TOWARDS SUPERIOR PERFORMANCE IN PUBLIC HOSPITALS: AN ASSESSMENT OF STRATEGIC CAPABILITIES - THE CASE OF KOMFO ANOKYE TEACHING HOSPITAL

BY

GEORGINA YEBOAH

THIS THESIS IS SUBMITTED TO THE UNIVERSITY OF GHANA, LEGON IN PARTIAL FULFILLMENT OFTHE REQUIREMENT FOR THE AWARD OF MBA DEGREE IN "HEALTH SERVICES ADMINISTRATION"

MAY 2001

DEDICATION

This work is dedicated to the glory of God, my loving husband Edward and Children, Steve, Stephanie and Ivan

DECLARATION

I declare that except for references which have been duly acknowledged, this work is the result of my own research and have not been presented in whole or part for the award of another degree elsewhere.

.....

GEORGINA YEBOAH
(STUDENT)

.....

DR. K. ANSAH OFEI
(SUPERVISOR)

.....

MR. A.A.D. OBUOBI
(SUPERVISOR)

DATE: 21st April 04

ACKNOWLEDGEMENT

I wish to empress my sincere thanks to the Almighty God for his support, guidance and wisdom accorded me in the presentation of this work.

Writing this thesis was not an easy task but with the assistance of my supervisors, Dr. K.A. Ofei and Mr. A.A.D. Obuobi, I was able to come this far. Their criticisms, suggestions, guidance and encouragement have made the work what it is today.

I also appreciate the encouragement and support of my husband Edward, who also typed and edited most of my work.

The financial support of my employer, the Ministry of Health, helped this thesis to progress. I am grateful for that.

My final thanks to the staff of Komfo Anokye Teaching Hospital for their co-operation.

ABSTRACT

Improvement in health service delivery has become an issue in recent times all over the world with Ghana not being an exception. In Ghana, Public Hospitals have come under severe media and public criticism for poor service delivery.

To be able to meet the expectation of the public, these hospitals must possess certain resources and competences. Not only should public hospital improve on their performance but should also do their best to excel in the health care industry.

This requires that the resources and competencies, which are necessary for health services delivery, must be distinct from that of others in the health service industry.

The study therefore sought to find out whether Komfo Anokye Teaching Hospital (KATH) possessed any distinct resources and competencies and how they could be exploited for superior performance.

The study employed a multi method approach of data collection. Structured questionnaires, documents and archives were used to get information on the hospital's past performance and also identify the resources and competences that Komfo Anokye Teaching Hospital possessed.

The study showed that Komfo Anokye Teaching Hospital had almost all the resources central to health service delivery as well as distinctive resources. KATH, compared with its competitors, was found to be endowed with physical resources like facilities for special cases. For example, Neonatal unit, Radiotherapy Centre, state-of-the-art X-ray

and Family planning facilities. However, the facilities at the hospital were over utilized and some of its equipment needed to be changed as they were old.

KATH had a strong human resource position as it had staff with vast expertise especially in the clinical areas. The hospital's relationship with the School of Medical Sciences of the Kwame Nkrumah contributed greatly to this advantage. The lecturers provided services through their teaching.

However, the performance of activities (competencies) was not encouraging. The resources had not been fully deployed to create competences in the performance of critical activities. From the overall assessment of KATH's competencies no unique competencies were found. In the area of Service Delivery/Operations the performance was ordinary. It would have been expected that with the good human resources position of the hospital, it would have a unique competence in this area.

As a teaching hospital which has research as part of its mission, KATH's performance in research and development was poor. It even had the personnel to undertake research. It could use research to improve on its services.

Managements of Public Hospital should not think that due to the resource constraints that they face improving performance or excelling in performance cannot be attained.

They should know their organizations by doing an internal assessment to identify strengths, which could be exploited and the weaknesses which ought to be strengthened and improved for superior performance.

TABLE OF CONTENTS

Title page.....i

Dedication.....ii

Declaration.....iii

Acknowledgement.....iv

Abstract.....v

Table of Contents.....vii

Abbreviations..... xii

List of Tables.....xiii

List of Figures.....xv

CHAPTER ONE: INTRODUCTION.....1

1.1 Background.....1

1.2 Problem Statement.....3

1.3 Research Questions.....5

1.4 Hypothesis.....5

1.5 Objectives.....5

1.6 Significance of the Study.....6

1.7 Scope and Limitation of the study.....7

1.8 Organization of Study.....7

1.9 Definition of important terms used in the study.....8

CHAPTER TWO: THEORETICAL FRANMEWORK.....10

2.1 Introduction.....10

2.2 Approaches to strategy.....10

2.3 Conceptual model for superior performance.....12

2.3.1 Strategic capability.....13

2.3.2 Positional Advantage..... 24

2.3.3 Performance outcomes.....25

2.3.4 Converting sources into superior positions and outcomes.....26

2.3.5 Identifying sources of advantage 36

2.3.6 Sustaining superiority.....40

2.4 Implication for the study of hospitals.....44

CHAPTER THREE: RESEARCH METHOLODOGY.....46

3.1 Introduction.....46

3.2 Research strategy.....46

3.3 Research setting.....47

3.4 Study population.....48

3.5 Sampling procedure.....50

3.6 Sampling characteristics.....50

3.7 Data collection methodology.....51

3.8 Pre-testing of Questionnaire.....53

3.9 Data collection limitation.....53

3.10 Data processing and analysis.....54

CHAPTER 4: RESULTS AND DISCUSSIONS.....55

4.1 Introduction.....55

4.2 Findings 55

4.2.1. Performance for the past three years..... 55

4.2.2. Resource profile of KATH.....69

4.2.3. Identification of Competitors 81

4.2.4. Unique Resources 82

4.2.5. Competencies profile of KATH.....87

4.2.6. Linkages within the hospital.....95

4.3 Discussion..... ...96

4.3.1 Past performance of KATH.....96

4.3.2 Resources.....98

4.3.3 Competencies.....101

CHAPTER FIVE: SUMMARY OF FINDINGS, RECOMMENDATIONS AND CONCLUSION.....105

5.1 Introduction.....105

5.2 Summary of findings.....105

5.2.1 Performance for the past 3 years.....106

5.2.2 Critical resources and competences and their uniqueness.....107

5.3 Recommendations.....112

5.4 Conclusion.....115

References.....117

APPENDICES.....123

APPENDIX I QUESTIONAIRE.....123

APPENDIX II Komfo Anokye Teaching Hospital-Organogram.....138

APPENDIX III Variables, Indicators and Measurements-Details.....139

APPENDIX IV Departmental objectives.....140

APPENDIX V Physical Resources Profile of KATH.....144

APPENDIX VI Types of Specialist/Specialized Staff..... 156

APPENDIX VII Competence profile of KATH.....157

APPENDIX VIII Data Set on KATH.....161

ABBREVIATIONS

A & E:	Accident and Emergency
D. AVAIL:	Drug Availability
D E N:	Dental
DIR. TON 1:	Direction to Records Office
DIR. TION 2:	Direction to Clinic/Consulting Room
ENT:	Ear, Nose and Throat
EXAMIN:	Patient Examined
HOSP AVER:	Hospital Average
INSTRUCT:	Understood Pharmacy Instructions
KATH:	Komfo Anokye teaching Hospital
KNUST:	Kwame Nkrumah University of Science and Technology
MED:	Medicine
MOH:	Ministry of Health
O&G:	Obstetrics and Gynaecology
PAED:	Paediatrics
PIMS:	Profit Impact of Marketing Strategies
POLY:	Polyclinic
RBV:	Resource-based View
RET/N. RET:	Told to Return or Not
SUB-BMC:	Sub-Budget Management Centre
SMS:	School of Medical Sciences
SURG:	Surgery
U. DELAY:	Unnecessary Delay

LIST OF TABLES

Table 3.1 Departments.....49

Table 3.2 Position in Department/Hospital.....50

Table 3.3 Grade.....51

Table 3.4 Variables, Indicators and Measurement for the Study.....53

Table 4.1 Objectives for the past three years 56

Table 4.2 Objectives achieved.....57

Table 4.3 Present objectives.....57

Table 4.4 Out-patient attendance..... 59

Table 4.5 Admissions 1998-2000.....60

Table 4.6 Out-patient satisfaction.....63

Table 4.7 Poor out-patient responses.....65

Table 4.8 Responsiveness and Reliability.....66

Table 4.9 Care.....67

Table 4.10 Physical Environment.....68

Table 4.11 Clients' perception of providers.....68

Table 4.12 Adaptability of Staff.....73

Table 4.13 Staff Commitment and Loyalty.....74

Table 4.14 Knowledge about Financial Resources.....75

Table 4.15 Reliability of Sources of Funds.....76

Table 4.16 Reputation before the Public.....78

Table 4.17 Resource Allocation.....81

Table 4.18 KATH's potential competitors.....82

Table 4.19 Critical Activities.....88

Table 4.20 Inbound Logistics.....89

Table 4.21 Operations/Service Delivery 89

Table 4.22 Marketing.....90

Table 4.23 Service.....91

Table 4.24 Firm Infrastructure.....91

Table 4.25 Human Resources Management.....92

Table 4.26 Technology Development.....93

Table 4.27 Procurement.....93

Table 4.28 Overall Assessment of Competences.....94

Table 4.29 Internal Linkages.....95

LIST OF FIGURES

Figure	2.1	Conceptual model for Superior Performance	12
Figure	2.2	The Value Chain	20
Figure	4.1	Pie Chart showing Regional Outpatient Attendance for year 2000	59
Figure	4.2	Chart Showing Regional Admissions	61
Figure	4.3	KATH Average	62
Figure	4.4	Respondents opinion on types of skills their staff have	73

CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND

The performance of an organization determines its success or failure. The improvement of performance should therefore be a way of life of organizations. The starting point is the recognition of the need which results from the recognition of a problem. In pursuit of improvement in performance, organizations do not seek to catch up with others but to outperform them. According to Porter (1996), a company can outperform rivals only if it can establish a difference that it can preserve. It must either deliver greater value to customers or create comparable value at a lower cost or do both.

Leebov (1988) asserts that service (performance) excellence is a process, not a programme. A programme has a beginning and an end. However, service excellence is a strategic way of doing business. To him, it should be valued in the culture of hospitals. It needs to be firmly installed and actively and aggressively maintained forever.

Many approaches to strategy intended towards superior performance have been propounded over the years. This was first conceived by Andrews (1971) who defined strategy as the match between what a company can do (strengths and weaknesses) within the universe of what it might do (environmental opportunities and threats). Though its power recognized, managers were not given enough insights about how to assess both sides of the organisational environment.

In the 1970s and 1980s, the external environment dominated most developments in strategy analysis and internal environment analysis was considered during strategy implementation. Tools like the Portfolio Planning, Profit Impact of Market Strategies (PIMS) and Experience Curve were also much emphasized.

In the early 1990s, the pendulum swung dramatically to consider factors inside the organization. The sources of competitive advantage were attributed to be inside the organization, which were the skills and collective learning. This approach laid less emphasis on the external environment.

However, since the mid-1990s, an approach which dwells on Andrew's (1971) framework is receiving much attention. It brings together both the external and internal environment of organisations. It helps to understand why some firms perform better than others.

The strategy literature talks about two dimensions of performance. They are financial (e.g. return on capital, shareholder wealth creation, profit growth) and market place performance e.g. market share, utilization, customer satisfaction, customer loyalty (Hunt and Morgan, 1995; Day and Wensley, 1988.). For profit businesses have superior financial performance in the form of profitability as their primary objectives. On the contrary, the most important organizational performance outcome for health care delivery is comprehensive and durable change in the mental and physical well being of people. The human centred purpose differentiates health care providers from other types of enterprises and shapes the fundamental concept of quality in health care settings. Hence, the provision of service quality and customer satisfaction appear to be the critical objectives in the strategy development process of health care organization. For this reason service quality and customer satisfaction have become important factors in the delivery of health care. Service quality is defined as the consumer's comparison between service expectations and service performance. Woodward (2000) defines quality of health care to include such characteristic as accessibility, appropriateness, effectiveness, efficiency and acceptability as well as equity. According to Arrington et al., (1995), performance is concerned with the efficiency of, effectiveness of customer satisfaction with, and value added by the sum total of what health care organization achieve through their processes, services and products.

The Ministry of Health (MOH) Ghana has undergone a lot of reforms since 1988 which are meant among other things to improve on its efficiency and enable it to provide better quality service. Since 1996, after a study on Quality Assurance confirmed dissatisfaction with existing services, the Ministry has devoted a lot of attention to quality assurance in all its curative institutions.

In addition, the Ministry has as part of its objectives the following. These have to be followed by all its health facilities:

(i) To increase geographical and financial access to health service to all people living in Ghana.

(ii) To provide better quality of care in all health care facilities and all outreach centres.

(iii) To improve efficiency at all levels of the health care system.

From the above, the MOH is more interested in public hospitals giving customer (patient) satisfaction a priority even before profitability.

The study therefore considered how service excellence could be achieved in all curative health institutions (public hospitals) through their strategic capabilities.

1.2 PROBLEM STATEMENT

People around the world are demanding greater quality in the health care they receive and accountability in the health care system. In Ghana, one would always hear listeners who phone-in during discussions on health issues on radio/television complaining about the quality of service and customer satisfaction. Patients and their relatives have begun taking legal actions against public hospitals for what they see as negligence of duty. In 1997 two separate cases at Komfo Anokye Teaching Hospital (KATH) which bordered on negligence

of duty which resulted in the amputation of the arm of a boy and the death of a male patient ended up in the courts and KATH was made to pay compensation to the relatives concerned. The current restructuring of MOH (embodied in the GHS and TH Act525) seeks to make the teaching hospitals autonomous and to be managed by boards. This is to help improve on their efficiency and effectiveness. Despite these challenges for improved performance public hospitals are faced with inadequate funds (i.e. physical constraints) created by worsening economic conditions. In their dilemma they cannot increase arbitrarily the cost of delivery. For example Korle-Bu Teaching Hospital (KBTH) in 2000 tried to do so to help improve performance but was not allowed by government to implement the new fees.

Public hospitals cannot throw their arms in despair under such circumstances. However, strategic management literature provides suggestions for the resolution of the situation. The literature sees organisations as a collection of capabilities and it is these capabilities which determine how efficiently and effectively a company performs its functional activities (Collis and Montgomery, 1995, Hunt and Morgan 1996, Day and Wensley, 1988). These capabilities which are the heart of a firms performance are subject to the interplay of fundamental market forces which are demand (does it meet customers needs?), scarcity (is it imitable or substitutable or durable?) and appropriability (who owns the profit?). It therefore follows that public hospitals and for that matter KATH, will be positioned to succeed (i.e. meet the quality care standards) if they have the best and most appropriate stocks of capabilities for their businesses, objectives, policies and strategies.

Andrews (1980) notes that subjectivity, lack of confidence and unwilling to face reality on the part of mangers make it hard for organizations to know themselves. But for the sake of self awareness, he suggests that it is necessary for an organization to identify approximately its central strength and crucial vulnerability to help it develop judgments about what it can

do and what it can do particularly well. Knowing them will also help in their proper management and sustaining them for a long-term payback.

The study therefore sought to use the strategic management approach to carry out an internal assessment of KATH to identify the stocks of capabilities which KATH possesses and which could be exploited to become a benchmarked-hospital in the Ashanti Region.

1.3 RESEARCH QUESTIONS

Hospitals provide certain services, which require them to possess certain critical resources and competences. The research therefore sought to find an answer to the following questions:

- What are these critical resources and competences
- Does KATH meet this requirement?
- How can KATH exploit their resources and competences for superior performance?

1.4 RESEARCH HYPOTHESIS

The study was conducted with the hypothesis that there are unique resources and core competencies, which KATH possess which could be exploited for superior performance.

1.5 OBJECTIVES

Generally, the research aims at assessing the resources and competencies of KATH, which could be exploited to meet the challenges in the environment for superior performance.

Specifically, the key objectives of the research were to:

i) investigate the performance of KATH for the past three (3) years.

ii) find out the resources and competences critical to health service delivery.

iii) assess the sources of advantage (in terms of resources and competences) KATH possesses

iv) determine how these sources of advantage could be exploited for superior performance

1.6 SIGNIFICANCE OF STUDY

The environment in which the public hospitals in Ghana operate has changed significantly. Many are the challenges (both opportunities and threats) that face them. Users expect more from hospitals than before. Public hospitals cannot continue with their mediocre and in some cases poor performance. They must become responsive organizations making every effort to satisfy the needs and wants of their markets. It is important for them to determine how responsive they want to be and develop appropriate systems for measuring and improving satisfaction in their market place. This is because people who come into contact with responsive organizations report high levels of satisfaction.

Moreover, complaints about limited resources have hindered them from actually taking time to understand even the little that they have and how they could be exploited for an advantage.

The study is expected to make management of these hospitals conscious of the challenges and their implications for them as well as the potential within them which must be harnessed for excellent performance.

Specifically, the conclusions are intended to help the management of KATH to begin to think of creating a unique market position in the northern sector of Ghana and particularly in the Ashanti Region. It is hoped that it will pay attention to those strengths identified and the weaknesses that are important for excellent performance.

1.7 SCOPE AND LIMITATION OF THE STUDY

The study was concerned with improving performance in public hospitals with particular interest in a teaching hospital. It did an in-depth strategic analysis of the hospital and how the findings could help achieve excellent performance.

Literature on strategic analysis relevant to the Ghanaian context was not available. Thus the study depended heavily on studies done in the field of marketing, journals and textbooks. Due to the limited time available to the researcher and the respondents, the competitive profiling of KATH against each of its most relevant competitors could not be done. However, respondents were able to make a comparative assessment with the competitors they identified.

1.8 ORGANIZATION OF STUDY

This work is organized into five (5) chapters. Chapter one gives a general introduction to the work and highlights the research questions as well as the significance of the study. It ends with an explanation of key terminologies used in the work.

Chapter two presents the theoretical framework, which touches on definition, developments in strategy and the conceptual model for the study.

In chapter three, the methodology is discussed. The main issues include data sources, collection tools and how the data so collected was analysed as well as the research setting.

The analysis, interpretation and discussion of the findings of data collected with the aid of questionnaire and documents and archives were done in chapter four.

The last chapter, chapter five, contains the summary of findings, recommendations and conclusion.

1.9 DEFINITION OF IMPORTANT TERMS USED IN THE STUDY

1. ***Strength*** – It is a resource or skill of advantage relative to competitors and the needs of the markets a firm serves or expects to serve.
2. ***Weakness*** – A limitation or deficiency in a resource or skill that seriously impeded an Organizations performance.
3. ***Unique Resources*** – They are those resources which create competitive advantage and are difficult to imitate.
4. ***Value*** – What buyers are willing to pay for what a firm provides them.
5. ***Customer Value*** – The bundle of benefits customers expect from a given product or service.
6. ***Value Activities*** – They are the physically and technologically distinct activities a firm performs.
7. ***Satisfaction*** – Refers to a state felt by a person who has experienced a performance (outcome) that has fulfilled his or her expectations. It is thus a function of relative levels and perceived performance. If the performance exceeds the expectation, the person is highly satisfied. If the performance matches expectation, the person is satisfied. If it falls short of expectations, the person is dissatisfied.
8. **Equity** – services are provided to all people who require them
9. **Accessibility** – Ready access to services is provided
10. **Acceptability** – care meets the expectations of the people who use the services
11. **Appropriateness** –required care is provided, and unnecessary or harmful care is avoided
12. **Comprehensiveness** – care provision covers all aspects of disease management from prevention to remediation, psycho-social aspects of care are considered

13. **Effectiveness**- care produces positive change in the health status or quality of life of the patient

14. **Efficiency**- high quality care is provided at the lowest possible cost

CHAPTER TWO

THEORETICAL FRAMEWORK

2.1 INTRODUCTION

This chapter discusses in detail the concept of strategic capability. It begins with the approaches to strategy; a conceptual model for superior performance and other literature relevant to the research questions.

2.2 APPROACHES TO STRATEGY

The field of strategy has largely been shaped around a framework first conceived by Andrew (1971). In his book "The concept of corporate strategy" he defined strategy as the match between what a company can do (organizational strengths and weaknesses) within the universe of what it might do (environmental opportunities and threats).

However, managers were given little insight about how to assess either side of the environment.

During the 1970s and 1980s, the external environment dominated the themes in strategy literature. During this period, most developments in strategy analysis concentrated on the industry environment of the firm and its competitive positioning in relation to rivals.

During the 1980s, tools like Portfolio Planning, the Experience Curve, PIMS and Porter's Five Force brought rigour and legitimacy to strategy at both the business-unit and corporate level (Collis and Montgomery, 1995; Grant, 1998). Top executives were judged on their ability to restructure, clutter and delayer their corporations (Prahalad and Hamel, 1990). Tools like Porter's Five Force Model showed clearly how to choose the "right industry" and within them, the most attractive competitive positions.

By contrast, strategic analysis of the firm's internal environment remained underdeveloped. According to Grant (1999), the internal environment analysis, for most part, has been concerned with issues of strategy implementation.

At the business-unit level, the pace of global competition and technological change has left managers struggling to keep up. As markets move faster and faster, managers complain that strategic planning is too static. As many big companies faced threats from smaller, less hierarchical competitors, they either suffered great setbacks or went through dramatic change. By the late 1980s, they were struggling to justify their existence.

With the introduction of new approaches to strategy like the 7 – S framework of Tom Peters and Bob Waterman (1989), core competencies and competing on capabilities, there was a re-direction from outside to inside the firm. These approaches emphasized the importance of skills and collective learning embedded in an organization and of management's ability to marshal them. This view assumed that the roots of competitive advantage were inside the organization and that the adoption of strategies was constrained by the current level of the company's resources. However, little attention was given to the external environment.

