. How can the airlines achieve stage four of the Hayes and Wheelwright model to achieve competitive advantage?

4. How can the airlines in Kenya use the five performance objectives model to gain a competitive edge in the aviation industry?

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## APPENDICES

### Appendix 1: Transmittal Letter

Dear Respondent,

#### **RE: OPERATIONS STRATEGIES ADOPTED BY KENYAN AIRLINES**

I am a student undertaking Masters in Business Administration (MBA) in Operations Management at the University of Nairobi. I am carrying out a research to evaluate the concept of operations strategy in selected airlines operating in Kenya with a view to establishing “**operations strategies adopted by Kenyan airlines for competitive advantage**” This is a requirement for partial fulfilment of my MBA course project at the University of Nairobi. The outcome of this study is expected to enhance airline knowledge on effective operations strategy through the available resources and operational capabilities to create competitive advantage in the dynamic business environment.

My approach will be consultative and shall endeavour to cause minimal disruption or none at all to your schedule of activities. I kindly request you to provide the required information by responding to the questions in the questionnaire. The information required is purely for academic purposes and will not be used outside this research. A copy of this research project will be made available to you upon request. I will appreciate your cooperation in this academic exercise.

Thanking you in advance.

Sincerely yours,

## **Appendix 2 : List of Airlines in Kenya**

1. Kenya Airways
2. Jetlink
3. Fly 540.
4. 748 air services
5. African Express Airways,
6. Air Kenya Express,
7. Aircraft leasing Services (ALS),
8. Astral Aviation,
9. Blue Bird Aviation (Kenya),
10. CMC Aviation,
11. Delta connection (Kenya),
12. East Africa Safari Air,
13. Safarilink Aviation

***Source: sterling investment Bank, 2009***

### Appendix 3 : Questionnaire

This is a survey conducted on selected airline operators in Kenya. The questionnaire has been designed to collect information from airline management staff for academic purposes only. Please complete the questions as instructed. The information provided shall be treated with the highest level of confidentiality and will not be displayed anywhere in my research project.

#### A. RESPONDENTS BACKGROUND INFORMATION

Where applicable, please tick (✓) the box that most applies to you

1. Name of your airline.....
2. Position of the respondent in the airline.....
3. Number of years worked in the airline  
0-5 Yrs   
6-10 Yrs   
11-20 Yrs   
Over 21 Yrs
4. What percentage of your total flight are domestic.  
Less than 10%   
11-30 %   
31-49   
Above 50 %
5. Who makes the long-term operational decisions in your organization  
Top management   
Operations manager   
Marketing and strategy   
Finance   
Combination of the operations, marketing and finance   
I don't know

6. Do you follow any specific approach or model in developing an operations strategy ? If yes, what is that approach ?

Yes  No

.....  
 .....  
 .....

7. Is your airline involved in any carbon offset program which involves the Passengers

Yes  No

(If yes) Which one.....

**B. OPERATIONS STRATEGIES ADOPTED BY KENYANA AIRLINES**

In order to have efficient operational function, an organization needs operations strategies. The level of maturity of the operations function can also be determined.

For each statement, to what extent does it apply to your organizational operations.

Tick (√) as appropriate.

- (1) To a large extent
- (2) To a large extent
- (3) To some extent
- (4) To a small extent
- (5) Not at all

		(1)	(2)	(3)	(4)	(5)
1.	My airline does not find it imposible to manage its operations strategically as operational performance objectives are continually changing between low cost, increased flexibility and improved quality.					
2.	My airline prefers to implement what other airlines have implemented to reduce risks					
3.	My airline does not find operations to be inward looking, reactive with little contribution to positive success.					

4.	Managers from other functions do not see operations as limiting their ability to work and compete effectively.					
5.	My airline is able to meet the standards imposed by their major competitors.					
6.	My airline operations managers look for improvements by tackling the cause of the biggest problem					
7.	My airline adheres to industry practices and standards					
8.	My airline does not buy parts, materials and equipment from the same suppliers that the competitors use.					
9.	Operations strategies do not always match the business strategy since they change with the prevailing competitor environment.					
10.	My airline seeks to emulate operations of the competitors by copying the best practices in the industry					
11.	Operations strategy is linked and derived from its business strategy					
12.	My airline operations have overtaken those of the competitors and are now the best in the industry in Kenya and in the region.					
13.	My airline operations function interacts on equal terms with the other functions.					
14.	Operations performance objectives are aligned and supported by the business objectives					
15.	Operations give credible support to the business strategy by providing appropriate					

	operational resources					
16.	Operations provide foundation for competitive success.					
17.	Airline operations is on the forefront developing best practices setting industry standards in kenya and abroad					
18.	My airline seeks to be better than the competitor and not simply copying					
19.	Airline operations forecast likely changes in the market and develops operations-based capabilities required to competet in future market conditions.					
20.	Airline operations is proactive and innovative in driving the airline's overall objective and are one step ahead of the competition.					
21.	Operations managers are involved in major decisions of other functions since they are responsible for continuous success.					