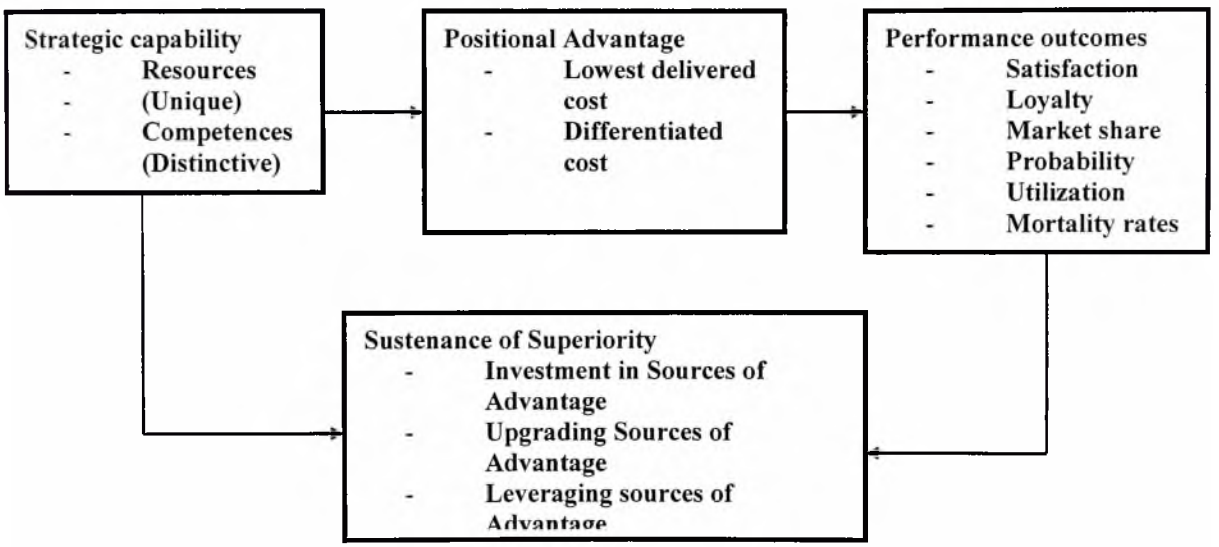
However, during the 1990s, there has been a movement forward in the interest in the role a firm's resources and competencies as the principal basis for strategy and the primary determination of a firm's performance. This is what has become known as the resource-based view (RBV) of the firm (Collis and Montgomery, 1995; Barney, 1991; Mahoney and Pandian, 1992; Peterlaf, 1993).

The RBV brings these approaches together and fulfils the promise of Andrew's framework. It combines the internal analysis of phenomena with companies with external analysis of the industry and the competitive environment. It derives its strength from its ability to explain in clear managerial terms why some firms perform better than others. It sees resources and competences as the heart of a company's competitive position subject to the interplay of

three fundamental market forces which are demand (does it meet customer needs and is it competitively superior?), scarcity (is it imitable or substitutable and is it durable?), and appropriability (who owns the profit?).

2.3 CONCEPTUAL MODEL FOR SUPERIOR PERFORMANCE

Fig 2.1



Source: Day and Wensley (1985), Hamel and Prahalad (1994)

From Figure 2.1 a firm's strategic capabilities are its unique resources and distinctive competences which are regarded as its sources of advantage in the market place. The positional and performance superiority is a consequence of relative superiority in the resources and competences as business develops. The sustainability of this superiority is contingent on barriers that make the sources difficult to imitate. Because these barriers to

imitation are continually eroding, the firm must continue to invest in upgrade and leverage to sustain or improve the advantage. A detailed discussion of the model follows:

2.3.1 STRATEGIC CAPABILITY

Strategic capability is a related concept that especially applies to the ability of an organization to be an effective competitor by levering its resources and core competencies speedily and effectively where they are needed. The possession or access to distribution networks which achieve high quality service levels is an example (Walton, 1999). Andrew, (1980) describes strategic capability as an organization's demonstrated and potential ability to accomplish against opposition of circumstances or competition, whatever it sets out to do. It is this that determines the difference in the performance of different organizations as it enables a firm to produce efficiently and/or effectively market offerings that have value for some market segments. Johnson and Scholes (1999) relate it to the resources available to an organization and the competence with which the activities of the organization are undertaken.

Johnson and Scholes (1999) assert that without the possession of the strategic capability necessary to support an organization's strategies, the success of the strategies, no matter how good they are, will be at stake. Thompson and Strickland (1990) also share the same view. They noted that internal weakness (the lack of strategic capability) negatively affected the implementation of growth strategies at U.S Sprint as the firm while expanding its business, failed to upgrade its accounting system and electronic calls routing switches necessary to handle the flood of customers. This led to a loss of $3 billion over two years.

Organizations must have a certain level of strategic capability to perform at the level required for success. Thus the first step in validating a tentative choice among several

opportunities is to determine whether the organization has the capacity to prosecute it successfully (Andrew, 1980).

The analysis of an organizations strategic capability is important in terms of understanding whether the resources and competences fit the environment in which the organization is operating and the opportunities and threats which exist. Again, new opportunities may exist by stretching and exploiting the organization's unique resources and competences either in ways which competitors find difficult to match or both (Johnson and Scholes, 1999). This requires innovation in the way organizations develop and exploit their resources and competences. To Newman et al., (1988), knowing "where we are" helps in planning for the future. A firm can build on its strengths and can circumvent or buttress its weaknesses.

Every organization has actual and potential strength and weaknesses. Since it is prudent in formulating strategy to extend or maximize the one and contain or minimize the other, it is important to try to determine what they are and to distinguish one from the other. The identification, proper management of and investment in strategic capabilities for a long-term payback are necessary. If a company lacks those necessary for crafting a strategy, its management should move fast to build them.

Andrew (1980) notes that subjectivity, lack of confidence and unwillingness to face reality on the part of managers make it hard for organizations to know themselves. But for the sake of self-awareness, he suggests that it is necessary for an organization to identify approximately its central strength and crucial vulnerability to help it develop judgments about what it can do and also what it can do particularly well.

Little help is got when after the identification of strategic capabilities a long list is generated. There is the need for an evaluation which should be done in the light of the strategies or goals of the organization and the challenges in the environment and those which can help in

the successful implementation of the strategies and goals exploited. This is because some of the capabilities may be more important than others as they count more in determining performance, in competing successfully and in forming a powerful strategy.

According to Stalk et al (1992) a capability becomes strategic only when it begins and ends with the customers. Companies with such a focus are conceived of as "a giant feedback loop that begin with identifying the needs of the customers and ends with satisfying them". Day and Wensley, (1988) who also shared the same opinion point out that the assessment of opportunities for competitive advantage must revolve around the analysis of customer benefit in the absence of which an organization's attempts to leverage its skills and resource into positional advantages are likely to prove ineffective. Coyne (1985) also points out that, a firm should not only have a skill or resource that its competitor does not have, (i.e. capability gap) but also the gap must make difference to customers. Changing conditions in an industry can lead to the need for re-evaluation of a firm's strategic capability in the light of newly emerging determinants of success in the industry.

Resources

Companies have very different collections of physical and intangible resources which make them different from others (Collis and Montgomery, 1995). These resources help an organization in the effective performance of its functional activities. Thus an organization is positioned to succeed with the best and most appropriate stocks of resources for its business and strategy. These resources could be owned, leased or rented.

A resource audit helps to identify and classify resources available to an organization both from within and outside to support its strategies. According to Johnson and Scholes (1999) an audit should not just list the resources but must assess the nature, quantity, quality and uniqueness.

The literature on resources groups it into four categories (Johnson and Scholes, 1999; Grant, 1999; Andrew, 1980; Kay, 1993). They are:

- **Physical resources**: These include machines and buildings. When assessing a firm's physical resources, factors such as age, conditions, capability and location should be considered.
- **Financial resources**: These include the sources and uses of money such as obtaining capital, managing cash, the control of debtors and creditors and the management of relationships with suppliers of money.
- **Human resource**: It involves the assessment of the number and types of different organization, adaptability of human resources and innovative capability of the people.
- Intangibles: These include corporate image, patent, brand names, good contact, employee loyalty and goodwill.

Before choosing a strategy or implementing it the resources on hand and available should be appraised. Their actual or potential capacity to take advantage of perceived market needs or cope with attendant risks should be objectively estimated.

Resources add value to organizations by taking inputs from suppliers, finance from the capital market, human resource from the labour market and converting them into finished goods and services. Effective resource analysis enables an organization to determine the core competences it requires in order to be successful (Farnham, 1999).

To outperform competitors an organization will need to have unique or superior resources (Johnson and Scholes, 1999; Collis and Montgomery, 1995; Day and Wensley, 1988). They are more tangible requirements for advantage that enable a firm to exercise its capabilities. Superior performance will therefore be based on developing a competitively distinct set of resources and developing them in a well-conceived strategy. Every firm has some resources which are unique which have the potential for producing a comparative advantage for the

firm (Hunt and Morgan, 1995).

A comparative advantage exists when a firm's resources enable it to produce a market offering that, relative to that of competitors, is perceived by some market segments to have a superior value and/or can be produced at a lower cost.

A comparative advantage in resources, then, can translate into a position of competitive advantage in the market place and superior performance – but not necessarily. Having the necessary resources is a necessary condition for achieving corporate purpose.

Hamel and Prahalad (1993) argue that organizations should not only fit their resources to the opportunities being pursued but should also endeavour to stretch their resources to exploit new opportunities in the environment. In their own words "abundant resources alone will not keep an industry giant on top when its hungrier rival practices the strategic discipline of stretch".

Competence

Competence is the ability of an organization to undertake a particularly productive activity. The literature uses the terms "capability" and "competence" interchangeably. The key distinctions are adjectives used to modify the terms. Thus Selzmick (1959) used distinctive competence to describe those things that an organization does particularly well relative to competitors and Igor Ansoff (1965) used the same term to analyse the basis of firms' growth strategies. Hamel and Prahalad (1990) coined the term core competences to distinguish those capabilities fundamental to a firm's performance and strategy. The value of the terms distinctive and core competences is that they center attention on the issue of competitive advantage.

Johnson and Scholes (1999) noted that usually good or poor performance is not found in the resource base per se but rather in the way in which resources are deployed to create

competences in the organizations activities together to sustain superior performance. Every organization has competences that enable it to carry out the activities necessary to move its products/services through the value chain. Some will be done adequately, others poorly but a few must be especially done well if the organization is to excel in performance. The literature on strategy call the competences necessary for the successful performance of an organization's activities threshold competences (Johnson and Scholes (1999) and those which underpin its competitive advantage, core distinctive competences or superior skills (Johnson and Scholes, 1999; Hamel and Prahalad, 1990; Andrew, 1980; Day and Wensley, 1988; Selznick, 1957).

Competence when used to describe performance implies that performance cannot be satisfactorily defined purely in terms of output but the way in which people approach their jobs which impacts on whether they will successfully accomplish goals (BBC Resource Book, 1994).

Hamel and Prahalad (1990) define core competence as a group of skills and technologies that enable an organization to provide particular benefit to customers. This implies that core competence is about harmonising streams of technology, organization of work and delivery of value. There is a shared understanding of customer needs and technological possibilities among various categories of workers who work together to meet these needs. Day and Wensley (1988) calling them superior skills, describe them as the distinctive capabilities of personnel that set them apart from the personnel of other competing firms. Bharadwaj et al., (1993) observe that superior skills and resources do not automatically give a business a competitive advantage but rather, they provide an opportunity to leverage skills and resources to achieve competitive cost and/or differentiation advantages.

Core competences are important in the development of strategy, as they are usually unique to the organization and therefore important in delivering sustainable advantage. Thus strategic

options that do not address core competences are less likely to contribute to strategy than those that do (Thompson and Strickland, 1990). They also provide potential access to a wide variety of markets (Hamel and Prahalad, 1990).

Johnson and Scholes (1999) noted that depending on how an organization is positioned and the strategies being pursued, the core competences will differ from organization to organization.

As with resources, besides using core competences to fit the environment in which an organization is operating, they could also be the basis on which the organization stretches into new opportunities (Johnson and Scholes, 1999). In mature markets, core competences could be exploited to develop "value-added" services and geographical spread of markets.

Core competences should be managed with special care through the focused commitment of resources, assignment of dedicated people and the continued efforts to learn supported by dramatic goals for improvement.

Identifying Competence

The literature proposed two main approaches to understanding and analyzing an organization's competences (Grant 1999; Johnson and Scholes 1999). They are:

1. A functional classification which identifies organizational competences in relation to each other of the principal functional areas of the firm e.g. corporate office, management information, research and development, manufacturing,

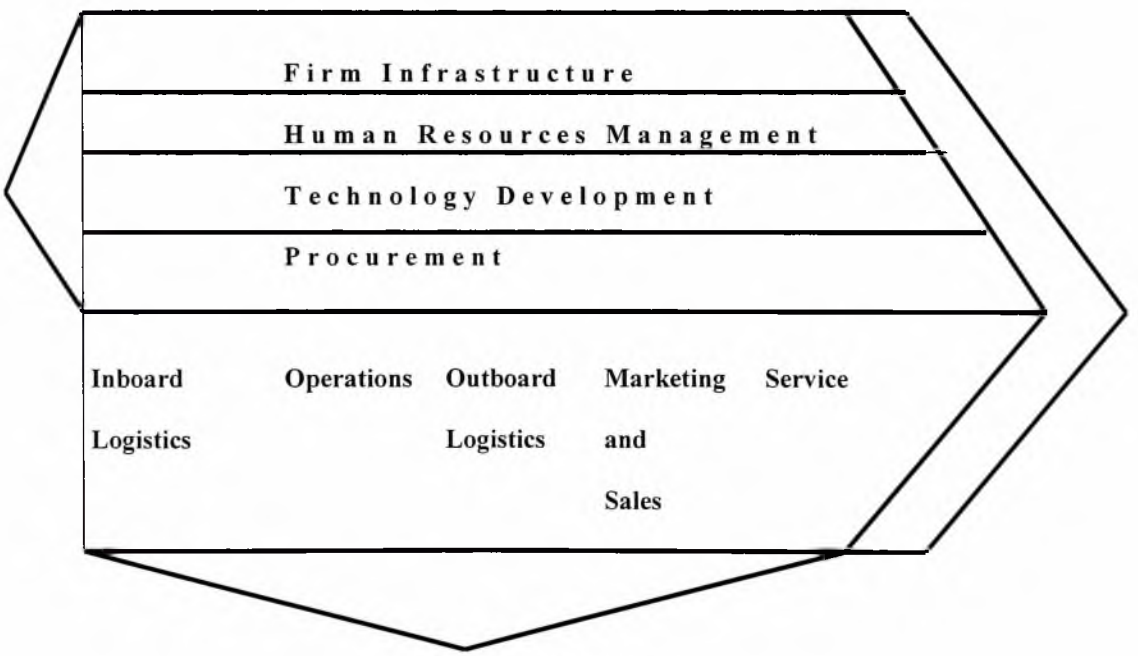
   product design, marketing, sales and distributions
2. The Value Chain Analysis. A detail discussion on the value chain is done in this literature

Value Chain Analysis

Michael Porter (1985) proposed the value chain as a company tool for identifying ways to create more value for customers. It describes the activities within and around an organization and relates them to an analysis of the competitive strength of the organization or its ability to provide value for-money products or services.

Every organization is a collection of activities that are performed to design, produce, market deliver and support its product/services. Porter is of the view that it is from the performance of these activities that competitive advantage can be derived.

Fig. 2.2 THE VALUE CHAIN



Source: Johnson and Scholes (1999)

The value chain identifies nine (9) strategically relevant activities that create value and cost in a specific business. The task of the organization is to examine its cost and performance in

each value creating activity and to look for improvements to the extent that it can perform certain activities better than competitors. The ability to perform these activities and fit them in the overall system can lead to improved performance (Porter, 1996). This indicates that value activities are the discrete building blocks of competitive advantage. The value activities are grouped into two- primary and support.

- **Primary activities-** These involve the sequence of bringing materials into the business, operating on them, sending them out, marketing them and serving them.

The five (5) main activities here are:

- Inbound logistics: activities relating to receiving, storing and disseminating inputs to the product/service. For example, materials handling, warehousing, transport, stock control.
- Operations: activities concerned with the transformation of inputs into final products/services. Example machining, packaging, assembling, testing.
- Outbound logistics: activities concerned with the collection, storage and distribution of final products to customers. For services, they may be more concerned with the arrangements for bringing customers to the service if it is a fixed location.
- Marketing and sales: activities which provide the means by which consumers/users are made aware of the product/service and are able to purchase them. Example advertising, selling, promotion, pricing.
- Service: activities which enhance or maintain the value of the product. Example installation, repairs, training, parts supply.

The primary activities most deserving of further analysis depend on the industry. What may be vital to a service firm may be different from that of a goods firm. A service firm may be

more concerned about operations and marketing and sales while a food distributor may be seeing inbound and outbound logistics as its critical areas/ processes and another firm may see all activities as critical in its performance (Crop, 1988).

- **Support activities:** help to improve the effectiveness or efficiency of primary activities. They are divided into four (4) distinct activities specific to a given industry.
    - Procurement: Refers to the purchasing of inputs used by the firm to the value chain
    - Technology development: Every value activity has a technology, even if it is know-how, procedures or technology embodied in process equipment. Example Research and Development (R&D), process development.
    - Human resource management: Involves recruiting, hiring, training, development and rewarding personnel. This area supports both primary and secondary activities.
    - Firm infrastructure: Include systems of planning, general management, finance, legal, information and management, governmental affairs and quality management. It supports the entire value chain.

Porter (1996) asserts that competitive strategy is about being different. That is, deliberately choosing a set of activities to deliver a unique mix of value. This implies that for a company to outperform competitors it has to establish a difference and also preserve it. This difference comes from the performance of the value activities.

Sources of Advantage

Unique resources and core competences are seen by researchers as the two broad sources of core competences. The two put together represent the ability of a business to do more or better than its competitors (Day and Wensley, 1988). They enable a firm to perform the various value activities at a lower cost or in a different way, thus helping in the attainment of lowest cost and/or differentiated position.

To outperform competitors an organization will need to have unique or superior resources (Johnson and Scholes, 1999; Collis and Montgomery, 1995; Day and Wensley, 1988). They are more tangible requirements for advantage that enable a firm to exercise its capabilities. Superior performance will therefore be based on developing a competitively distinct set of resources and developing them in a well-conceived strategy. Every firm has some resources which are unique which have the potential for producing a comparative advantage for the firm (Hunt and Morgan, 1995).

A comparative advantage exists when a firm's resources enable it to produce a market offering that, relative to that of competitors, is perceived by some market segments to have a superior value and/or can be produced at a lower cost.

A comparative advantage in resources, then, can translate into a position of competitive advantage in the market place and superior performance - but not necessarily. Having the necessary resources is a necessary condition for achieving corporate purpose.

Hamel and Prahalad (1993) argue that organizations should not only fit their resources to the opportunities being pursued but should also endeavour to stretch their resources to exploit new opportunities in the environment. In their own words "abundant resources alone will not keep an industry giant on top when its hungrier rival practices the strategic discipline of stretch.

2.3.2 POSITIONAL ADVANTAGE

According to Day and Wensley (1988), the positional advantages of a business are directly analogous to competitive mobility barriers that could deter a firm from shifting its strategic position. They can be broadly construed as lowest delivered cost positions and differentiated positions.

Lowest delivered cost positions: entails performing most activities at a lower cost than competitors while offering parity products.

Differentiated positions: entails perceiving a consistent difference in important attributes between the firm's offerings and its competitors or performing value- adding activities in a way that leads to perceived superiority along dimensions that are valued by customers. This can happen in diverse ways: Provision of superior service, strong brand name, and superior product quality.

Porter (1980) asserts that seldom, if ever, can a firm achieve the two positions since any attempt will lead to firms being trapped in a mediocre performance, unable to deliver either in a superior way. He calls such a situation as " being stuck in the middle".

However, this assertion has received many dissenting views being seen as a fallacy of the generic strategy. Baden-Fuller and Stopford (1992) claim that the best firms are striving all the time to reconcile the opposite.

A business has a competitive advantage when its customers purchase its services because they believe they are a better value. Customers may measure value in terms of a lower price or the benefits to be derived from a characteristic of a service. With hospital services, the competitive advantage may be the result of a lower price, but may also come from a perception that services are a higher quality or have some other characteristics to which consumers attach a higher value (Kropf 1988).

2.3.3 PERFORMANCE OUTCOMES

The strategy literature refers to two dimensions of performance (Stacy, 1993; Bhardwaj et al 1993; Hunt and Morgan 1996; Day and Wensley 1988):

(i) Financial: e.g. return on investment, shareholder wealth creation.

(ii) Market Place: e.g. customer satisfaction, market share, utilization, customer loyalty.

Day and Wensley (1988) criticize accounting conventions which are used to measure the financial performance of organizations for their

(i) inadequate handling of intangible (for example, goodwill which is a commercial asset with future value becomes an arithmetic necessity) and

(ii) improper valuation of sources of competitive advantage with investment in these sources treated as overheads without being seen as contributing towards long-term performance.

The Resource Advantage (R – A) Theory of Hunt and Morgan (1995) propose that the primary objective of firms is superior financial performance and the indicator used is profitability. The most popular performance indicators are market share and profitability. Market share is based on the premise that it helps to distinguish winners from losers' by the market share they achieve. Day and Wensley (1988) find this to be simplistic as in reality competition is played out over many time periods within evolving markets. Kotler and Clarke (1996) also argue that though customers may be dissatisfied but:

(i) Because there are not alternatives or competitors

(ii) Because of inertia in the market place as the organization might still be strong in the system, they may continue to utilize the services or patronize the goods.

Other indicators like customer satisfaction and customer loyalty are little used though they afford the considerable benefit of reflecting customer responses to positional advantages and

the product being offered. Day and Wensley (1988) believe that they should come before market share and profitability outcomes.

Firms seek a level of performance which goes beyond some referent which could be the firm's own performance in a previous time period or a set of rivals firms, an industry average or a stock of market.

The superior performance enjoyed by firms have been attributed to the possession of resources and skills which enable the firms to produce efficiently and/or effectively market offerings that give value to some market segment. These resources yield market place positions of competitive advantages which in turn brings superior performance. Researchers have pointed out the factors that have contributed to the superior efficiency and effectiveness of Japanese car companies include corporate cultures, promotion of teamwork, treatment of suppliers as partners, just-in-time inventory systems and total quality management (Hunt and Morgan 1996).

2.3.4 CONVERTING SOURCES INTO SUPERIOR POSITIONS AND OUTCOMES

The conversion of sources of advantage into pay offs has been addressed only in piecemeal. The strategy literature generally deals with how unique resources and care competences are converted into positional advantages. Porter (1985) talks about cost and differentiation drivers. On the other hand, marketers skip the relationship of the input sources of advantage (for example, relative advertising, sales and promotion expenditure) with the performance outcomes of market share or profit.

Both approaches leave a serious gap, as the conversion of positional advantages to performance outcomes is not given any attention. Day and Wensley (1988), however, do much to mediate the relationship.

- **Sources To Positions of Advantage**

The drivers of positional advantage are the high leverage skills and resources that do the most to lower cost or create value to customers. Each activity in a firm's value chain is influenced by the combined effect of these drivers (Porter 1985).

- Cost drivers

Are the structural determinants of costs of each activity that are largely under a firm's control. They are the factors that determine the cost efficiency of a firm. Cost efficiency is a measure of the level of resources needed to create a given level of value (Johnson and Scholes, 1999). The efficiency with which an organization performs its activities contributes greatly to the provision of products/services valued by customers. The management of cost is fundamental to long-term profitability for any firm operating in a competitive market. To a great extent, the strength of a business rest on its ability to deliver products/services at costs lower than competitors. The cost of products/services should not be viewed as simple accumulation of direct and allocated expenses for its production and sale, but also as an indicator of the firm's ability to manage its resources. The proper handling of these cost drivers can bring about cost reductions which in turn can give an organization an advantage. The cost drivers are discussed below:

- *Economies of Scale*

This is normally associated with manufacturing firms due to a high capital cost of plants needed to be recovered over a high volume of output. This source of cost advantage could also be in distribution or marketing in other industries. It arises from the ability to perform activities differently and more efficiently at larger volume or from the ability to pay off the cost of intangibles such as the cost of advertising and R&D over a greatest sales volume.

Service firms can exploit economies of scale by centralizing their service production while decentralizing thier customer contact (Upah 1980) or centralizing critical services and decentralizing less critical ones. This is particularly important to equipment intensive service firms.

Competitive advantage could be obtained through the ability to secure funding for large-scale investments, competence in mass consumer advertising or the ability to develop and sustain global networks of partners or distributors. Economies of scale could also be associated with selection and training of employees, purchased goods and services and investments in specialised technology and R&D to systematize the service delivery process. These activities enable a multi-unit service firm to achieve a cost advantage relative to single unit and multi-unit service firms with fewer units.

- *Supply Cost*

Clearly influences an organizations overall cost position and are particularly important to organizations which act as intermediaries where the value added through their own activities is low and the need to identify and manage input cost is critically important to success. The management of supply relationships greatly influences an organization's cost.

- *Product/Process Design*

Little attention has been paid to the role of product design to overall cost competitiveness of a company. Good contacts and relationships through out the value chain will help to get the necessary information for the analysis of the design/cost relationships. Product design can affect the cost of after sale service.

When the production process is checked cost can also be reduced. In service firms, the process involved in service provision could be reduced or standardised.

- *Experience*

Is a key source of cost advantage, which has been explained through the experience curve. It suggests that over time, the efficiency with which an organization performs an activity improves. This helps the organization to develop core competences in this activity and gain cost advantage. Experience can lower cost overtime through factors like improved scheduling, labour efficiency improvement and better tailoring of raw materials to the process.

Moreover, as an organization's members work together over a period of time the organization may realize the economies of information interchange through common training and experience and repeated interpersonal interactions (Williamson, 1971; 1975). Thus there is more efficient flow of information in the organization and transaction costs are reduced and the firm becomes more efficient as experience is gained.

However, according to Winter (1987), experience can be a source of competitive advantage only when the (i) learning is tacit and not observable in use and (ii) underlining knowledge is complex. In addition a few people should be privy to the information and employee mobility should also be low (Bharadwaj et.al., 1993).

- Drivers of Differentiation

They represent the underlying reasons why an activity is executed in a unique or superior way. They correspond directly to the sources of advantage that reside in unique resources or core competences when mobilized by an effective strategy. The main drivers are:

- *Policy Choices*

Effectiveness is a measure of the level of value, which can be created from a given level of resources. The analysis relates to how well the organization is marching its products/services to the needs of the customers, which it has identified, and the competences underpinning this effectiveness. Where competition is based on value added, the information for its assessment should be based on the customer's/users point of view of the product/service. The sources of value added are what Porter (1985) calls differentiation drivers. Principal among them are (1) policy choices about what activities to perform and how to perform them. Examples, product features and performance, level of advertising spending, quality of inputs procured for an activity, skill and experience level of personnel employed in an activity and training provided, (2) timing that gains first –mover advantages.

- *Timing that gains first-mover advantage*

Different combinations of drivers interact to determine the extent to which an activity is unique or superior to that of competitors.

- Managing linkages

Another driver which could be managed for both cost or differentiation advantage is linkages within and outside the value chain. Porter (1985) defines linkages as the relationship the way between one value activity is performed and the performance of another. Identifying linkages is a process of searching for ways in which each value activity affects or its affected by others. Competitive advantage/improved or superior performance and its sustainability are derived from the way the activities of an organization fit and reinforce one another (Porter, 1985, 1996). In her article about the extraordinary performance of a group

companies over the last ten years, Loomis (1984) described their managements as doing three things better than their competitors. Among them is the better management of the overall systems relative to competitors. In other words, they push for the better functional execution within business system and better management of both inter-relationships within the companies and the critical external inter-relationships with suppliers, customers and competitors. This makes it more difficult for competitors to imitate than when it is based on separate activities.

Two broad types of linkages exist:

- Linkages within the value chain (internal linkage)
- External linkages (vertical linkages and linkages with buyers

Linkages within the value chain

Traditionally, the work of a company is done by departments. But these departments pose some problems as they typically operate to maximize their own objectives and not that of the company. By so doing walls are created between departments leading to lack of cooperation. Such situations add to overall cost and diminish value in the product/service. For superior performance, core processes should be identified and capabilities developed to manage these processes (Kotler, 1994; Johnson & Scholes, 1999). This will help get competences which are compatible, as they will relate to the same view of what value for money means to the customer. Linkages can lead to competitive advantage through optimisation and coordination. Linkages often reflect trade-offs among activities to achieve the same overall results. Checking the performance of a value activity can help reduce the cost of other activities. The coordination of activities will help to ensure quality products/services delivery. It helps in cost reduction and enhances differentiation.

Internal linkages can take the following forms:

- Linkages between primary activities. Paying attention to inspection of purchased inputs can enhance the quality of product/service as well as reduce cost of production.
- Linkages between primary and support activities. The management of this linkage may be the basis of a core competence. For example procurement practices can impact on inbound logistics as well as the final product/service or good human resource management practices like training and development can benefit all the primary activities and the quality of product/service.
- Linkages between different support activities. Top management's support for innovation will enhance technology development.

External linkages - Performance can also be improved through the ability to compliment or coordinate the activities of the organization with those of suppliers, channels or buyers.

- Vertical linkages: Reflect interdependencies between a firm's activities and the value chains of suppliers and channels. This implies that the way suppliers and channels perform their activities can affect the cost or performance of the firm they deal with. Their value chains can be identified by examining how their behaviour affects the activities of the organization and its performance. Porter (1985) observes that due to the difficulty associated with the identification of their value chains they are often overlooked.

Kotler (1994) points out that suppliers should not be seen as cost centres or adversaries but as partners in working out profitable strategies.

Linkages with suppliers centre on issues like supplier's product design characteristics, service quality assurance, delivery procedures, order processing etc. It could also be in the form of a supplier performing an activity that the firm might otherwise undertake. For cost

reduction and quality enhancement a firm can specify its requirement for its suppliers as well as check their performance.

Linkages with channels could also take the form of location of channel's warehouse, material handling technology (which can impact on the firm's outbound logistics and packaging cost), or promotional activities. The performance of channels when checked can contribute to cost reduction and quality enhancement.

- Linkages with buyers: With the public hospitals services are sold directly to user/consumer/buyer and not through channels. What the consumer is going to receive and experience at all points of contact with a service firm is what Normann (1984) terms " service package". To gain competitive advantage the value chain of the buyer should be understood and a service package that will give the buyer satisfaction developed (Kropf 1988). Each activity along the value chain can be examined to determine the value received by the buyer. The value activities of the producing firm can affect the value created for the buyer. For example the use of a film that requires a lower dose of radiation for a mammography can increase the value of the service provided to patients by lowering their risk of developing radiation induced cancer.

Day and Wensley (1988) assert that the usefulness of the notion of drivers is difficult to assess. They believe that at best it is a descriptive tool, lacking any theory to clarify how drivers work or even how they can be isolated. It is not even clear that they all mean the same thing. For instance, some drivers of differentiation correspond directly to sources of advantage such as location, scale or level of integration. However, "policy choices", the most prominent differentiation driver are discretionary decisions about activities to perform and how to perform them. Though such decisions are critical, they are not sources of

advantage but rather mediating events that determine the degree of leverage an investment in a particular skill on resource has on cost or differentiation.

- **Converting Sources Directly to Performance**

The conversion of sources to performance has been based on the fundamental theorem of market share determination. The theorem is based on the premise that market shares of various competitors are proportional to their shares of total marketing effort (Kotler 1984).

Cook (1983) applies the theorem in the "new paradigm marketing strategies". In this model, when a firm's capacity to supply products is greater than the market demand for its advantage, then that firm has an advantage. The size of this advantage is estimated by subtracting a firm's share of strategic investments from its share of units sold. When the firm's share of spending (investments) is equal to market share an equilibrium is reached. On the contrary when investment is lower than market share of units sold, share of units eventually will decline in search of a new balance in consumer preferences.

Day and Wensley (1988) find the structure of Cook's model as making many flaws. To them, the fundamental theorem as applied by Cook has numerous restrictive assumptions which when relaxed would render the theorem virtually unmanageable for diagnostic or prescriptive purposes. They suggest other issues which should have been incorporated in the model. They include:

1) Differences between firms in their ability to spend marketing dollars effectively;
2) The likelihood of diminishing returns to additional investments;
3) The carrying over effects of past investments and

4) Synergistic effects of the marketing mix various.

They also find the basic valuation model proposed by Cook "more damaging". The valuation model presumes that the current level of investment in terms of annual cash outlays is the proper basis for assessing the level of market share a firm can sustain. The resulting market share has a net present value that relates current outlays to the discounted value of the future revenue stream (Cook 1985). They think the model potential value of past and current strategic investments.

A complete picture must reflect:

1) The link between today's investments and opportunities to executive tomorrow's options;
2) The value of first-mover advantages; and
3) The strategic choice of when and how the profit potential of a positional advantage will be realized.

- **The Payoff from Positional Advantages**

A cost or differentiation advantage should eventually lead to superior performance (market share and/or profitability). The size and duration will, however, depend on:

- Whether the value perceived by the customer and the resulting price premium are greater than the extra cost of the activities that create differentiation.
- The objectives business in terms of the trade off between higher immediate profit and increased market share gained with a penetration price.
- The difficulty the competitors will have in matching or leapfrogging the advantage. Not all industries afford equal opportunities to sustain an advantage. Those with

durable, irreversible and market-specific assets and a slow pace of technological change are much more likely to promise enduring profitability.

Unique resources and distinctive competences are not automatically converted into positional advantages, nor are positional advantages into performance outcomes. The conversions are medicated jointly by strategic choices, including objectives and entry timing and the quality to tactics and implementation.

2.3.5 IDENTIFYING SOURCES OF ADVANTAGES

- **Key Success Factors**

Day and Wensley (1988) are of the view that the managerial usefulness of any effort to assess advantage comes from the accurate identification of the handful of skills and resources that have the greatest leverage on position and performance. These are the key success factors (KSF) that must be managed very well to ensure long-run competitive effectiveness. Grant (1999) describes them as the factors that determine a firm's ability to survive and prosper in an industry. He gives two conditions which a firm must meet to survive and prosper in an industry:

- It must provide customers with what they want to buy (i.e. what do out customers want?).
- It must survive competition (i.e. what does the firm need to do to survive competition?).

Management should understand the primary reason for the existence of its firms and the underlying factor of its performance is customers. It should therefore identify the firm's customers and their needs as well as their reason for their selection of the firm instead of others. This will help the firm to determine the factors which will help it to meet the needs of the customers.

Management should also examine the basis of competition in the industry, the intensity and key dimensions as well as how it can obtain superior position. The point here is that a company can be extremely strong in areas which are unrelated to business success, either in existing or future/envisaged business areas. Such "strengths" then are not strengths at all, and they can in fact constitute a major source of weakness if a company attempts to use these to compete strategically.

- **Characteristics of Sources of Advantage**

Literature on the subject indicate that for any resource and competence to qualify as the basis for effective strategy or a source of competitive advantage (superiority) they must meet a number of challenging criteria or must pass a number of external market tests (Barney, 1991; Coyne, 1985; Stalk et al., 1992; Bharadwaj et al., 1993; Hamel and Prahalad, 1990; Collis and Montgomery, 1995). These are:

- They must provide value to the buyer. In other words, they must contribute to the production of something that customers want at a price they are willing to pay.
- They must be inimitable so that they will be rare. This will ensure the sustainability of competitive advantage and performance. Sources of advantage which can be easily imitated generate only temporary value. Since inimitability does not last forever, managers can check against this and sustain superior performance for some time by building their sources around the following:
    - Physical uniqueness example location, minerals rights, patent
    - Causal ambiguity which arises from tacitness, complexity and specificity (Ploanyi, 1962; Barney, 1986b; Nelson and Winter, 1982: Williamson, 1985). Tacitness is defined as the implicit and non-codified accumulation of

- skills that result form learning by doing. Complexity results from the interrelationships between various skills and assets. The complexity of firms of ten makes it difficult to identify their critical success factors as they cannot be explained by one factor but by linked factors. Thus they cannot be explained by one factor but by linked factors. Specificity entails the transaction – specific skills and assets that are utilized in the production process and provision of services for particular customers.

- There must not be any strategically equivalent substitutes for these sources of advantage. Barney (1991) notes that substitutability are in two forms:

  (i) where a competitor substitutes similar resources/skills that enables it to formulate and implement identical strategies.

  (ii) where very different resources/skills are used as strategic substitutes

- They must be durable. The resource/competence should be able to sustain competitive advantage over time. Collies and Montgomery (1995) states that "the longer lasting a resource is, the more valuable it will be". Most industries are so dynamic that the value of resources and competences depreciate quickly. Banking on the durability of most unique resources and competences is risky as they have limited life and will earn only temporary profits.

- The test of appropriability. According to Collis and Montgomery (1995) not all profits from a resource automatically goes to the company which 'owns' it. The value is always subject to bargaining among a host of players including customer, distributors, suppliers and employees. When strategy is based on such resources profit can be hard to capture.

- According to Johnson and Scholes (1999), when core competences depends on specific

individuals the organization becomes vulnerable to the loss of this individual. However if it is a corporate competence its sustainability is secured.

- The test of competitive superiority: Resources and competences should be assessed relative to competitors. Every company can identify one activity that it does relatively better than other activities and claim that as its core competences. In assessing core competences managers must look beyond what their organizations perform best internally to what they do better than competitors. To Collis and Montgomery (1995), the term distinctive competence is more appropriate if competence is assessed relative to competitors. The disaggregation of a firm's core competence into specifics helps to understand the sources of the firm's core competence into specifics helps to understand the sources of the firm's uniqueness and measure by analyzing the data whether it is competitively superior on those dimensions. It also helps in driving actionable implications i.e. what to do with it.

  According to Hax and Majuf (1996), a relevant competitor is one who fulfills one or more of the following conditions. From a market point of view:

  - It has a high market share;
  - It has experienced a sustained market growth;
  - It earns high levels of profitability with regard to the industry average;
  - It has demonstrated an aggressive attitude against your entire business or important segments of your business;
  - It has a highly vulnerable position against your own competitive actions.

From a functional point of view:

- It has the lowest cost structure;
- It has the strongest technical base;
- It has the strongest marketing;

- It offers the best product quality;
- It shows the highest level of vertical integration;
- It exhibits the highest level of capacity utilization.

To him, a sound strategy has to be supported by a thorough understanding of a firm's most relevant competitors, since a business strategy aims at achieving a sustainable advantage over them.

2.3.6 SUSTAINING SUPERIORITY

Sustained superior performance occurs only when firm's comparative advantage in resources and competences continue to yield a position of competitive advantage despite the actions of competitors. Since all firms seek superior performance (be it financial/market place), a firm having unique resources and core competences will have its competitors doing all that lies within their ability to neutralize its advantage. If sources of advantage could be obtained from the market place, they will do so or substitute them or find new ones which can produce value which is superior to the advantaged competitor. Hamel and Prahalad (1994) asset that market leadership today is not equal to market leadership tomorrow as the market which a company dominates today is likely to change substantially. To them there is no such thing as "sustaining" leadership; it must be regenerated again and again.

Companies that have unique resources and core competences must therefore be wise to know that the value of these resources can be eroded with time and competition (Day and Wensley, 1988; Bharadwaj et al., 1993; Collis & Montgomery, 1995). To ensure a continuous advantage, which will in turn bring sustained performance, they must be nurtured continually. If this is not done the sources of advantage may be taken for granted leading to erosion of performance. Furthermore, other companies may not be ideally positioned with competitively sources of advantage - some of their resources may be good, others may be

mediocre while others liabilities (Collis & Montgomery, 1995) truly believe that "in most companies resources do not pass the objective application of the market tests". Since the environment is not stable there is the need for firms to keep on building for the next round of competition or survival. There is therefore the need for continuous investment in upgrading and leveraging of resources.

- **Investment in resources and competences**

All resources and competences require constant monitoring and maintenance expenditures (Dierickx & Cool, 1989). This is because the barriers to imitation of these resources and competences are prone to decay in the absence of proper attention. Firms competing in the same industry are likely to continuously strive to bridge resource and competence gaps that put them at a disadvantage relative to competitors. In addition, in dynamic environments where factors like consumer preferences change, the sources of advantage underlying a firm's superior performance are prone to depreciate overtime. Under such circumstances, ensuring the durability of a firm's unique resources and competences will require investment in these sources. This will help to maintain and build both threshold and distinctive resources and competence. As Porter (1985) notes, a firm must offer " a moving target to its competitors, by reinvesting in order to continually improve its position". Not only should a firm invest in current resources and competences but also it should invest in new resources and skills for the future. All the processes that contribute to the sources of advantage should also be invested in.

Collis and Montgomery, (1995) point out that the competitive dynamics that determine an industry's attractiveness must be examined when investing in core competences. This will help managers to avoid the risk of making an investment that will yield low returns.

- **Upgrading resources**

For companies without any unusually valuable resources and core competences or have them limited or substituted by competitors, Collis and Montgomery, (1995), suggest upgrading of resources and competences. Companies must continually upgrade the number and quality of their resources and associated competitive positions in order to hold off the most inevitable decay in their value. They define upgrading as moving beyond what the company is already good at, which can be accomplished in a number of ways. This can be done by adding new resources and competences and/or by upgrading to alternative resources and competences that are threatening the company's current capabilities. They noted that the most successful example of upgrading has been adding new competences "sequentially, often over extended time period".

- **Leveraging resources**

Corporate strategies must strive to leverage resources into all the markets in which those resources and core competences contribute to comparative advantage or to compete in new markets that improve the corporate resources i.e. extending valuable resources and core competences across markets (Collis and Montgomery, 1995). The extent to which resources and competences can be extended across markets depends on their specificity. Certain specialised valuable resources (e.g. expertise in narrow scientific disciplines and secret product formulas) may lose their value quickly when moved away from their original setting since they are so specific. However highly fungible resources like cash, many kinds of machinery and general management skills can be extended to other markets. They may however, rarely constitute the key sources of comparative advantage (Collis and Montgomery, 1995). Some of the strategic errors committed in leveraging of resources are overestimating of the transferability of specific assets and capabilities; overestimation of the

ability of organizations to compete in highly profitable industries; and lack of regard of the competitive dynamics of that market. However, if done appropriately, the rewards of resource leveraging are high.

Hamel and Prahalad (1993), also argue that the key to competitive advantage is not initial resources endowment, but a firm's ability to leverage its resources and competences. They propose five ways of doing this:

- Concentrating resources through the process of: converging resources upon a few clearly defined and consistent goals (what they call "strategic intent"); focusing the effort of each group, department and business unit and individual priorities in a sequential fashion; and targeting those activities that have the biggest impact on customer's perceived value.
- Accumulating resources through: extracting lessons from the stockpile of experiences, and borrowing from other firms by learning from them or accessing their resources and competencies through alliances and outsourcing etc.
- Complementing resources by blending different types of resources in ways that multiply the value of each, and balancing to ensure that limited resources and competences in one area do not hold back the effectiveness of resources and competences in another.
- Conserving resources by utilizing resources and competences through recycling them though different products, markets and product generations; and co-opting resources through collaborative arrangements with other companies.
- Recovering resources by increasing the speed with which investments in resource generate cash returns to the firm. A key determinant of resource recovery is new product development cycle time.

2.4 IMPLICATION FOR THE STUDY OF HOSPITALS

One of the earliest attempts to examine quality (Donalbedian, 1966) led to the development of a conceptional framework that divided health care delivery into 3 aspects: Structure, process and outcome.

Donalbedian (1966) states that:

"This three-fold approach is possible because there is a fundamental, functional relationship among the three elements..... Structural characteristics of the setting in which care takes place have a propensity to influence the process of care so that its quality is diminished or enhanced. Similarly, changes in the process of care including variations in its quality, will influence the effect of care on health status, broadly defined".