### C. EVALUATING OPERATIONS COMPETITIVE PRIORITIES

To excel in the development of appropriate operations strategies, an organization needs to be governed by the chosen competitive priorities of cost, quality, flexibility and dependability to remain competitive. For each statement, to what extent does it apply to your organization operational decisions. Tick (√) as appropriate.

- (1) To a large extent
- (2) To a large extent
- (3) To some extent
- (4) To a small extent
- (5) Not at all

		(1)	(2)	(3)	(4)	(5)
22.	My airline offers product at lower price than competitor most of the time.					
23.	My airline eliminates waste to achieve low cost and reduce the operating cost					
24.	My airline is concerned about excellent customer service.					
25.	My airline simultaneously seeks to achieve low cost, high quality, flexibility and speed.					
26.	My airline offers products and services as per specification without error					
27.	My airline do not offer products and services consistently as expected by the customer					
28.	Our flights always achieves on time performance					
29.	My airline has a flexible workforce to manage peak demand periods					
30.	My airline frequently introduces new routes and even new aircraft					
31.	My airline has a wide range of locations where customers can be served.					
32.	My airline changes volume or frequency of service as demand changes					
33.	My airline customizes products and services to meet unique customer needs					
34.	My airline seeks to deliver its services reliably just as promised					
35.	My airline has excelled in quick turn-rounds and minimal delays					
36.	My airline is keen to adopt new technological					

	innovations for process improvement					
37.	My airline does not consider technology as a costly venture whose benefits are usually overestimated.					
38.	My airline has eliminated non-value adding processes to speed up processes and reduce cost.					
39.	My airline has a culture of continuous improvement through continuous learning					
40.	My airline uses six sigma to eliminate defects for customer satisfaction.					
41.	My airline has a quality management system (QMS)					
42.	My airline has regular quality audits to enhance effectiveness of the QMS program.					
43.	Everybody is involved in the effectiveness of QMS through training and development					

#### **D. CHALLENGES IN DEVELOPING EFFECTIVE OPERATIONS STRATEGIES**

Kenya airlines face many challenges in the design and implementation of effective operations strategies. Rank the extent to which the following elements hinder the effectiveness of the implemented operations strategies. Tick (✓) as appropriate

- (1) To a very great extent
- (2) To a great extent
- (3) To a moderate extent
- (4) To a small extent
- (5) Not at all.

		(1)	(2)	(3)	(4)	(5)
44.	Change management 'we have always done it this way' attitude.					



45.	Poor resource deployment and appropriate management of the same to support operations strategy.					
46.	Matching market needs with the available operational resources					
47.	Operational efficiency, performance of the right tasks by operations function					
48.	Consistence with the business strategy (operations strategy is consistent with the business strategy)					
49.	Consistence with the other functional strategies e.g. marketing, finance e.t.c.					
50.	Little or no top management support of the operations strategy					
51.	Government interference in the implementation of operations strategy					
52.	Lack of innovation culture in the organization					
53.	When hefty monetary investments are required and the airline is not able					
	Demands from strategic alliances and partnerships airlines					
54.	Poor infrastructure sometimes leads to expensive decisions (diversions)					
55.	Language barrier arising from globalization of organizations (need to employ extra manpower to address the need)					
56.	Natural disasters like adverse weather conditions e.g. earthquakes, volcanic ash e.t.c					

57.	Bilateral agreements with other governments hinders launching of some profitable routes or sustaining operations.					
58.	Change of company ownership and top management					
59.	Terrorism threats and terrorism activities in Kenya and its borders					
60.	Globalization of the airline market, opening of hubs in other regions.					
61.	State of the economy of the country of operation					
62.	Internet and technological changes and improvements					
63.	The labor relations within the organization and in the country.					
64.	The prevailing political climate					

Outline any specific challenges that your airline has (is) facing in formulation and implementation of effective operations strategies.

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**E. BENEFITS OF EFFECTIVE OPERATIONS STRATEGIES**

As a result of implementing appropriate operational strategic decisions, many airlines have accrued alot of benefits. Rank the extent to which the following apply in your airline.

1. To a very great extent
2. To a great extent
3. To a moderate extent
4. To a small extent
5. Not at all.

		(1)	(2)	(3)	(4)	(5)
1.	My airline has achieved reduced operational costs					
2.	My airline has achieved increased profits					
3.	My airline products are considered superior to those of the competitor (competitive advantage)					
4.	My airline has had increased market share					
5.	There is improvement of the organizational image					
6.	My airline has achieved operational efficiency					

State any other benefits your airline is enjoying as a result of the operational strategies that have been correctly put in place.

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**Thank you for taking time to respond to this questionair**