Structure encompasses relative stable characteristics of hospitals and other delivery institutions. Among these factors are number and mix of personnel, types and nature of equipment and facilities and aspects of organisation such as committee structure

Process includes the activities involved in providing and receiving care. In health planning language "activities" are a combination of task or interventions that go to solve a health need or demand presented by an individual or group (Montoya-Aguilar, 1987)

One important attribute of the health care activities that constitutes an essential aspect of health system performance is their quality. Therefore, the quality of performance of hospital or any health institution may be appreciated on the basis of level of quality share by its main activities. Relevant indications include such issues as timeliness, continuity and patient compliances well as whether diagnostic and compassionate manner and the efficiency in a competence with which services are delivered. Process also deals with the interaction between the provider and the consumer. The interactive view of the process focuses on how well the service employee delivers functional quality (how care is experienced by the

consumer) as well as technical quality (competence in what is done) (Lanning and O'Connor 1990).

Outcome of care involves such aspects of health care on the health status of the patient. It results from the interaction by the structure/process. It may include such factors as quality of life, and patient satisfaction. How well the service interaction meets the consumer's expectation is of primary importance as an outcome measure.

This approach is analogous to that of strategic management.

Health Planning		**Strategic Management**
Structure	-	Resource
Process	-	Value Activities (competences)
Outcome	-	Performance outcomes

Therefore using the strategic management approach to assess the capabilities of hospitals, which could be exploited for superior performance, is on course.

Public hospitals like any other organisation need to have a business approach to their management. Though they might not have profit making as the number one priority, due to the financial constraints they face (inadequate governmental support) they should not lose sight of improving their performance. This will help to also increase their market share and get some profit to support their efficient running.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 INTRODUCTION

The study which was both exploratory and descriptive sought to gather and examine information from the Komfo Anokye Teaching Hospital (KATH) for the purpose of establishing as accurately as possible the resources and competences which the hospital possess and which could be exploited to improve its performance to make it a leader in health service delivery in Ashanti Region.

3.2 RESEARCH STRATEGY

The study used the case study approach. Robson (1993) defines case study as a strategy for doing research, which involves an empirical investigation of a particular contemporary phenomenon within its real life context using multiple sources of evidence. Considering the issues to be addressed and the objectives of the study using the case study approach will help to bring to light the strategic capabilities, which could be exploited to improve performance at KATH.

However, case studies are not without limitations. Because of their intense nature, they can usually only focus on a small number of cases. This leads to a question about the representativeness of the findings and whether they provide an adequate base for both the development and the answering of research questions.

3.3 RESEARCH SETTING

The study was carried out at the Komfo Anokye Teaching Hospital (KATH) which is the second largest hospital in this country with a bed compliment of 813.

- **Geographical Position**

The hospital can be found in Kumasi the capital town of the Ashanti Region. It is located on a hill overlooking the city of Kumasi. It is bordered on the east, south, west and north by the main Bantama-Kejetia dual carriageway, the Central Police Barracks and the Bantama Township respectively. This is the site where the legendary fetish priest of Ashanti Okomfo Anokye planted a mysterious sword which remains stuck in the soil till this day.

- **Mission**

The hospital has as its mission "to provide quality health care to the public, teach and undertake research".

- **Developments**

The hospital was completed in 1954, and initially named the Kumasi Central Hospital. The name was later changed to Komfo Anokye Hospital in honour of the legendary priest Okomfo Anokye. In 1975, in pursuance of government policy to establish a second medical school in Ghana, the hospital was upgraded to a Teaching Hospital. In addition to patient care, it was to provide the necessary teaching facilities for medical students of the Medical School of the Kwame Nkrumah University of Science and Technology, Kumasi. The school was also required to provide clinical service through teaching.

With the implementation of the Hospital Administration (PNDC) Law 209 the hospital came under the management of the Board appointed by the MOH in 1990. A Chief Administrator who sees to the implementation of the policies of the Board was appointed. *

* (See Appendix II for the organizational structure of KATH)

- **Catchment Area**

KATH serves as a referral hospital for the Ashanti, Northern, Upper East and West, Brong-Ahafo, Western, parts of Eastern and Central Regions.

- **Services**

The hospital provides the following services through its various departments:

o *Clinical*	-	Accident and Emergency, Surgery, Child Health, Obstetrics and Gynaecology, Dentistry, Ear, Nose and Throat (ENT), Ophthalmology (Eye), Medicine, Anaesthesia, Polyclinic, Radiotherapy, Psychiatry.
o *Diagnostic*	-	Radiology, Microbiology, Clinical Biochemistry, Haematology, Pathology and Blood Bank.
o *Support Services*	-	Laundry, Catering, Engineering and Estate, Stores and Supplies, Limb Fitting, Accounts, Internal Audit, Security.
o *Pharmaceutical*	-	Pharmacy.
o *Physiotherapy*	-	Physiotherapy.

3.4 STUDY POPULATION

The study was conducted at the KATH using 23 departments (see Table 3.1) most of which are directly involved in patient care and a few indirectly involved (i.e. do not deal directly with patients). The source of data collection was the staff of these departments. The study sought to find out from them the resources and competences of the hospital and how unique they considered the resources and competences in the performance of activities of the hospital relative to competitors.

TABLE 3.1 **DEPARTMENTS**

	FREQUENCY	PERCENTAGE
Accident/Emergency	2	8.0
Accounts	1	4.0
Administration	1	4.0
Anaesthesia	1	4.0
Blood Bank	1	4.0
Child Health	2	8.0
Clinical Biochemistry	1	4.0
Clinical Microbiology	1	4.0
Dentistry	1	4.0
ENT	1	4.0
Haemathology	1	4.0
Histopathology	1	4.0
Maintenance	1	4.0
Medical Records	1	4.0
Medicine	1	4.0
Obstetrics & Gynaecology	1	4.0
Pharmacy	1	4.0
Physiotherapy	1	4.0
Polyclinic (Dispensary)	1	4.0
Radiography	2	8.0
Surgery	1	4.0
Supplies and Stores	1	4.0
TOTAL	**25**	**100.0**

From the table (3.1) while some departments had 4.02% of the total respondents, others had 8.0%. For instance at the A & E department there were 2 units headed by 2 Principal Nursing Officers who did not have detail knowledge about the resources and competencies of each others unit.

3.5 SAMPLING PROCEDURE

(i) Convenience sampling was used to gather information from 27 health workers from the 23 departments. .

In order to get candid responses, top management and heads of departments were not selected. It was in only two departments where the heads were selected as they fell into the above-mentioned criteria. These heads were selected because in their departments they were the only persons who had detail knowledge of their department and the hospital. This was especially evidenced at the Medical Records and Statistics Department where the staff contacted referred the researcher to see the head to complete the questionnaire.

3.6 SAMPLING CHARATERISTICS

The sampling method used succeeded in providing respondents who were supervisors, senior departmental members and heads of departments. Tables 3.2 and 3.3 show the positions and grades of respondents.

From table 3.2, 68% of respondents were supervisors, 24% were Heads of departments and 8.0% were departmental members.

Table 3.3 indicates that respondents cut across clinical, diagnostics, pharmaceutical and administration and support areas which are the main services areas of the hospital.

TABLE 3.2 **POSITIONS IN DEPARTMENT/HOSPITAL**

POSITION	FREQUENCY	PERCENTAGE
Supervisor	17	68.0
Head of Department	6	24.0
Departmental Member	2	8.0
TOTAL	**25**	**100.0**

TABLE 3.3 GRADES

	FREQUENCY	PERCENTAGE
Principal Health Services Administrator	1	4.0
Principal Nursing Officer	5	20.0
Specialist	4	16.0
Technologist/Technician	5	20.0
Supply Officer	1	4.0
Pharmacist	2	8.0
Principal Anesthetist	1	4.0
Accountant	1	4.0
Biochemist	1	4.0
Principal physiotherapist	1	4.0
Senior Biostatistician	1	4.0
Senior Radiographer	1	4.0
Senior Medical Officer	1	4.0
TOTAL	**25**	**100.0**

3.7 DATA COLLECTION METHOD

The study was conducted using a combination of data collection methods to obtain primary and secondary data. Structured questionnaires which were self-administered were used to collect primary data. Respondents answered questions about the direction of the organization, the resources and competences of the hospital and their uniqueness. This conforms to what the literature on strategy proposes for the identification of unique resources and core competences, and the linkages between their departments and other departments.

In the design of the questionnaire, both closed-ended and open-ended questions were used

for easier and quicker responses and expression of opinions respectively. In developing a checklist for the assessment of resources and competences the factors proposed in the strategy literature (Johnson and Scholes, 1999; Grant 1998) were considered. Also, Porter's Value Chain Model and the checklist used by Hax and Majuf (1996), in his competitive profiling of Procter and Gamble (P & G) against Unilever, were partly utilized. The critical activities of KATH were classified into 8 different activities. Porter's 'Outbound logistics' was not seen as a critical activity due to the fact that the production and consumption of services are simultaneous/inseparable.

The use of documents and archives like annual reports, statistics, minutes, circulars and financial reports were sources of secondary data. Information on the performance of the hospital for the past 3 years was obtained from these sources as well as information about developments in the hospital. Addy (2000) suggests that marketing-related assessment should be customer-based using consumer research to assess customer perception about some of the activities of organizations. Thus extracts from customer satisfaction study conducted by KATH was used for this purpose.

The rationale for adopting a multi-method approach was to attempt to achieve convergence. In this way, it would be possible to compensate partly for the limitations and biases inherent in any one method. This was done with regard to suggestion by Weick (1979) and Webb and Weick (1979) that organizational behaviour is best captured and examined through multiple methods.

Table 3.4 below shows the variables, indicators and measurements for the study. See appendix (III) for details of indicators and measurements.

TABLE 3.4 VARIABLES, INDICATORS AND MEASUREMENTS FOR THE STUDY

VARIABLES	INDICATORS	MEASUREMENT
Performance	Performance for the past 3 years	Utilization, customer satisfaction, objectives, major policies, mortality rates.
Resources	Physical, Human, Financial and Intangible Resources	Quality, Quantity and Ownership of Resources.
Competences	Value activities	How particularly well they are performed relative to competitors.
Linkages	Linkages within the hospital	Inter-departmental collaboration coordination of departments.

Source: Researcher's own construct

3.8 PRE-TESTING OF QUESTIONNAIRE

The questionnaire was pre-tested in some of the departments of KATH. Medical doctors, nurses and paramedics were used. Twenty staff were used in the pre-testing. From the pre-testing, a few changes were made to the questionnaires. A few open-ended questions were changed into closed-ended questions.

3.9 DATA COLLECTION LIMITATIONS

1) Some of the respondents could not tell exactly what pertained in the competing hospital especially with regard to the competence with which activities were performed. Thus causing them to rate based on personal observations from within the hospital.
2) With those who indicated that there were no competitors of KATH, their rating of the competences were done as perceived internally. In both cases, however, respondents tried to give their fair ratings about the indicators.

3) Though not all the departments of the hospital were selected for responding to the questionnaire yet with the 22 the study was able to get the information needed to achieve its aims.

4) Out of the 23 departments, no information was obtained from one of the departments (Eye Department) thus; it not been represented in the data analysis. Full information about the Polyclinic was not obtained as the respondent went on leave and the next person who could have offered the necessary information was not available whenever the researcher went to her office.

3.10 DATA PROCESSING AND ANALYSIS

Responses from the questionnaires were coded on receipt and entered into the computer and processed using the Statistical Package for the Social Sciences (SPSS). Some of the packages used were frequencies and cross tabulations. Some of the data were presented graphically and in tables. Data on physical resources were manually processed. Data from documents on past performance were processed by hand (manually).

Furthermore, the means of the responses of the activities were found and the ratings done. This was to help determine how strong the strengths and how weak the weaknesses were. The ratings were done as follows:

High weakness (HW) – 1 **Mild Weakness (MW) -2** **Even (E) - 3**

Mild Strength (MS) – 4 **High Strength (HS) -5**

The distinctiveness of the strengths was also tested against three prominent characteristics of distinctive competences which are inimitability, substitutability and customer benefit (or valued by customers). A similar testing was performed in determining the unique resources. The distinctive strengths were finally compared with the key success factors (or critical activities) of KATH identified to determine necessary strengths and weaknesses.

CHAPTER FOUR

RESULTS AND DISCUSSIONS

4.1 INTRODUCTION

This chapter discussed the findings of the study in accordance with the study's objectives which were:

- To investigate the performance of KATH for the past three (3) years.
- To find out the resources and competences critical to health service delivery.
- To assess the sources of advantages (in terms of resources and competences) KATH possesses.
- To determine how these sources of advantage could be exploited for superior performance.

It starts with a presentation of the performance of KATH for the past 3 years, resources available to KATH, the competences with which activities are performed and ends with the linkages within the hospital.

4.2 FINDINGS

4.2.1 PERFORMANCE FOR THE PAST THREE YEARS

The study sought to look at what the hospital had been able to do in terms of improvement in quality of life and patient satisfaction as well as efforts made by the hospital towards the achievement of these. Measurements used were hospital direction, hospital utilization by patients and patients' satisfaction.

Organizational Direction

One cannot consider the performance of an organization without finding out what its

objectives were during the period under study. Therefore where the hospital hoped to be during the last three (3) years was considered.

- Objectives

The objectives that were set for the hospital for the past 3 years were used in this study as one of the measures of its performance.

***TABLE 4.1* OBJECTIVES FOR THE PAST THREE YEARS**

OBJECTIVES	FREQUENCY	PERCENTAGE
To provide quality health care	11	44.0
To improve the quality of management	1	4.0
Don't know	13	52.0
Total	**25**	**100.0**

From Table 4.1, 48% of respondents were able to tell what they thought the objectives of the hospital were for the past three years. The other 52% did not have any knowledge about them.

Concerning the achievements of the objectives as indicated in Table 4.2, respondents differed in their opinions. While some thought the objectives were achieved as there was improvement in the health service delivery (16%), others indicated that they could not be a achieved due to inadequate logistics, lack of cooperation and communication among departments and new structures to improve the quality of management not fully established (24%). 60% could however, not tell whether or not the objectives were achieved. The hospital's mortality rates indicated a drop from 32.7% in 1998 to 8.2% in 1999 and rose again to almost 10% in 2000. The rates over the years were high implying that quality of health life had not been fully achieved.

TABLE 4.2 **OBJECTIVES ACHIEVED**

ACHIEVED	FREQUENCY	PERCENT
YES	4	16.0
NO	6	24.0
DON'T KNOW	15	60.0
TOTAL	**25**	**100.0**

Attempts at crosschecking the responses from annual reports proved futile, as there were no annual reports for the period 1997 – 2000. The reason for this was given as the non-submission of departmental reports. However, from the files there was an indication of the introduction of a new management system in the hospital – The Budget Management Concept (BMC) with its sub-budget management centres – since the year 1998. Also in line with the MOH objectives for the period 2000 – 2 002 (as indicated in Chapter One under Background), KATH has also had as its objective to provide quality health care to its users since the year 2000. Measurable targets for the two objectives could, however, not be obtained.

TABLE 4.3 **PRESENT OBJECTIVES**

	YES	NO	DON'T KNOW
OBJECTIVES	28.0	-	72.0
COMMUNICATION OF OBJECTIVES TO:			
EMPLOYEES	24.0	12.0	64.0
CUSTOMERS	8.0	28.0	64.0
SHAREHOLDERS	8.0	8.0	84.0

From Table 4.3 28% indicated their knowledge of the present objectives of the hospital and gave it as

"To improve on the quality of health care".

72% could, however, not tell what the objectives of the hospital were.The critical events which gave rise to the present objectives were given as:

- Competition
- Globalisation
- Technology
- Changes in customer tastes and preferences
- Government regulations
- Medico-legal developments.

On the average, 13.3% indicated that the present objectives of KATH had been communicated and articulated to employees, customers and shareholders; 16% indicated that they had not and 70.7% could not tell. Can this be a contributory factor to the lack of knowledge of the past and present objectives on the part of employees?

Regarding the objectives of their departments, all the respondents were able to indicate them, though they were also in general terms and not measurable terms. They were also found to be convergent with that of the hospital as they all moved towards the achievement of quality health care (See Appendix IV).

However, considering the generalization and observations by the researcher during the data collection, it could be said that most departments were guided by the mission of the hospital (indicated in Chapter Three under Research Setting) in coming up with their objectives which reflect more on their functions than targets for a period (see Appendix III).

- Corporate Plan

This is a document indicating the medium or long-term direction of an organization. It contains the goals, objectives and strategies that an organization is pursuing. This was non-existent at the hospital. However, an administrator indicated that there were plans of

preparing one for the year 2002.

- Hospital utilization by patients

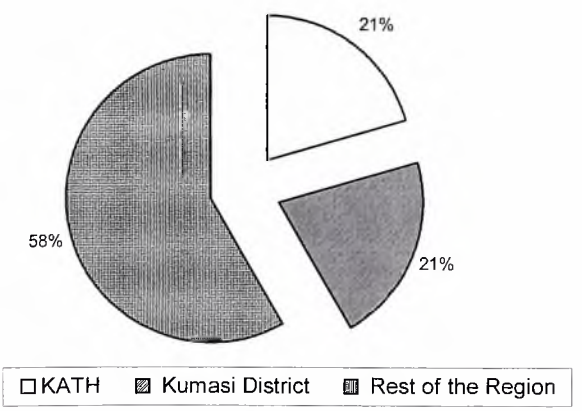
TABLE 4.4 **OUTPATIENT ATTENDANCE**

1998	1999	2000
357,407	358,623	328,566

Source: KATH Medical Records and Statistics Department

The outpatient attendance for the years 1998 – 2000 is presented in Table 4.4 above. While in 1999 the attendance increased by 0.34%, it fell by 8.4% in 2000. Though there was no indication of a specific target by the hospital, it could be said that normally, a rise rather than a fall in attendance would be expected.

FIGURE 4.1 **PIE CHART SHOWING REGIONAL OUTPATIENT ATTENDANCE FOR YEAR 2000.**



Source: Researcher's construct

From Figure 4.1, in the year 2000, outpatient attendance at KATH formed 20.6% of the total of the Ashanti Region, with the health facilities in the Kumasi District having 21% and the rest of the region having 58.4%. This is about a fifth of the region's total outpatient attendance (1,592,979*) which is quite substantial.

TABLE 4.5 **ADMISSIONS 1998 – 2000**

HOSPITAL	BED COMPLIMENT	ADMISSIONS		
		1998	1999	2000
KATH	750 (45.7%)	36987 (48.5%)	34750 (40.3%)	40601 (41.3%)
St. Patrick's (Offinso)	142 (8.7%)	3872 (5.1)	4107 (4.8%)	5062 (5.2%)
KNUST	85 (5.2%)	4076 (5.4%)	4076 (4.7%)	4759 (4.8%)
St. Michael's (Pramso)	82 (5%)	40309 (5.7%)	5698 (6.6%)	5775 (5.9%)
Regional Total	1.640*	76202	86248	98280

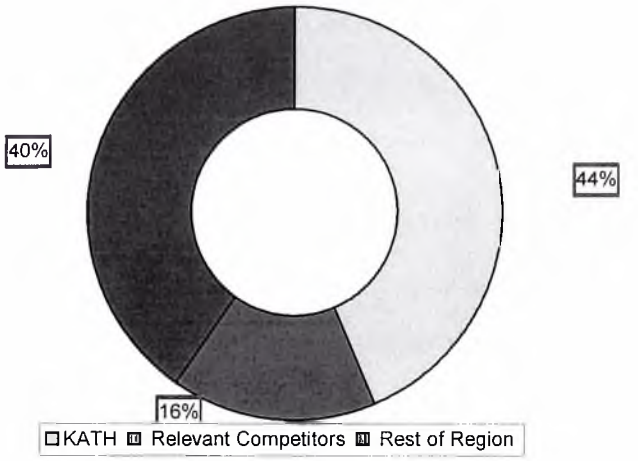
KATH'S ADMISSIONS ARE COMPARED WITH SOME OF THE POTENTIAL COMPETITORS AND THE REST OF THE REGION.

Admissions at KATH fell from 48.5% in 1998 to 40.3% in 1999 but rose a little to 41.3% in 2000. That of St. Patrick's and KNUST hospitals (two of its potential competitors) also fell in 1999 and rose slightly in 2000.

The average in-patient utilization for the period (1998 – 2000) was 43.4% for KATH and 16.1% for the potential competitors. This shows that the average in-patient utilization of KATH was greater than its competitors by a factor of 27. Also it is clear that KATH's admissions were almost half of that of the entire Ashanti Region (see Figure 4.2).

* The regional total excludes the attendance and admissions at private hospitals.

FIGURE 4.2 **CHART SHOWING REGIONAL ADMISSIONS**



- Customer satisfaction

There was no information on customer satisfaction for the period 1998 – 2000. However, a patient satisfaction survey conducted early this year (2001) was used (see Table 4.6).

CHAPTER FOUR

RESULTS AND DISCUSSIONS

4.1 INTRODUCTION

This chapter discussed the findings of the study in accordance with the study's objectives which were:

- To investigate the performance of KATH for the past three (3) years.
- To find out the resources and competences critical to health service delivery.
- To assess the sources of advantages (in terms of resources and competences) KATH possesses.
- To determine how these sources of advantage could be exploited for superior performance.

It starts with a presentation of the performance of KATH for the past 3 years, resources available to KATH, the competences with which activities are performed and ends with the linkages within the hospital.

4.2 FINDINGS

4.2.1 PERFORMANCE FOR THE PAST THREE YEARS

The study sought to look at what the hospital had been able to do in terms of improvement in quality of life and patient satisfaction as well as efforts made by the hospital towards the achievement of these. Measurements used were hospital direction, hospital utilization by patients and patients' satisfaction.

Organizational Direction

One cannot consider the performance of an organization without finding out what its

objectives were during the period under study. Therefore where the hospital hoped to be during the last three (3) years was considered.

- Objectives

The objectives that were set for the hospital for the past 3 years were used in this study as one of the measures of its performance.

***TABLE 4.1* OBJECTIVES FOR THE PAST THREE YEARS**

OBJECTIVES	FREQUENCY	PERCENTAGE
To provide quality health care	11	44.0
To improve the quality of management	1	4.0
Don't know	13	52.0
Total	**25**	**100.0**

From Table 4.1, 48% of respondents were able to tell what they thought the objectives of the hospital were for the past three years. The other 52% did not have any knowledge about them.

Concerning the achievements of the objectives as indicated in Table 4.2, respondents differed in their opinions. While some thought the objectives were achieved as there was improvement in the health service delivery (16%), others indicated that they could not be a achieved due to inadequate logistics, lack of cooperation and communication among departments and new structures to improve the quality of management not fully established (24%). 60% could however, not tell whether or not the objectives were achieved. The hospital's mortality rates indicated a drop from 32.7% in 1998 to 8.2% in 1999 and rose again to almost 10% in 2000. The rates over the years were high implying that quality of health life had not been fully achieved.

TABLE 4.2 **OBJECTIVES ACHIEVED**

ACHIEVED	FREQUENCY	PERCENT
YES	4	16.0
NO	6	24.0
DON'T KNOW	15	60.0
TOTAL	**25**	**100.0**

Attempts at crosschecking the responses from annual reports proved futile, as there were no annual reports for the period 1997 – 2000. The reason for this was given as the non-submission of departmental reports. However, from the files there was an indication of the introduction of a new management system in the hospital – The Budget Management Concept (BMC) with its sub-budget management centres – since the year 1998. Also in line with the MOH objectives for the period 2000 – 2002 (as indicated in Chapter One under Background), KATH has also had as its objective to provide quality health care to its users since the year 2000. Measurable targets for the two objectives could, however, not be obtained.

TABLE 4.3 **PRESENT OBJECTIVES**

	YES	NO	DON'T KNOW
OBJECTIVES	28.0	-	72.0
COMMUNICATION OF OBJECTIVES TO:			
EMPLOYEES	24.0	12.0	64.0
CUSTOMERS	8.0	28.0	64.0
SHAREHOLDERS	8.0	8.0	84.0

From Table 4.3 28% indicated their knowledge of the present objectives of the hospital and gave it as

"To improve on the quality of health care".

72% could, however, not tell what the objectives of the hospital were.The critical events which gave rise to the present objectives were given as:

- Competition
- Globalisation
- Technology
- Changes in customer tastes and preferences
- Government regulations
- Medico-legal developments.

On the average, 13.3% indicated that the present objectives of KATH had been communicated and articulated to employees, customers and shareholders; 16% indicated that they had not and 70.7% could not tell. Can this be a contributory factor to the lack of knowledge of the past and present objectives on the part of employees?

Regarding the objectives of their departments, all the respondents were able to indicate them, though they were also in general terms and not measurable terms. They were also found to be convergent with that of the hospital as they all moved towards the achievement of quality health care (See Appendix IV).

However, considering the generalization and observations by the researcher during the data collection, it could be said that most departments were guided by the mission of the hospital (indicated in Chapter Three under Research Setting) in coming up with their objectives which reflect more on their functions than targets for a period (see Appendix III).

- Corporate Plan

This is a document indicating the medium or long-term direction of an organization. It contains the goals, objectives and strategies that an organization is pursuing. This was non-existent at the hospital. However, an administrator indicated that there were plans of

preparing one for the year 2002.

- Hospital utilization by patients

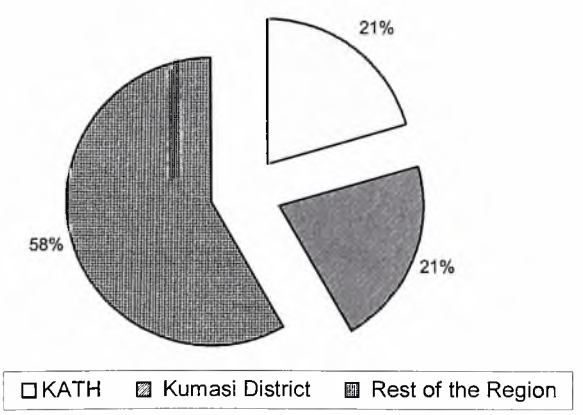
TABLE 4.4 **OUTPATIENT ATTENDANCE**

1998	1999	2000
357,407	358,623	328,566

Source: KATH Medical Records and Statistics Department

The outpatient attendance for the years 1998 – 2000 is presented in Table 4.4 above. While in 1999 the attendance increased by 0.34%, it fell by 8.4% in 2000. Though there was no indication of a specific target by the hospital, it could be said that normally, a rise rather than a fall in attendance would be expected.

FIGURE 4.1 **PIE CHART SHOWING REGIONAL OUTPATIENT ATTENDANCE FOR YEAR 2000.**



Source: Researcher's construct

From Figure 4.1, in the year 2000, outpatient attendance at KATH formed 20.6% of the total of the Ashanti Region, with the health facilities in the Kumasi District having 21% and the rest of the region having 58.4%. This is about a fifth of the region's total outpatient attendance (1,592,979*) which is quite substantial.

TABLE 4.5 **ADMISSIONS 1998 – 2000**

HOSPITAL	BED COMPLIMENT	ADMISSIONS		
		1998	1999	2000
KATH	750 (45.7%)	36987 (48.5%)	34750 (40.3%)	40601 (41.3%)
St. Patrick's (Offinso)	142 (8.7%)	3872 (5.1)	4107 (4.8%)	5062 (5.2%)
KNUST	85 (5.2%)	4076 (5.4%)	4076 (4.7%)	4759 (4.8%)
St. Michael's (Pramso)	82 (5%)	40309 (5.7%)	5698 (6.6%)	5775 (5.9%)
Regional Total	1.640*	76202	86248	98280

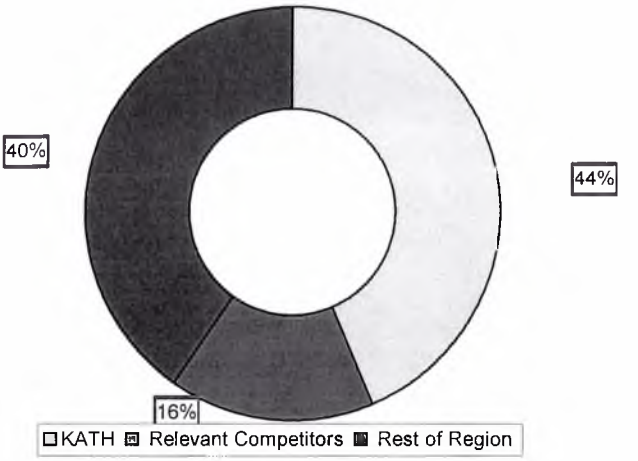
KATH'S ADMISSIONS ARE COMPARED WITH SOME OF THE POTENTIAL COMPETITORS AND THE REST OF THE REGION.

Admissions at KATH fell from 48.5% in 1998 to 40.3% in 1999 but rose a little to 41.3% in 2000. That of St. Patrick's and KNUST hospitals (two of its potential competitors) also fell in 1999 and rose slightly in 2000.

The average in-patient utilization for the period (1998 – 2000) was 43.4% for KATH and 16.1% for the potential competitors. This shows that the average in-patient utilization of KATH was greater than its competitors by a factor of 27. Also it is clear that KATH's admissions were almost half of that of the entire Ashanti Region (see Figure 4.2).

* The regional total excludes the attendance and admissions at private hospitals.

FIGURE 4.2 **CHART SHOWING REGIONAL ADMISSIONS**



- Customer satisfaction

There was no information on customer satisfaction for the period 1998 – 2000. However, a patient satisfaction survey conducted early this year (2001) was used (see Table 4.6).

FIGURE 4.3

SOURCE: KATH CUSTOMER SATISFACTION SURVEY RE (2000)

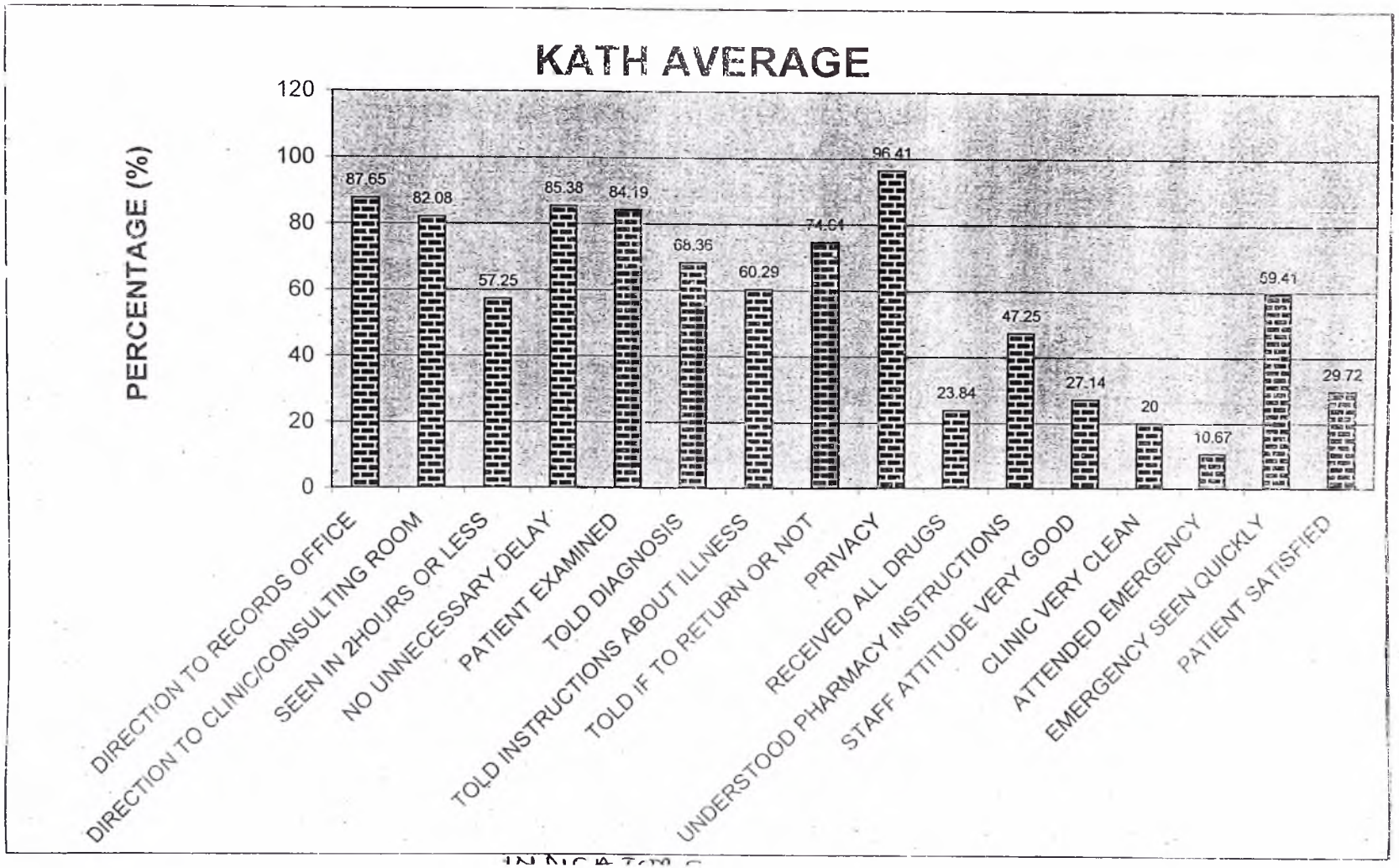


TABLE 4.6 OUTPATIENT SATISFACTION

FINDINGS AND CONCLUSIONS

Based on the computations, the results obtained are as depicted in the following tables.

Findings of Patient Satisfaction Survey

S/BMC	DIR.TION	DIR.TION	WAIT.TIM	U. DELAY	EXAMIN.	TOLD DIA	INSTRUCT	RET./N.RE	PRIVACY	D. AVAIL.	PHA. INST	STAFF AT	HOSP. CL	EMERG.	EMERG. 2	OVERALL	No. Resp
A&E	92	87	98	14	79	69	58	92	108	45	102	42	28	10	7	41	111
%	82.88	78.38	88.29	12.61	71.17	62.16	52.25	82.88	97.30	40.54	91.89	37.841	25.23	9.01	70	36.94	
DEN	98	108	90	3	103	84	85	72	108	34	41	37	30	9	3	35	111
	88.29	97.30	81.08	2.70	92.79	75.68	76.58	64.86	97.30	30.63	36.94	33.33	27.03	8.11	33.33	31.53	
POLY	141	139	66	30	128	73	45	83	146	18	71	70	41	21	15	67	147
	95.92	94.56	44.90	20.41	87.07	49.66	30.61	56.46	99.32	12.24	48.30	47.62	27.89	14.29	10.20	45.58	
ENT	111.0	108	85	11	113	86	69	93	114	4	16	17	12	9	8	29	117
	75.51	73.47	72.65	9.40	96.58	73.50	58.97	79.49	97.44	3.42	13.68	14.53	10.26	7.69	88.89	24.79	
EYE	103	65	28	31	107	88	68	70	109	20	30	5	3	11	8	11	111
	92.79	58.56	25.23	27.93	96.40	79.28	61.26	63.06	98.20	18.02	27.03	4.50	2.70	9.91	72.73	9.91	
MED/S	96	96	54	14	74	58	64	95	100	42	88	43	41	12	7	44	104
	92.31	92.31	51.92	13.46	71.15	55.77	61.54	91.35	96.15	40.38	84.62	41.35	39.42	11.54	58.33	42.31	
SUR/S	103	96	44	19	89	99	97	101	107	26	34	13	9	17	14	12	120
	85.83	80	36.67	15.83	74.17	82.5	80.83	84.17	89.167	21.67	28.3	10.83	7.5	14.2	82.35	10	
TOTAL																	821
AVER	87.65	82.08	57.25	14.62	84.19	68.36	60.29	74.61	96.41	23.84	47.25	27.14	20.00	10.67	59.41	28.72	

SOURCE KATH CUSTOMER SATISFACTION SURVEY REPORT (2000)

The hospital average on the whole was low in waiting time (57.25), cleanliness (20.0), staff attitude (27.14), drug availability (23.85) and pharmacy instructions (74.25).

Users who went to the pharmacy were used with the drug availability indicator. It was observed that all the essential drugs were available at the pharmacy during the survey. It was therefore concluded that the drugs which were not available were possibly those outside the essential drug list.

The percentage of clients who were very satisfied with the hospital's services was very low (23.7%). Its Eye Clinic recorded the lowest for its overall customer satisfaction (9.9%). Also 4.5% and 2.7% found the clinic's staff attitude to be good and the clinic clean respectively. In addition, its waiting time was also high as patients (74%) had to spend over 2-4 hours before being seen.

Areas of high hospital average included privacy (96.41%), no unnecessary delays (85.38%), direction to Records Office not difficult (87.65%) and directions to Clinic/Consulting Room (82.08%) as well as patients examined 984.19%).

Poor responses from patients were not overlooked (see Table 4.7). They were in respect of important indicators like drug availability (those who did not go to the pharmacy at all), staff attitude (poor staff attitude), hospital cleanliness (dirty environment) and overall satisfaction (unsatisfactory).

TABLE 4.7 **POOR OUTPATIENT RESPONSES**

S/BMC	D. AVAIL	STAFF ATT.	HOSP. CL.	OVERALL SATIS.
A & E (No.)	4.00	11.00	12.00	12.00
%	3.60	9.91	10.81	10.81
DEN (No.)	63.00	3.00	3.00	10.00
%	56.76	2.70	2.70	9.01
POLY (No.)	48.00	16.00	10.00	8.00
%	32.65	10.88	6.80	5.44
ENT (No.)	31.00	2.00	2.00	4.00
%	26.50	1.71	1.71	3.42
EYE (No.)	31.00	4.00	6.00	7.00
%	27.93	3.60	5.41	6.31
MED/S (No.)	21.00	6.00	6.00	9.00
%	20.19	5.77	5.77	8.65
SUR/S (No.)	56.00	8.00	4.00	3.00
%	46.67	6.67	3.33	2.50

Source: KATH Patient Satisfaction Survey Report (2000)

The hospital's average on patients who found the hospital's services unsatisfactory was 6.59% which is on the high side. The highest overall unsatisfactory service was recorded by the Accident and Emergency Unit (10.8%). The Polyclinic recorded the highest in poor staff attitude of 10.88%.

This implies that for every 100 patients who attend the hospital about 7 are not satisfied with the hospitals services which is a very big number and should be a matter of concern.

- *In-patient survey*

The areas looked at were:

- Responsiveness and Reliability – response time (prompt response to clients' needs, organization and efficiency of care and communication).

- Care – relates to empathy and assurance (knowledgeable and courteous, polite, reassuring and sympathetic, inspiring, trust and confidence).
- Environmental Impact – refers to the directly observable characteristics of the health care environment (clean, tidy environment, comfort of surroundings).

TABLE 4.8 **RESPONSIVENESS AND RELIABILITY**

			OBGY	SURG	PAED	MED	HOSP. AVER
Number of people interviewed	Total:	265	51	81	45	88	
Average length of stay in hospital (Days)			9.00	29.60	8.18	13.70	
INFORMATION							
Clients were informed of:			%	%	%	%	%
Their illness			80.39	72.84	55.56	70.45	69.81
Tests to be done			52.94	79.01	77.78	89.77	74.88
Examinations to be done			72.55	85.19	97.78	87.50	85.75
Results of Tests and Examinations explained to them.			47.06	53.09	37.78	47.73	46.41
Prescribed Medication explained to them.			98.04	77.78	91.11	96.59	90.88
Clients were given sufficient information concerning:							
Ward/hospital rules/routine			82.35	62.96	73.33	77.27	73.98
Where to direct their inquires			56.86	46.91	55.56	51.14	52.62
The Physician responsible for their care			90.20	66.67	64.44	82.95	76.07
ACCESSIBILITY							
Clients had no difficulty:							
Contacting physician			82.35	66.67	80.00	82.95	77.99
Contacting nurses			94.12	75.31	91.11	90.91	87.86
Locating places in the hospital			94.12	74.07	91.11	97.73	89.26
Clients:							
Were treated satisfactorily within reasonable time			94.12	79.01	88.89	95.45	89.37
Were visited by doctor/doctors at lease once a day			66.67	70.37	88.89	73.86	74.95
Could discuss problems with doctor(s)			94.12	74.07	91.11	95.45	88.69

Source: KATH Patient Satisfaction Survey Report (2000)

The information flow, which is supposed to be an important factor in the interaction process, has some pitfalls. Less than 50% of clients received an explanation of their test results and only 52.6% knew where to direct their concerns. This state can lengthen response time and lead to adverse occurrences. It is however, noteworthy that over 80% were treated

satisfactorily within reasonable time. Access to physician was not very satisfactory. The hospital's overall average on responsiveness and reliability (77.04%) was quite good.

TABLE 4.9 **CARE**

				OBGY	SURG	PAED	MED	HOSP. AVER
Number of people interviewed		Total:	265	51	81	45	88	
Average length of stay in hospital (Days)				9.00	29.60	8.18	13.70	
Staff:				%	%	%	%	%
Introduced themselves to clients				25.49	18.52	13.33	14.77	18.03
Responded to needs of clients				88.24	77.78	88.89	89.77	86.17
Were courteous to clients				82.35	64.20	80.00	88.64	78.80
Clients:								
Received all prescribed medication from hospital pharmacy				76.47	27.16	62.22	48.86	53.68
Had confidence in staff competence and skill				100.00	82.72	88.89	94.32	91.48
Relatives stayed by them				21057	60.49	91.11	42.05	53.80
Nurses				94.12	66.67	40.00	84.09	71.22

Source: KATH Patient Satisfaction Survey Report (2000)

Confidence of clients in staff competence was as high as 91.5% and on the average the staff were quite courteous to the clients (78%). Response to clients' needs was also quite encouraging at 86%. However, drug availability and staff introducing themselves to clients were not encouraging. It could be said that the staff of the hospital were quite empathetic and assuring.

TABLE 4.10 **PHYSICAL ENVIRONMENT**

	OBGY	SURG	PAED	MED	HOSP. AVER
Number of people interviewed Total: 265	51	81	45	88	
Average length of stay in hospital (Days)	9.00	29.60	8.18	13.70	
Staff:	%	%	%	%	%
Considered the ward temperature satisfactory	88.24	59.26	11.11	84.09	60.67
Complained of odor in ward	27.45	39.51	33.33	21.59	30.47
Found bathroom very clean	27.45	1.23	2.22	21.59	13.12
Found toilet very clean	25.49	1.23	0.00	18.18	11.23
Considered meals supplied very satisfactory	5.88	0.00	0.00	12050	4.60
Considered the ward to be very clean	15.69	9.88	0.00	21.59	11.76
Were not disturbed by mosquitoes at night	72.55	59.26	71.11	64.77	66.92
Were not disturbed by flies during the day	60.78	74.04	84.44	65.91	71.30
Were not disturbed by visitors during the day	76.47	75.31	66.67	81.82	75.07
Were not disturbed by staff during the day.	90.20	88.89	95.56	78.41	88.26

Source: KATH Patient Satisfaction Survey Report (2000)

Like the outpatient survey, the hospital average for the physical environment was 43.3% which is not satisfactory. Meals supplied to patients were not found very satisfactory (4.6%). The cleanliness of ward facilities like toilets, bathrooms and wards all fell below 15%.

TABLE 4.11 **CLIENTS' PERCEPTION OF PROVIDERS**

	OBGY	SURG	PAED	MED	HOSP. AVER
Number of people interviewed Total: 265	51	81	45	88	
Average length of stay in hospital (Days)	9.00	29.60	8.18	13.70	
Clients perceived Staff:	%	%	%	%	%
To work under stress	7.84	38.27	17.78	6.82	17.6
To find their work stimulating	98.04	82.72	88.89	95.45	91.2
Workload to be heavy	47.06	32.10	37.78	42.05	39.2
As having a positive attitude towards their work	96.08	80.25	91.11	89.77	89.8
Had a common objective – good care for patients	98.04	77.78	93.33	93.18	90.5
Overall assessment of service to be very Satisfactory	21.57	1.23	0.00	19.32	10.5

Source: KATH Patient Satisfaction Survey Report (2000)

Health care workers usually complain of heavy workload and the stress associated with the work. Interestingly, the clients did not see it as such. They saw them as having a positive attitude towards their work.

The overall assessment of the hospital's service by in-patients was not encouraging as only 10.5% found it to be very satisfactory. With the department of Paediatrics none of the respondents found its services very satisfactory.

4.2.2 RESOURCE PROFILE OF KATH

A resource profiling/auditing identifies and classifies the resources that an organisation owns or can access to support its strategies. It attempts to assess the quality of resources available, nature of those resources, and the extent to which the resources are unique. The study assessed the types of resources which KATH possessed and which were categorized into physical, human, financial and intangible.

Physical resources

For the detail analysis of the physical resources, their quantities, quality and ownership see Appendix V. The major equipment, facilities, beds and cots of the various service areas were assessed.

Clinical – Equipment and facilities in the Department of Medicine were in good condition. Its diagnostic equipment were big in size, but considering the utilization most of the facilities were found to be over utilized. At the Obstetrics and Gynaecology department (O & G) with the exception of the cardiothocograph, most equipment were not in very good state. Some like the diathermy machines and the resuscitaire were old. Facilities like the theatres, labour ward, in-patient wards and ultra sound services were over-utilised.

Accident and Emergency (A & E) operating theatre equipment and facilities were in good condition, have normal capacity except the theatre recovery ward which was small. At the casualty unit, the conditions of the facilities at the recovery wards were poor. Except its P.O.P room, the capacities of all other facilities were small.

Furthermore, anaesthetic machines were in a good shape and so were those at the department of Child Health (Paediatrics). However, the facilities of the latter were over-utilised and its wards needed attention. Moreover, the equipment and facilities at the surgery and oral health (dentistry) departments were in a good state and enjoyed normal utilization.

In addition, at the ENT department, equipment and facilities were over-utilised with its mastoidectomy set being outmoded. The locations of all facilities were easily accessible to users.

Finally, most of the beds and cots were in poor conditions.

Diagnostic – The quality of almost all the equipment in the laboratories was good. Even those above ten (10) years were still in good conditions. The issue of adequacy of equipment did not arise. Respondents, however found their laboratories to be small and welcomed bigger facilities. One of the respondents complained about the sterility of the Microbiology laboratory. This was due to the absence of air-conditioners which had led to the leaving of all doors ajar. Conditions in all the laboratories were rated as either poor or satisfactory. Since the Histopathology laboratory was a little separated from the other laboratories and the main hospital, locating it became difficult for some patients. With the exception of the parasitology laboratory, the other two laboratories under the Microbiology department were not easily located by users.

Physiotherapy – The equipment and facilities were all in a good state. However, considering their utilization, most equipment were being over-utilised and all facilities were small in

capacity/size. Accessibility to the department was difficult, especially for cardio-vascular accident (stroke) patients, as they had to climb some stairs before getting to the department. A modern and spacious physiotherapy was being put up at the time of the study.

Pharmaceutical – The equipment of the department were outmoded with some being beyond repairs. There were a lot of drugs which the hospital could prepare itself to reduce the cost of drugs but was limited by the equipment at its manufacturing unit. The various dispensaries – outpatient and in-patient were located at the patient service areas and were easily accessible to patients.

Administration and Support Services – There were facilities which provide support services for those directly involved in health service delivery. The Maintenance Department had well-equipped workshops and ensured the maintenance and repairs of hospital equipment and other facilities. The stand-by generators did not supply power to the entire hospital, when there were black outs, but to only very sensitive service areas. The Administration and Accounts Department could be said to have the necessary tools/equipment for their work. However, the photocopiers in both departments were not in a very satisfactory state. This impeded the smooth movement of work.

The Medical Records and Statistics Department was in the process of being computerized. Its patient cards issuing points were all located near the various consulting rooms. The Supply and Stores Management Department did not have quality equipment and facilities as well as air-conditioners and computers. Almost all its equipment and facilities were more than 15 years, in poor state and small in capacity.

All the equipment and facilities were owned by the hospital except the ultra-sound at the O & G department and some of the equipment in the Clinical Biochemistry Department which were owned by the School of Medical Sciences. With the ultra sound service the proceeds went to the Medical School.

Human resources

Human resources are the productive services that human beings offer to a firm in terms of the skills, knowledge, reasoning and decision making abilities. Their assessment involves the number and types of different organisational members, their adaptability and innovative capabilities (Grant 1998).

Skills

Staff of KATH were highly endowed with the necessary skills for the performance of their duties and also had the necessary knowledge about their jobs (i.e. understood what their jobs entailed). 96% of respondents attested to this fact.

From Fig. 4.4 100 % of respondents indicated that staff of their departments had technical skills. 60 %, 48 %, 40 % and 92 % said that their staff had managerial, computer, clerical and innovative skills respectively. 88 % also indicated that some of their staff were unskilled It was noted that the hospital had started a computerization programme and was therefore providing training for those who would be utilizing/operating the computers. Departments without clerical skills depended on the General Administration for such services.

FIGURE 4.4 **RESPONDENTS OPINION ON TYPES OF SKILLS THEIR STAFF HAVE**

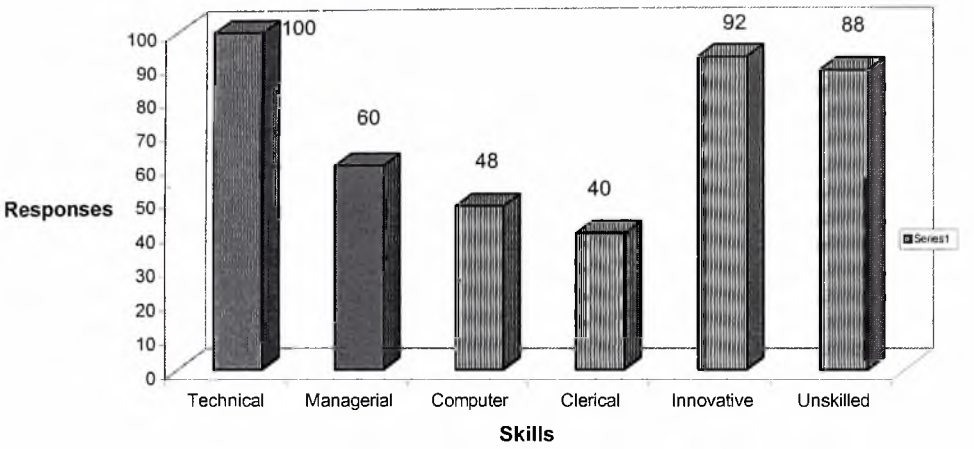


TABLE 4.12 **ADAPTABILITY OF STAFF**

RESPONSE	FREQUENCY	PERCENTAGE
Very Adaptable	10	40.8
Adaptable	12	48.0
Not very Adaptable	3	12.0
Not Adaptable	0	0.0
Total	25	100

From Table 4.12, the adaptability of the staff of KATH was encouraging as they were able to move in line with the new developments in the health sector. 40.8% and 48% thought that their staff were very adaptable and adaptable respectively

TABLE 4.13 **STAFF COMMITMENT AND LOYALTY**

RESPONSE	FREQUENCY	PERCENTAGE
Very Devoted	5	20.0
Devoted	10	40.0
Fairly Devoted	10	40.0
Not Devoted	0	0.0
Total	25	100.0

While 20% of respondents thought staff were very devoted, 40% and 40% also thought staff were devoted and fairly devoted respectively. Current records of labour disputes available at the hospital indicate that there had been agitations which led to strike actions in some cases by doctors and nurses against either management or the government. Some of the reasons were about working conditions, payment of allowances and accommodation. To the workers, reasons for these agitations and even strike actions had all been genuine. However, all avenues for the resolutions of the grievances were never exhausted before the strike actions were embarked upon.

Key Staff

All the key staff in the organization were under management's direct control except most of the medical consultants/specialists and the scientists who were employees of the Kwame Nkrumah University of Science and Technology (KNUST). They doubled as lecturers of the University and health service providers of the Hospital.

Some of these key staff also served as heads of the clinical and diagnostic departments. The problem management had with them was proper supervision. As lecturers and heads of departments at the School of Medical Sciences of the University, very little time was available to them to do proper supervision at the hospital. The time factor also affected the

health service provision. For instance, some respondents indicated that because they were not always available when needed, the hospital management did not proceed smoothly. Again, the hospital management did not have the power to discipline these staff when they failed to respond to duty.

Financial resources

In assessing the financial resources of KATH the study considered the following:

- Major sources of funds and their reliability
- Uses of funds
- Financial policy
- Financial plan(s)

TABLE 4.14 **KNOWLEDGE ABOUT FINANCIAL RESOURCES**

LEVEL OF KNOWLEDGE	FREQUENCY	PERCENTAGE
Knowledgeable	4	16.0
Not very knowledgeable	7	28.0
Don't know	14	56.0
Total	25	100.0

An interesting thing that came out of the assessment of the financial resources was respondents' knowledge about them. It came out that while 16% knew a lot about the financial management of the hospital, 28% had some knowledge and 56% did not have any knowledge (see Table 4.14). Though it was not an issue being looked for but its occurrence was noteworthy. This is so because as organizational members whose efforts lead to the generation of funds for the organization and who depend on the hospital for inputs they

should know about other sources and their reliability and the uses of funds. The knowledge helps to prevent speculations and also leads to commitment on the part of staff.

Major sources of funds and reliability

The hospital's major sources of funds were:

- Government of Ghana (GOG)
- Internally-Generated Funds (IGF)
- Donor Pool Fund (DPF)

Though respondents differed on the percentages of the various sources of funds, the financial statements over the years indicated that GOG had always been more than half of the total revenue of the hospital, followed by IGF and then DPF.

TABLE 4.15 **RELIABILITY OF SOURCES OF FUNDS**

Sources	Very Reliable (%)	Reliable (%)	Not Very Reliable (%)	Not Reliable (%)	Don't Know (%)	Row Total (%)
GOG	12.5	75	12.5	0.0	0.0	100
IGF	50	25	0.0	0.0	25.5	100
DPF	12.5	25	0.0	0.0	12.5	100

None of the sources was found to be "not reliable". They all had some level of reliability. 75% of the respondents viewed GOG as reliable and 12.5% and another 12.5% as very reliable and not very reliable respectively. The reason given for its being "very reliable" was the fact that it was government's responsibility to provide funds for the running of the hospital and therefore did that all the time. The timing of the release of funds was given as the reasons for its not being very reliable as there were always delays especially during the

first and last quarters of the financial years. Those who viewed it as "reliable" based it on the two reasons above.

With IGF, 50% of respondents saw it as very reliable and 25% as reliable. Data available indicated that whenever, there was a prolonged strike action, there were losses in IGF. In 1998 the strike action by Junior Doctors in Ghana in December resulted in revenue loss of ¢120 million to the hospital. It was observed that the IGF had been the source that the hospital depended on when there were delays in the release of the GOG.

An Accountant intimated that the availability of the DPF depended on the Ministry of Health's Donor partners honouring their pledges. Thus making it not very reliable.

Uses of Funds

The hospital funds were used to incur the following broad expenditure items:

- Personal Emoluments
- Traveling and Transport
- General Expenditure
- Maintenance, Repairs and Renewals
- Stores and Supplies
- Capital Expenditure
- Drugs
- Other Expenditure

Financial Policy and Plan

The hospital did not have a financial policy. However, it had had short-term (yearly) financial plans for the years 1999, 1998, 1997. From their financial report and accounts for 1998 it was indicated that the hospital was able to achieve the plan for the year.There were

no financial plan for 2000 and 2002.

Management of Creditors

Since 1998, KATH had been able to streamline the handling of its creditors. It first streamlined its procurement practices by introducing the tender system and buying as and when necessary. It was able to reduce its payment period from 180 days before 1998 to 45 – 60 days in 1998. This had given it a good reputation before its creditors.

Intangible resources

These include corporate image, product image (brand names), patents employee loyalty, networks (relationships) and goodwill. The study considered the hospitals reputation before the public, relationships and access to low cost supplies.

TABLE 4.16 **REPUTATION BEFORE THE PUBLIC**

RESPONSE	FREQUENCY	PERCENTAGE
EXCELLENT	2	8.0
GOOD	10	40.0
SATISFACTORY	11	44.0
NOT GOOD	2	8.0
TOTAL	25	100.0

From Table 4.16 the highest responses fell between good (40%) and satisfactory (44%). From a radio programme recently (i.e. in 2000) undertaken by the hospital to ascertain the perception of the public about the hospital, it came out that there was confidence in the ability of the providers to offer good quality care. However, the public did not find the providers responsive (i.e. willing to help customers and provide prompt service), empathetic

and courteous. It was this negative perception of the providers that had given the hospital not very good reputation before the public.

Relationships

Customers

The hospital had two main customers – the general public and the Ashanti Goldfields Company Ltd. (AGC). The relationship between the hospital and the general public was "basic" (Rust et al. 19960. In other words, there was no lasting relationship established as after the transaction, both parties went their way. However, with the A.G.C. Ltd. it was more "reactive" in nature as the hospital had offered to respond to the AGC's needs when it had any problem.

Other Hospitals/Institutions

The hospital had links with the Kwame Nkrumah University of Science and Technology. Whilst its School of Medical Sciences used the hospital's facilities for the training of medical students, it also rendered services in the form of patient care and others to the hospital. The hospital benefited from the services of some of these lecturers who were mostly consultants/specialists. Certain departments at the hospital also had links with hospitals and University in Europe and the U.S.A. with whom joint researches and training programmes were done. The Haematology Department had link with the St. George's Hospital Medical School (U.K) in the areas of staff training, joint research and assistance in research. The Biochemistry Department had established a network with Emory University (U.S) in the area of sharing of medical problems and achievements. Finally, the Surgery and Accident and Emergency Departments had networks with the Utah University Hospital (U.S), Harvest Africa (U.S) and the University of Holm (Germany) in the areas of staff training and the

performance of major special surgeries which the hospital did not have the capacity (in respect of skill or resources or both) to perform.

Suppliers

The hospital saw its suppliers of goods and services as partners as they both worked together for their mutual benefit. The hospital undertook registration of suppliers every year, monitored their performance and offered financial assistance to its suppliers of services like those undertaking maintenance or constructional works (for later refund) and regular meetings held with them as well as proved itself creditworthy. In other words, its had proved to be a reliable and supportive partner. The suppliers on their part offered favourable credit facilities and assistance in cases of emergencies when the hospital fell on them (i.e. suppliers of goods). However, meetings are not held with suppliers of goods.

Low Cost of Supplies

Since it is a big institution which makes major purchases quarterly, it was able to enjoy low cost of suppliers from bulk purchase discounts and its tender system. It also had access to the Ministry of Health's Central Medical stores where the prices of some of the items were relatively cheaper.

Resource Allocation

TABLE 4.17 **RESOURCE ALLOCATION**

RESPONSE	FREQUENCY	PERCENTAGE
Even	5	20.0
Unbalanced	12	48.0
Don't know	8	32.0
Total	25	100.0

To the majority of respondents, the allocation of resources (physical, financial, human) in the organization was unbalanced (48%). Some of these people could not tell the basis of resource allocation but others thought it depended on who could "shout louder" to influence management. To those who perceived the allocation as even (20%) they gave the basis as volume of work, size and needs of department/unit.

4.2.3 IDENTIFICATION OF COMPETITORS

Any sound strategy has to be supported by a thorough understanding of the firms' most relevant competitors, since a business strategy aims at achieving sustainable advantage over them (Hax and Majuf, 1996). Thus an external assessment of KATH's capabilities relative to its relevant competitors was done to determine their distinctiveness. Respondents were asked to identify who they thought were the relevant competitors of KATH using the criteria below:

A relevant competitor was one who fulfills or has the potential of fulfilling one or more of the following conditions:

(i) Had a high market share or enjoyed high patronage of its services.

(ii) Had a strong technical/managerial base.

(iii) Offered quality services.

(iv) Had demonstrated an aggressive competitive attitude against your entire or important segments of your business.

Some respondents viewed KATH as a giant in the health service industry in the Ashanti Region without any relevant competitor(s) (24%). The major ones identified were in both private and public sectors.

TABLE 4.18 KATH'S (POTENTIAL) COMPETITORS

PUBLIC HOSPITALS	PRIVATE HOSPITALS
1. KNUST Hospital (Kumasi)*	1. Bomso Specialist Clinic (Kumasi)
2. St. Michael's Hospital (Pramso)	2. Aninwa Medical Centre (Kumasi)
3. Manhyia Polyclinic (Kumasi)	3. AGC Hospital (Obuasi)
4. St. Patrick's Hospital (Offinso)	

*Under Ministry of Education (i.e. KNUST)

4.2.4 UNIQUE RESOURCES

From the strategy literature , for a resource to qualify as a basis for an effective strategy or superior performance it must pass a number of external market test of its value (Collins and Montgomery, 1995; Grant, 1996; Bharadwaj et al., 1993). Four of the tests/characteristics were used to determine the uniqueness of the resources of KATH possess. They were:

Imitability

Substitutability

Ownership/appropriability

Customer value

Their relevance to the hospital/health service delivery was also considered i.e. their linkage to critical success factors.

Physical Resources

As far as physical resource were concerned KATH could be said to be highly endowed. Its facilities were well equipped with state-of-the-art equipment, some of which were time and cost saving for both hospital and users and were not available at the competitors' facilities. These included X-ray machines which exposed users to lower doses of radiation, foetal monitoring machines (Cardiotocographs), autoanlysers and oxygen and sterilisation plants, diathermy machines (used in surgeries) as well as anaesthetic equipment.

It also had an advantage in terms of the facilities operated under its various service areas. Some of the facilities were not found anywhere in the region or had a comparative advantage over those in existence in the region or even the competitors facilities. These include:

Clinical	-	Neo-natal Unit, Anaesthesia, Accident and Emergency (24 hour service), Sickle Cell, Asthma, Hypertension, Diabetic, Renal, Cerebral Palsy Clinics
Specialist Clinics	-	ENT (Hearing Assessment Centre) – none in the region Oral Health – none of the competitors operate this facility, Modern Family Planning Centre, High Dependency Unit, Radiotherapy – none in the region, Dialysis Centre – none in the region.
Diagnostic	-	Mycology and Bacteriology Services, Blood Bank, Endoscopy, Radiology, Histopathology with a big Mortuary and a Laboratory – the only one in the region.

Pharmaceutical	-	A manufacturing unit with an A-Septic Laboratory (for sterile preparations)
Physiotherapy	-	None in the region except at AGC hospital but not comparable to that of KATH. A Non-Governmental Organization was putting up a state- of -the- art physiotherapy facility (with equipment) for the hospital
Support Services	-	Central Sterilisation Unit which offers services to other hospitals as well as maintenance Unit.

Human Resources

KATH had an advantage in human resources. It had a relatively high number of human resources with varied educational, technical and professional qualifications commensurate with its status as a teaching hospital. These staff were experts who worked in the various service areas of the hospital (i.e. clinical, diagnostic, pharmaceutical, physiotherapy and administrative and support services).

Clinical	-	Medical Consultants/Specialists, Resident Doctors, Specialized Nurses, Dental Technologist/Assistants (see Appendix VI for the details of the specialists).
Diagnostic	-	Scientist, Technologist, Radiologist, Radiographers, Technicians, Pathologists.
Pharmaceutical	-	Clinical Pharmacists and experienced Pharmacists.
Physiotherapy	-	Physiotherapists, Physiotherapy Assistants.

Administrative and Support	-	Experienced Administrators, Biomedical Engineers and Technologists, Estate Officers, Biostatistician, Prosthetist, Accountants.

Financial Resource

KATH enjoyed a strong financial position. Its capacity to generate funds internally was high. With the GOG and DPF, the other public hospitals except the KNUST hospital, also benefited from it, however, because of its size and utilization rate, KATH enjoyed a higher percentage. The others in the private sector, on the other hand, do not have access to these sources. They may resort to debt financing the interest of which could add to their cost. AGC hospital, however, is financed by the AGC Ltd. These sources of funds provided value to the customers as they were used in the provision of items/services which benefit customers directly or indirectly like the improvement of facilities and the provision of supplies for service delivery.

Intangible Resources

The uniqueness of these resources was in the areas of low-cost of supplies, supplier relations and networks/links with other hospitals/institutions.

The low-cost of supplies from the Central Medical Stores can also be obtained by the other public hospitals. The hospital can exploit the low cost of supplies to lower its cost of service delivery.

Its reputation before suppliers as a reliable and supportive long term partner is due to its good creditor management.

Links with the institutions/hospitals outside the country were enjoyed through the effort of the Medical School and the programmes associated with them are yearly and it brings a lot of benefits to both the hospital and users. For instance when the medical doctors from the University of Utah Hospital in the United States of America came on their yearly visits, they brought special equipment which enabled them to perform surgical operations which the hospital was limited in doing. They also trained the hospital's staff in the use of those equipment and the performance of such operations.

4.2.5 WEAKNESSES

Physical Resources

The hospital itself did not have any ultra-sound machine for use by its patients who utilize its Obstetrics and Gynaecology Department . The doctors who used the one for the SMS did only a few cases and not even every day. Thus most patients went outside the hospital for the service. This impacts on the comprehensiveness of the health care which is a characteristic of quality (Woodward, 2000).

Most of the hospital beds were very old and in bad conditions. They have been in the hospital since its establishment in 1954.

Many facilities were found to be small in size or capacity. The wards were small as they were overutilised. Floor cases on some of the wards was not abnormal any more.

- The laboratories complained of their sizes being small and they had not been as sterile as they should be.
- The supplies and stores management unit is small and not in good condition which impacted on the storage of materials and equipment. Its handling and sewing equipment were also old and in a poor state. The manufacturing unit of the pharmacy department had very old equipment most of which were unserviceable.

Human Resource

- The sense of commitment and loyalty of employees and staff of the University was not strong. The majority of responses were between devoted and fairly devoted.

- There was the lack of management's direct control over key staff who were employees of the KNUST. Since the hospital management did not have the power to sanction the university staff it is health care quality that will suffer in the end.

Financial Resources

- The hospital had never had a financial policy and had since the year 2000 not had a financial plan.

Intangible Resources

- There was no proper/good customer relationship. In other words, there was still a focus on transaction marketing instead of relationship marketing. No deliberate efforts to retain customers were made.
- The hospital did not have a very good image before the public

4.2.5 COMPETENCES PROFILE OF KATH

Competences refer to a firm's capacity for undertaking a particular productive activity. The difference in performance of different organizations in the same industry is rarely fully explained by differences in their resource base per say but also on how resources are deployed to create competences in the activities of the firm.

The profiling of the competences was to give an understanding of the necessary competences

that KATH had to develop to truly achieve sustainable advantage.

Critical activities

Critical activities are those activities that have the greatest leverage on position and performance. They determine the survival and prosperity of a firm in an industry. In other words they are the activities in which public hospitals have to excel to achieve superior performance

Table 4.19 CRITICAL ACTIVITIES

ACTIVITIES	FREQUENCY	PERCENTAGE
All activities	18	72.0
All but marketing	2	8.0
All but service	2	8.0
All but marketing and service	1	4.0
All but technological development	1	4.0
All but service, firm infrastructure and procurement	1	4.0
Total	25	100

From Table 4.16 while 72 % of respondent saw all activity as central to health service delivery, 8 % viewed all activity as critical except marketing and 4.0 % viewed all except service, firm infrastructure and procurement.

Competences

The detail weighting of the activities can be found in Appendix VII

TABLE 4. 20 **INBOUND LOGISTICS**

ACTIVITIES	Rating of Activities				
	HW	MW	E	MS	HS
Receipt and Inspection			x		
Stock Control System		x			
Storage of Inputs/Supplies			x		
Timeless of Supplies		x			
Distribution of Supplies to user departments		x			
AVERAGE		**x**			

KATH's strengths in receipt and inspection of goods and storage of inputs/supplies were equally matched by competitors. On the other hand, KATH could be said to be performing ordinarily in these activities. Its performance was poor in stock control systems, timeliness of supplies and distribution of suppliers to user units/departments or KATH was not performing well in these areas.

TABLE 4. 21 **OPERATIONS/SERVICE DELIVERY**

ACTIVITIES	Rating of Activities				
	HW	MW	E	MS	HS
Effectiveness of care				x	
Staff Responsiveness to Customers/Users			x		
Process of Service Delivery			x		
Maintenance of Facilities			x		
Timeliness of Service Delivery		x			
Availability of Supplies/Drugs			x		
AVERAGE			**x**		

The competitive position of KATH against its competitors was quite similar. The only source of advantage was in the effectiveness of health care. This respondents' believed was made possible through the expertise of its staff and the provision of 24-hour service. KATH performance in timeliness of service delivery was poor. On the other hand, it could be said that KATH did a little better in quality of service; ordinarily in staff responsiveness to customers/users, process of service delivery, maintenance of facilities and availability of supplies/drugs; and not well in timeliness of service delivery. Staff attitude (staff responsiveness to customers), waiting time (timeliness of service delivery), process of service delivery and drug availability were all found unsatisfactory in the hospital's customer satisfactory survey. About the distinctiveness of the strength in effectiveness of care, respondents differed in their opinions. 73% saw it as distinctive and 27% did not see it as such.

TABLE 4.22 **MARKETING**

ACTIVITIES	**Rating of Activities**				
	HW	**MW**	**E**	**MS**	**HS**
Pricing Strategy			x		
Promotion Strategy		x			
Market Research	x				
Physical Environment			x		
AVERAGE		**x**			

KATH's position in marketing was poor. Market research was very poor and the physical environment was nothing to be happy with. Patients also found the physical environment not very satisfactory (Refer to Patient satisfaction survey).

TABLE 4.23 **SERVICE**

ACTIVITIES	Rating of Activities				
	HW	MW	E	MS	HS
Client Education/Counseling			x		
AVERAGE			**x**		

From Table 4.23, KATH's performance in Education/counseling was ordinary. Relatively it was on a par with its competitors.

TABLE 4.24 **FIRM INFRASTRUCTURE**

ACTIVITIES	Rating of Activities				
	HW	MW	E	MS	HS
Top Management Support			x		
Planning Systems			x		
Control Systems			x		
Organizational Structure			x		
Corporate Culture			x		
Leadership Capabilities				x	
Communication and Information Systems			x		
Accounting Systems			x		
Financial Management/Control			x		
Leadership Styles			x		
Control of Board of Directors			x		
AVERAGE			**x**		

KATH had a slight ease due to the better leadership capabilities. On the contrary, in the performance of the other activities its strengths were matched by its competitors. While 55.6% of respondents saw their leadership capabilities as difficult to surpass, 44% did not share such a view. The researcher's investigations, however revealed that A.G.C. and KNUST hospitals matched these leadership capabilities as their managements also had

educational and professional qualifications.

TABLE 4.25 **HUMAN RESOURCE MANAGEMENT**

ACTIVITIES	Rating of Activities				
	HW	MW	E	MS	HS
Selection and Recruitment		x			
Health and Safety Measures		x			
Training and Development			x		
Employee Empowerment			x		
Reward Systems		x			
Promotion Systems			x		
Appraisal Systems		x			
Labour/Management Relationship			x		
Manpower Planning			x		
AVERAGE			**x**		

KATH did not enjoy any advantage as far as human resource management was concerned. It was exactly even with the other hospitals in the areas of training and development employee empowerment, promotion systems, labour/management relationships and manpower planning. Conversely, it did worse in selection and recruitment, health and safety measures, reward and appraisal systems. Respondents commented that the selection and recruitment of permanent staff, reward systems, promotions and manpower planning (implementation) were all controlled by the MOH. The hospital however, recruited casual staff and they were of the view this was not properly done as many of the casuals did not have any skills and/or were semi-literates.

TABLE 4.26 **TECHNOLOGICAL DEVELOPMENT**

ACTIVITIES	Rating of Activities				
	HW	MW	E	MS	HS
Level of Automation		x			
Research and Development			x		
Technology System			x		
Research and Development Funding		x			
Research and Development Facilities		x			
Human Resources for Research and Development			x		
AVERAGE			**x**		

The position of KATH in the level of automation and technology system was quite similar to that of the others. KATH, unlike the others, has research as part of its mission. With this in mind, it could be said that KATH was not performing well in this area. From the hospital's annual financial reports, no budgetary allocation for Research and Development or expenditure on it was found.

TABLE 4.27 **PROCUREMENT**

ACTIVITIES	Rating of Activities				
	HW	MW	E	MS	HS
Selection and Evaluation of Suppliers			x		
Quality Management of Purchased Goods/Services			x		
Methods of Procurement		x			
Timeliness of Procurement		x			
Procurement Lead Time		x			
AVERAGE		**x**			

Either the competing hospitals had maintained a slight advantage over KATH as a result of

better methods of procurement, timeliness of procurement and procurement lead-time or KATH was performing slightly badly in these areas. However, there was similar performance in the areas of the selection and evaluation of suppliers and quality management of purchased goods/services.

TABLE 4.28 **OVERALL ASSESSMENT OF COMPETENCES**

CRITICAL ACTIVITIES	RATING
INBOUND LOGISTICS	-
OPERATIONS	E
MARKETING	-
SERVICE	E
FIRM INFRASTRUCTURE	E
HUMAN RESOURCE MANAGEMENT	E
TECHNOLOGICAL DEVELOPMENT	E
PROCUREMENT	-

Key:
-: KATH was weaker than competitors/KATH's performance was poor.
E: KATH was even with the competitors/KATH's performance was ordinary.

Table 4.26 presents the overall (competitive) assessment of KATH which identifies its strengths and weaknesses in each of the critical activities (critical success factors) categories. KATH was even with the competitors/KATH's performance was ordinary in the areas of operation/service delivery, service, firm infrastructure, human resource management and technological development. On the other hand, in the area of inbound logistics, marketing and procurement its position was slightly weaker than its competitors/KATH's performance was poor.

4.2.6 LINKAGES WITHIN THE HOSPITAL

The study considered the departmental relationships within the hospital and how management was coordinating them.

TABLE 4.29 **INTERNAL LINKAGES**

LINKAGES	PERCENTAGE
Presence of Linkages	100
Co-operation Among Departments	88
Teamwork in the Hospital	80
Co-ordination of Activities	32

From Table 4.29, all the respondents indicated that there were interrelationships (interdependence) within the hospital. In other words, they perceived that the performance of the activities of their departments impacted on some departments and so did theirs.

The linkages took the following forms:

- Clinical - Clinical
- Clinical - Diagnostic
- Clinical - Administrative and Support
- Clinical - Pharmaceutical
- Clinical - Physiotherapy
- Diagnostic - Diagnostic
- Diagnostic - Pharmaceutical
- Diagnostic - Administrative and Support
- Physiotherapy - Administrative and Support
- Pharmaceutical - Administrative and Support
- Administrative and Support - Administrative and Support

There were linkages between those involved in direct service delivery for example Clinical –

Clinical; Clinical – Diagnostic; Clinical –Pharmaceutical; Diagnostic – Diagnostic.

The Clinical departments depended on the diagnostic investigations to determine the treatment that should be given to a patient. If investigations are poorly done, it can affect the effectiveness of the care given.

88% believed that there was co-operation between their departments and the others which were affected by their activities. 80% believed that there was teamwork in the performance of the activities of the hospital as a whole. However, only 32% observed that there was co-ordination of the activities of the entire hospital. For those who did not observe any co-ordination of the activities (68%), they said that there was no forum/meeting of all heads of departments where the hospital's performance was discussed.

4.3 DISCUSSION

4.3.1. PAST PERFORMANCE OF KATH

- **The hospital's direction**

Considering the calibre of respondents, reasons for the lack of knowledge of the objectives could be attributed to the lack of communication either from management to heads of departments and employees; or from heads of departments to departmental members; or the lack of involvement of organizational members in setting objectives for the hospital. The lack of interest or effort on the part of organizational members to find out what the direction of the organization could also be a factor. This was evident during the data collection. Most respondents' commented that the questions about the direction of the hospital should have been directed to the administrators since they were the people who should determine the hospital's direction.

The researcher's attempts at finding out from the files evidence of the communication of the objectives did not yield any results. Circulars, minutes of committee meetings and staff

durbars did not have any such indications.

- **Hospital Utilization by Patients**

The high utilization could be attributed to the fact that KATH is a referral centre. Data on referrals could, however, not be obtained as the Medical Records and Statistics Department did not have such records. Also, users have access to some of its general and specialist clinics like the Polyclinic, Accident and Emergency, Eye, Ear, Nose and Throat (ENT), Dental and Ante-natal Clinics, without being referred from any health facility (see Appendix X for Top Ten diseases of Out-patients and Top Ten Causes of Admissions which shows diseases like malaria which could be treated at health centers and district hospitals).

- **Patient satisfaction**

According to Day and Wensley (1988) the insights performance indicators like customer satisfaction and customer loyalty provide cannot be inferred from historical evidence of market share, utilization or profitability. An increase in the latter indicators may be taken to mean that the organization is doing well while on the other hand customers may be dissatisfied or not fully satisfied with the offerings.

One reason for the long waiting time was found to be the lack of adequate human resources especially doctors and nurses. This had led to heavy workload on staff which might have accounted for the not encouraging staff attitude. In the course of the data collection, the researcher happened to be at an emergency ward with eight beds (which were fully occupied at that time) but with only one nurse on duty attending to the patients some of whom had to be prepared for the theatre. In such a situation, it would be difficult for this nurse working under pressure to be as nice as patients might expect. The nurse/patient ratio was at time of the study 1:7 instead of 1:3 which was the norm.

An observation made by the researcher was the presence of visitors at ward entrance wanting to see their patients outside the hospital's visiting hours (4 pm–5 pm). Many of them gave

their reasons as sending drugs to their patients. Such a situation stemming from the drug situation at the in-patient pharmacies is a cause for worry.

The issue of poor cleanliness augurs ill for a hospital which aims at improving the health of its clients as the situation exposes clients to infections. The issue of congestion on some of the wards, especially those departments with lowest in cleanliness (i.e.Surgery and Paediatrics), was found to be a contributing factor. On such wards cleanliness will definitely be a problem as there would be over utilization of ward facilities. These were the same places with high responses of odour on the wards.

The most worrying aspect was the fact that in two departments none of the respondents found the food very satisfactory. No wonder many relatives visiting outside the visiting hours came with food for their patients.

The patient satisfaction survey has gone to prove the assertion of Day and Wensley (1988) right. Though a lot of patients utilized the hospital, they were not very satisfied with its offerings. This also goes to prove that the hospital's objective of improving the quality of health care was not completely achieved, as the users' expectations were not fully met.

4.3.2 RESOURCES

- **Physical**

With regards to its pharmaceutical service (manufacturing unit) KATH could greatly reduce the expenditure on drugs by manufacturing some of its commonly used drugs as it already has the expertise instead of the practice of buying all drugs from outside and putting mark ups on them. By so doing efficiency of care could be assured a\s the cost of drugs could go down.

In service marketing the physical resources which are part of the physical evidence play a major role in influencing patients' impression about the hospital as they are used as indicators

of quality. All the physical resources of advantage were owned by KATH. According to Collins and Montgomery (1995), not all profits from a resource automatically flow to the company who has it. Such returns normally accrue to the owner of the resource. However, since the resources of advantage were owned by KATH it follows that the returns from them would accrue to it. Thus basing a strategy on such resources can make returns easy to capture.

The poor state of its materials handling and storage equipment and facilities can affect the quantity of materials that could be procured at any given time. Moreover, the storage of some supplies can also be done within a relatively short period which will necessitate purchases at short intervals which could add to the cost of service delivery.

- **Human**

The presence of the vast expertise of staff gives patients the confidence in the ability of staff to provide the service. The continuous use of these skills lead to their improvement which can also lead to increased efficiency of individual workers or work groups (Bharadwaj et al., 1993) which can in the end improve the quality of health service. Grant (1998) indicates that the adaptability of employees determine key aspects of strategic flexibility to the firm. Thus the adaptability of the hospital's staff can help the hospital to be more responsive to changes in market (patient) requirements.

With the exception of the Bomso Specialists Clinic which had a few full-time medical specialists in the fields of Obstetrics and Gynaecology, Paediatrics (Child Health), Surgery and Medicine, the other hospitals did not. They depended on part-time specialists – most of whom were from the KATH – whose services respondents found not very reliable.

According to Grant (1996) the commitment and loyalty of employees determine the capacity of the firm to attain and maintain competitive advantage. The employee turnover rate was very high among the nurses. On the average, 10 nurses left the hospital and the service of the

Ministry of Health every month. With the doctors those who complete their residency programme and become "Specialist" resign from the Ministry of Health to join the Kwame Nkrumah University of Science and Technology (KNUST) as lectures of the School of Medical Sciences. This implies that the capacity of KATH to attain and maintain superiority in the health industry in the Ashanti Region is limited.

- **Financial**

Grant (1988) is of the view that a firm's borrowing capacity and its internal funds generation determine its capacity for investment expenditure and its ability to weather fluctuations in demand and profits over time. It should be noted that Public Hospitals (in Ghana) are not permitted to borrow money. It is the government who provides funds for their running besides their Internally Generated Funds (IGF). The hospital's capacity to generate funds internally was a major strength. The high utilization of its services could be a major factor. Also, it had well-trained revenue collectors and an accountant in charge of its internal revenue unit. The cooperation of organizational members in ensuring that bills of patients were fully settled was another factor.

Though not a profit orientated hospital there is the need for financial policy and plans which contains financial goals, objectives and strategies which the hospital is or will be pursuing within a particular period of time. They will enable the hospital to measure or assess its financial performance and also guide its spending. The lack of it might lead to a tendency of utilizing funds for unplanned programmes or even programmes outside the goals of the hospital.

- **Intangibles**

The lack of proper relationships can have a negative impact on the hospital's performance. Relationship marketing firms can enhance their performance by cultivating new customers

and/or retaining their existing customers and selling more to them. However, cultivating new customers is generally more expensive than retaining existing ones. Riechheld and Sasser (1990) found 5 % reduction in customer defections to be associated with profit increases ranging from 25 to 85 % in the industries they studied. This suggests that service firms (hospitals inclusive) doing business with their customers from a long term relationship perspective have a greater potential of achieving cost advantage. From the study of Afari (2000), it was established that patient satisfaction is greatly enhanced by relationship marketing orientations.

KATH cannot be proud or satisfied with reputation which lied between "good and satisfactory" considering its relatively high physical, financial and human resource base. The public expects more in accordance with the saying that "to whom much is given, much shall be required". The willingness of patients to return and also sell the hospital to other people depends on their impressions about the hospital. Thus the "not very good" impressions that the public had about the hospital implied that they did not get the full satisfaction that they require.

4.3.3 COMPETENCES

- **Service delivery**

Effectiveness of care was attributed to its staff expertise. However, considering its advantage in resources KATH would have been expected to exploit them to excel in the performance of service delivery. Moreover, timeliness of service delivery is another characteristic of quality care. Thus its weakness does not allow quality of service to be complete.

- **Firm infrastructure-**

This is the activity that directs and coordinates all the other activities. The Chief Administrator of the hospital was a contract serving officer who had been in an acting

position for eight (8) years and respondents saw him as inefficient. The Board of Directors had also been there since 1990 (their term of office had expired) and the respondent thought that they were not performing as expected.

In addition corporate culture is another important element which could help to improve performance. Most literature on organization culture and performance of firms suggests that culture can have a significant positive economic value for firms (Barney 1986a; Ouchi, 1981; Deal and Kennedy, 1982). The strong culture hypothesis suggests that firms that have strong distinctive traits, values and shared belief patterns will outperform organizations that are weak on these dimensions (Dennison, 1984). Health services being primarily delivered by employees, the "people" component of service delivery as perceived by customers plays an important role in service differentiation.

- **Human Resources Management**

According to Zeithaml and Bitner (1996) service employees are the service because they provide the service; the organization in the eyes of customers as they represent the firm to the clients; and marketers as they can influence customer satisfaction. Therefore delivering service as promised or to meet customers' expectations often totally, lies within the control of employees (especially those in the frontline). Unless employees are satisfied or happy in their job, patient satisfaction will be difficult to achieve.

- **Procurement**

The selection of reliable suppliers will help in the supply of quality products/services and also ensure the timeliness of supplies delivery. In addition poor methods of procurement can affect the cost of product/services especially if it is not competitive. Again, poor procurement lead-time can impact on timeliness of supplies and availability of supplies for service delivery.

- **Linkages within the hospital (activities)**

According to Kolter (1994) the success of a firm depends not only on how well each department performs its work but also on how well the departmental activities are coordinated. Too often, company departments are to minimize their departments' interest rather than the company or customer's interest. This can lead to a slow down in the delivery of quality customer service. It therefore follows that the perceived lack of coordination could affect the quality of health care and patient satisfaction.

The various service areas in the hospital perform all the value activities. It is the ability to link these activities which determines the success or failure of the hospitals, goals or strategies and could be a source of real superior performance. The management of the internal linkage can help to achieve efficiency (delivering health care at lowest cost) or lowest delivered cost position and enhance quality health care and patient satisfaction. For instance by paying attention to its inbound logistics activities performed by its Supplies Management Department and partly by the Internal Audit (example Inspection of inputs purchased), KATH can enhance the quality of its service (Clinical and Diagnostic) as well as reduce cost of service delivery. On the other hand the hospital's, procurement practices can also impact on its inbound logistics and final service. From the competences analyses (Table 4.27) its procurement activities performed by Administration and Support Services were not strong. For instance procurement was not timely (Mild Weakness) which could impact on timeliness of supplies, which was a Mild Weakness (See Table 4.18) which could in turn affect the availability of Supplies/Drugs for Service delivery which was Even (ordinary) (See Table 4.19). These could in the end affect acceptability of the service to patients.

The nature of many service jobs suggests that customers' satisfaction will be enhanced when employees work as teams and hospitals are no exceptions. Employees who feel supported and that they have a team backing them up will be better able to maintain their enthusiasm and provide quality service. By promoting teamwork, hospitals can enhance employees'

ability to deliver health service excellence while at the same time the intimacy and support enhance their indication to be excellent service providers.

From the study, the strengths/advantages of KATH were more in its resources than in its competences (activities). The performance of activities central to the hospitals survival and prosperity was not encouraging. Moreover, not much is being done in managing the linkages within the organization to improve performance. This confirms the assertion that abundant resources alone will not keep an industry giant on top (Hamel and Prahalad, 1993) and also that good or poor performance is not fully explained by differences in resource base per se, but is determined by the way in which they are deployed to create competences in the activities of an organization and the management of the linkages among activities (Johnson and Scholes, 1999). It could therefore be said that KATH has not fully deployed these resources of advantage to create competences in its activities. This could be one of the main reasons why its past performance was not very satisfactory. Relating the hospital's performance during the past 3 years to the strategic capabilities/analysis it could be said that the necessary structures will have to be put in place to ensure improved performance.

CHAPTER FIVE

SUMMARY OF FINDINGS, RECOMMENDATIONS AND CONCLUSION

5.1 INTRODUCTION

In this chapter the summary of the findings, recommendation and conclusion of the study are presented.

5.2 RESEARCH QUESTIONS

Hospitals provide certain services which require them to possess certain resources and competences.

a) What are these critical resources and competences?

b) Does KATH meet this requirement?

c) How could KATH exploit these for superior performance?

The research therefore sought to find answers to these questions

5.3 SUMMARY OF FINDINGS

A key objective of this study was to determine the strategic capabilities (unique resources and care competences) of KATH which could be exploited for excellent performance. Answers to this and others were expected to help determine the strengths of KATH which could be exploited and the weaknesses which need to be developed to meet the challenges in the environment.

5.3.1 PERFORMANCE FOR THE PAST 3 YEARS

It needs to be noted that one cannot move towards excellent performance without considering what the past performance was. The study therefore, a mong other objectives sought to find out KATH's performance for the past 3 years.

Generally, the hospital's objectives for the past 3 years as indicated by staff were:

b. to provide quality health care
c. to improve the quality of management with the introduction of Budget Management Concept (BMC).

However, the specific objectives for the period could not be obtained from any of the data sources. There were no annual reports for that period. Though the lack of adequate logistics/structures was seen as the reasons for the hospital not achieving its objectives, it could also be said that the lack of knowledge of staff about the objectives was also a contributing factor. This is as a result of the lack of involvement of staff in the setting of objectives and the lack of articulation and communication of the objectives to staff. Their involvement and knowledge could increase their commitment to the objectives and help in achieving them.

The hospital's major policy reform, the Budget Management Concept could not achieve its aim due to the lack of management's commitment to the policy and the lack of empowerment of the manager of the sub-BMCs.

Furthermore, though the hospital enjoyed a high patronage of its services in the region, most of its clients were not very satisfied with the way service was delivered. Some of the areas of poor quality were staff attitudes, cleanliness and drug availability.

5.3.2 CRITICAL RESOURCES AND COMPETENCES AND THEIR UNIQUENESS

Knowing what activities and resources are critical to health care delivery will help hospitals to avoid spending money, time and other resources on things that do not count or benefit patients.

From the findings of the study the resources critical to the survival and prosperity of public hospitals are physical, human, financial and intangible.

- **Physical Resources**

The types and capacity would depend on the level of health care (i.e. primary, secondary or tertiary) particular hospital is established to provide and the number of patients that a hospital facility attends to. Thus for a teaching hospital like KATH which provides tertiary care, it would be expected to have sophisticated equipment which could enable it to provide the needed services. Thus for KATH to lack its own ultrasonography facilities which would even be expected at a secondary health facility is a setback. It did not have a CT scanner and therefore, had to refer patients to Korle-Bu for health care. However, KATH had almost all the necessary medical equipment and facilities for its service delivery.

For hospitals which provide observation or in-patient care, beds and cots become very important physical resources. For KATH, besides ordinary hospital beds, it is expected to have for example, orthopaedic and other special beds for the management of complex cases. The findings indicated that the hospital did not have enough orthopaedic beds though it handled lot of orthopaedic cases. Its cardiac beds were however, found to be adequate. The conditions of the hospital beds were found to be poor. Most beds had not been changed or maintained since the establishment of the hospital in 1954.

- **Human Resources**

Human resource is central to health care delivery as it is their skills and knowledge which helps to achieve hospitals mission and goals.

Like the physical resources, the calibre of health care providers needed at the various health care levels also varies. While at the primary level medical assistant or medical officers can deliver the service, at the tertiary level specialists are needed to deliver service and also supervise medical officers to deliver service. Human resources – loyalty and commitment of employees is another crucial factor in the health care industry. This will reflect in the attitude of staff to patients, from the patient satisfaction, many staff attitude was found to be poor through the responses from the competences profile placed it between poor and good. Linking this to the responses from the Human Resources Management activities, it could be said that the lack of employee satisfaction due to either poor or good Human Resources policies could be a contributing factor. Managerial styles should encourage the feelings of loyalty and commitment. They should be made to know that they are the most important assets that the hospital has and that the achievement of the hospital's vision, mission, goals and strategies depended greatly on the skills and knowledge.

KATH has the expertise critical to the delivery of its services. Though not adequate, the issue was not only new to KATH but a national one. The adaptability and innovativeness of the human resources are also crucial due to the continuing changes (developments) in the health care field. This would help in their professional development and assist them in improving the care that they provide.

- **Financial Resources**

Money plays an important role in providing health services as it enables the procurement of inputs to be made and other monetary incentives, besides salaries paid by central

government, can also be provided, KATH has a strong financial position. However, the lack of a guide in the use of the funds can lead to the tendency of management utilising the fund for planned items or even programmes which have not bearing with the goals and objectives of the hospital. It had been able to even use part of its internally generated funds to carry out major rehabilitation works on its facilities and also to procure inputs to keep work going.

- **Intangible Resources**

It has been made clear that in public hospitals relationship marketing orientation enhances patient satisfaction (Afari 2000) KATH's relationship marketing orientation or customer relations was poor. No planned efforts had been made to retain patients. Access to low cost but quality supplies is very important to health services delivery in public hospitals because their first objective is to ensure financial (and geographical) access to all who need their services. Thus access of low cost supplies can help reduce the cost of services to patients. KATH's reputation before the public was one of satisfactory and good. This as has already been presented was as a result of the public's perception of its staff as not being responsive, empathetic and courteous. A good reputation can stimulate positive ward of mouth by current users.

Activities which public hospitals have to excel in to obtain superior performance were identified as follows:

- **Inbound logistics**

The way the inputs procured or brought into the hospital are handled in terms of receipts, storage and dissemination impacts on the quality of service delivered. KATH performs this activity but the competence with which it is done is weak. From the resource profiling it was clear that the equipment and the facilities at the supply and stores Management Department

which played a major role in the performance of these activities were in poor state, and small in capacity. It did not even have computers to assist in its store keeping.

- **Service Delivery/ Operations**

This is where inputs are transformed into final services, which in health care delivery involves attending to patients that is the purpose for which hospitals are set up. The competence with which this activity was performed was generally not exceptional. However, it did well in providing an effective health care to its customers. Respondents attributed this to the calibre of experts that the hospital had. There is the need for something to be done about the timeliness of service delivery. Patients waited for a long time before being attended to. This does not give KATH a good impression before its clients. Inadequate staffing was seen as reason for this long waiting time.

- **Service**

Patients have a part to play in ensuring the effectiveness of health care. They can effectively play this role upon the instructions/education given to them by providers. KATH's performance of this activity was not encouraging probably due to heavy workload.

- **Technological Development**

This activity might not be crucial to hospitals offering primary and secondary care but for a teaching/tertiary hospital like KATH, which has research (medical) as part of its mission, it becomes crucial. KATH's general performance of this critical activity showed that it had not placed much importance on it. For instance Research and Development facilities and findings were poor. Its expenditure over the period 1998-2000 did not indicate any spending on medical research.

- **Procurement**

Hospitals depend on material and service inputs for service delivery. The quality of inputs used can also affect the effectiveness of health care and the availability of inputs also facilitates work of providers and enhances quality. On the whole, KATH's performance of this important activity was poor. Not much importance had been placed on it though a greater part of funds is spent on it

- **Firm infrastructure**

It however, takes quality managerial/firm infrastructure to give direction to hospital and also coordinate all the other activities performed by the various departments/units towards achievement of goals. From the study, except leadership capabilities in which KATH excelled all the other activities were ordinarily performed. Firms that have strong corporate culture excel in performance. This strong culture on the part of KATH was not evident from the findings.

- **Human Resource Management**

In addition, health service like many other services requires interactions between patients/users and the employees (providers) and these interactions strongly influence the users perception of service quality. Management therefore faces a tremendous challenge in selecting, training and motivating employees to care about doing their jobs and provide good service to users. The study showed poor selection and recruitment systems, Health and Safety Measures and Reward and Appraisal Systems.

- **Marketing**

Finally, rising expectations and changing needs of the public makes marketing another important activity that should not be overlooked. It takes responsive organisations to meet such markets. KATH's marketing orientation was found to be poor.

From the findings of the study, KATH had more advantages in resources than in the competences with which its value activities were performed. However, it takes advantages in both and the deployment of the resources in the performance of the activities as well as the management of the linkages within the hospital to achieve superior performance.

5.3 RECOMMEDATIONS

From the findings of the study the following recommendations are made:

1 EMPLOYEE INVOLVEMENT/COMMUNICATION

From the study it was clear from the organisational direction and financial resource profiling that not much had been done by KATH management to let employees know about what was going on in the hospital.

It is recommended that

(i) key employees should be involved in the goals and objectives setting of the hospital.

(ii) Management should organize staff durbars regularly to explain its goals, policies, achievements and problems to employees.

(iii) Heads of departments should also communicate developments in the hospital to their staff

(iv) Employees should also take interest in the management of the hospital

2 IMPROVING ON COMPETENCIES

Though KATH was highly endowed with resources, its competencies were generally weak. This could be improved through quality management. For instance, management needs to put

in place good logistics management practices and ensure. This will help in the supply of quality products, availability/timeliness of supplies. The appointment of a substantive and visionary Chief Administrator is also a necessity. In addition, management must become committed to Research and Development which is part of its mission. Through this new and improved service which will add to quality service can be developed.

3 PRESSURE OF WORK ON HEALTH STAFF

Seeing the burden of work on KATH hospitals:

(i) the public should be encouraged to utilize the other lower levels of health care

(ii) the teaching hospitals should also render specialist outreach services at the lower levels of health care.

4 HUMAN RESOURCE MANAGEMENT

Human resource policies and practices are considered to be of particular strategic importance in delivering high quality service. Public Hospitals must therefore address issues like job redesign, reward systems, employee empowerment and recognizing outstanding achievement. With the operationalistion of Act 525, the teaching hospitals and the Ghana Health Service will become autonomous and their Boards will have the power to do their own recruitments and selection. They should therefore take advantage of that opportunity and put in place the right Human Resources Policies to make their employees feel good in their jobs.

In addition, to improve staff attitudes, norms, rules and procedures should be laid down to ensure consistent behaviour.

5 CO-ORDINATION OF ACTIVITIES

There is the need for KATH management to organise yearly performance review meetings for heads of departments and key organizational members to discuss the performance of the departments and that of the hospital as a whole. At such meetings the performance of departments should be linked. In other words in considering the good/poor performance of a department, the other departments whose activities impact on it should not be left out. Management of KATH and other Public hospitals must be conscious of the linkages within the hospitals and take steps to coordinate them for superior performance

6 BUILDING GOOD PUBLIC IMAGE

As a major Referral Centre and the only Teaching hospital serving the northern sector of the country, a good public image would help build the public's confidence in KATH. Management should do its best to build a very good public image for the hospital. In this direction area like staff attitudes, waiting time, cleanliness and availability of drugs/supplies should be given serious attention.

7 SUSTAINING PERFORMANCE

Investment in the resources of advantage is very important in checking against the erosion of the advantage through depreciation, imitation or substitution by competitors. KATH should make efforts at maintaining its resources of advantage and ensuring that they are always unique to help them achieve the needed superior performance. New resources and competences which are necessary should also be acquired to meet customers' needs.

8 FURTHER RESEARCH

i) There will be the need for further research in the area of comparative internal analysis of teaching /tertiary hospitals. This is so because the critical success factors specific to teaching hospitals might be a little different from that of lower levels of health care.

ii) Benchmarking could also be done using best performing hospitals

5.4. CONCLUSION

A hospitals resources and competences constitute potential sources of advantage only if they are central to its survival and prosperity. In other words, they should be able to contribute to the production of what would benefit customers. As Day and Wensley (1988) point out, assessment of opportunities for competitive advantage must revolve around the analysis of customer benefits. In the absence of such analysis of customer benefits, a firm's attempts to leverage its resources and competences into positional advantages are likely to prove ineffective.

Again, for these sources of advantage to be a basis for an effective strategy, goal or objective, they must not be easy to obtain or copy or substituted by competitors and must be owned by the hospital. The superior performance from such resources can be long –term. With those owned by the hospitals, any returns accrued from them could be easily captured by the hospitals. Results from the study have proved that KATH possesses the critical resources that are needed for the health services delivery. However, its performance of crucial activities is poor in areas like marketing, inbound logistics, and procurement while areas like service delivery, patient education and counseling are not exceptionally done. This has gone to prove that hospitals need not only resources but should be able to utilize these

resources to perform critical activities to meet customer expectation.

Findings from the study leads one to conclude that when management's vision or organizational goal or objectives are not well communicated to employees, they might not be committed to them which can make achievement difficult. Public hospitals must see their employees as the greatest assets which transform their vision to realities. Moreover, the management of these important assets is very important in that it is when they are happy in their jobs that they can also ensure patient/client satisfaction.

Finally, it could be said that Public hospitals should be able to identify their strengths and weaknesses, develop the weaknesses into strengths and exploit them to achieve quality health care. They should also pay attention to the linkages within them and do their best to coordinate them so that total quality of care and customer satisfaction could be achieved.

REFERENCES

Addy, E. (2000), Marketing Management Lecture notes (School of Administration)

Andrew, K.R. (1971), The Concept of Corporate Strategy. Richard Irvin Inc.

Andrew, K.R. (1980), The Concept of Corporate Strategy, Revised Edition. Richard D Irvin Inc.

Annual Financial Report and Accounts 1997, 1998 - KATH

Arrington, B et al., (1995) Improving Governance, Hospital and Health Services Administration, Special CQI Issue 40, No. 1/Spring pp 5-109

Afari, A.A. (2000), A study of Relationship Marketing of Public and Private Hospitals in Ghana

Ansoff, I. 1965

Bharadwaj, S.G, Varadarajan, P.R and Fahy, J. (1993), "Sustainable Competitive Advantage in service Industries: A conceptual Model and Research Propositions. Journal of Marketing Vol. 57 (October) pp 83-99.

Barney, J. (1986a), Organization Culture: Can it be a source of sustained competitive advantage? Academy of Management Review (July) 656-65.

Barney, J. (1986b). Strategic Factor markets: Expectations, Luck and Business Strateg,. Management Science 32 (October) 1231-41

Barney, J. (1991). Types of Competition and the Therapy of Strategy toward an Integrative Framework, Academy of Management Review Vol. 11 (April) pp 791-800.

Baden, F.C and Stopford, J.M. (1992), Rejuvenating the Mature Business: The Competitive Challenge, London: Routledge.

Collis, D.J and Cynthia, M.A (1995), Competing on Resources: Strategy in the 1990s "Harvard Business Review (July-August) pp 118-28 Vol. 73 No. 4

Cook, V.J. Jr. (1985), The Net Present Value of Market Share. Journal of Marketing, 49 (Summer) 49-63.

Coyne, K.P. (1985,. Sustainable Competitive Advantage: What it is, What it isn't. Business Horizons: 29 (January-February), 59-61.

Customer Satisfaction Survey Report (2000) - Komfo Anokye Teaching Hospital, Unpublished

Deal, T and Kennedy, A. E (1982, Corporate Culture, Reading, M.A Addison Wesley

Dierickx, I and Cook, K (1989), Asset Stock Accumulation and Sustainability of Competitive Advantage, Management Science, 35 (November) pp 1504-11

Day, G.S and Wensley, R. (1985), Assessing Advantage: A framework for Diagnosing Competitive Superiority, Journal of Marketing Vol.52 (April) pp 1-20.

Dennison, D.R. (1984), Bringing Corporate Culture to the Bottomline, Organizational Dynamics, 13 (Autumn), 4-22.

Donabedian, A. (1966), Evaluating the Quality of medical care. Milbank Quarterly, 44:166-203

Donabedian, A. (1980), Explorations in Quality Assessment and Monitoring. Vol. 1: The Definition of Quality and Approaches to its Assessment, Ann Arbor, MI: health Administration Press.

Financial Statements (1999) - KATH

Financial Statements (2000) - KATH

Grant, R.G. (1998). Contemporary Strategy Analysis: Concepts, Techniques, Applications, 3rd edition, Blackwell Publishers Inc.

Glueck, W.F. (1976). Business Policy: Strategy Formation and Management Action 2nd edition McGraw- Hill Book Company

Hax, A.C and Majuf, N.S. (1996), The Strategy Concept and Process, Prentice Hall, London

Hunt, S.D and Morgan, R.M (1975), The Comparative Advantage Theory of Competitions, Journal of Marketing (April) Vol.59 No.2 pp 1-15

Hunt, S.D and Morgan, R.M (1995), The Resource-Advantage Theory of Competition: Dynamics, Path Dependencies, and Evolutionary Dimensions. Journal of Marketing Vol.60 (October) pp 107-114.

Hamel, G and Prahalad, C.K. (1994), Competing for the Future, Harvard Business Review (July-August) pp 122-128

Johnson, G and Scholes, K (1999), Exploring Corporate Strategy, 5th edition, Prentice Hall, Europe.

Kay, J. (1993), Foundations of Corporate Success, Oxford. Oxford University Press.

Kotler, P (1994), Marketing Management: Analysis, Planning and Control, 7th edition Englewood Cliffs: N.J. Prentice –Hall, Inc.

Kotler, P and Clarke, R.N. (1996), Marketing for Health Care Organizations.

Kropf, R and Szafran, A.J. (1988), Developing a Competitive Advantage in the Market for Radiology Services, Hospital and Health Services Administration Vol. 33 No. 2 (summer) pp 213-220.

Lanning, J. A. and O'Connor S. J. (1990), The Health Care quality Quagmire: Some Signposts, Hospitals and Health Services Administration Vol. 35 No. 1 (Spring) pp 39 – 54.

Leebov, W (1988). Service Excellence, The Customer Relations Strategy for Health Care, American Hospital Publishing Inc.

Loomis, C.I (1984), The Recovery Skips Middle Managers, Fortune, February pp112.

Mahoney, J.T. and Panadian, R. (1992), The Resource-Based View the Conversion of

Strategic Management. Strategic Management Journal, 13 (June) pp 363-80.

Ministry of Health Programme of Work (2000). Draft for Discussion

Montoya-Aguilar, C. (1987), Appropriate Provision and Management of Services, In: Measurement in Health Promotion and Protection, Copenhagen, World Health Organization, (WHO European Series No. 22).

Montoya-Aguilar,C. (1994), Measuring performance of Hospitals and Health Centres. WHO/SHS/DHS/94.2

Nelson, R and Winters. (1982), An Evolutionary Theory of Economic change. Cambridge, MA: Harvard University press

Newman, W et al., (1985), Strategy, policy and Central Management, 9th edition. South Western Publishing Co.

Newman, R (1984), Service Management: Strategy and Leadership in Service Business. Chicester, England, John Wiley.

Quchi, W.G. (1981), Theory 2. Reading . MA Addison Wesley.

Polanyi, M, (1962), personal knowledge: Towards a Post Critical Philosophy, London: Ronteledge

Porter, M (1980), Competitive Strategy, New York: free press

Porter, M (1985), Competitive Advantage: Creating and Sustaining Superior Performance, New York: Free Press

Porter, M (1996), What is Strategy, Harvard Business Review (November-December)

Prahalad, C.K. and Hamel, G. (1990), The Core Competence of the Corporation, Harvard Business Review 68 (May-June) pp 79-87.

Peter Laf, M.A (1993), The Cornerstones of competitive Advantage: Resource – Based View, Strategic Management Manual Journal 14 (1993): 179-192.

Robson, C.R. (1993), Real World Research: A Resource for Social Scientists and

Practioner-Researchers, Blackwell Publishers.

Rust, R.T et al., (1996), Service Marketing, Harper Collins College Publishers.

Reichheld, F.F and Sasser, W.E. (1990), Zero Defections: Quality Comes to Service Harvard Business Review, 68 (September-October) 301-7

Stalk, G et al., (1992), Competing on Capabilities: The New Rule of Corporate Strategy, Harvard Business Review Vol. 70 No.2 pp 57-69.

Stacey, R.D. (1993), Strategic Management and Organizational Dynamics, London: Pitman

Selznick, P (1957), Leadership in Administration, New York: Harper and Row Publishers. Inc.

Thompson, A. A. Jnr and Strickland, A.J. (1990), The Concepts and Techniques of Strategic Management, 5th edition, Richard D. Irwin Inc.

Upah, G. D. (1980), Mass Marketing in Service Retailing: A Review and Synthesis of Major Methods, Journal of Retail, 56 (Fall) pp 59-76.

Williamson, O. E. (1971), The Vertical Integration of Production: Market Failure Considerations, American Economic Review 61(May) pp 112-23.

Williamson, O. E. (1975), Markets and Hierarchies: analysis and Anti-trust Implications, New York: The free Press

Winter, S.G. (1987,. Knowledge and Competence as Strategic Assets in the Competitive Challenge, David J. Teece, New York: Harper and Row, pp 159-84

Walton, J. (1999), Strategic Human Resource Development. Prentice Hall

Woodward, C.A. (2000), Improving Provider Skills- Strategies for assisting health workers to modify and improve skills: Developing quality health- a process of changes, WHO/EIP/050/00.1

Weick, K. (1979), The social Psychology of Organizing Research, M.A Addison-

Wesley pp 188-193.

Webb, E and Weick, K. (1979), Unobstrusive Measures in Organization Theory: A Reminder, Administrative Science Quarterly, 24, pp 650-59

Zeithaml, V and Britner, M. J. (1966), Services Marketing, McGraw-Hill Companies Inc.

REFERENCES

Addy, E. (2000), Marketing Management Lecture notes (School of Administration)

Andrew, K.R. (1971), The Concept of Corporate Strategy. Richard Irvin Inc.

Andrew, K.R. (1980), The Concept of Corporate Strategy, Revised Edition. Richard D Irvin Inc.

Annual Financial Report and Accounts 1997, 1998 - KATH

Arrington, B et al., (1995) Improving Governance, Hospital and Health Services Administration, Special CQI Issue 40, No. 1/Spring pp 5-109

Afari, A.A. (2000), A study of Relationship Marketing of Public and Private Hospitals in Ghana

Ansoff, I. 1965

Bharadwaj, S.G, Varadarajan, P.R and Fahy, J. (1993), "Sustainable Competitive Advantage in service Industries: A conceptual Model and Research Propositions. Journal of Marketing Vol. 57 (October) pp 83-99.

Barney, J. (1986a), Organization Culture: Can it be a source of sustained competitive advantage? Academy of Management Review (July) 656-65.

Barney, J. (1986b). Strategic Factor markets: Expectations, Luck and Business Strateg,. Management Science 32 (October) 1231-41

Barney, J. (1991). Types of Competition and the Therapy of Strategy toward an Integrative Framework, Academy of Management Review Vol. 11 (April) pp 791-800.

Baden, F.C and Stopford, J.M. (1992), Rejuvenating the Mature Business: The Competitive Challenge, London: Routledge.

Collis, D.J and Cynthia, M.A (1995), Competing on Resources: Strategy in the 1990s "Harvard Business Review (July-August) pp 118-28 Vol. 73 No. 4

Cook, V.J. Jr. (1985), The Net Present Value of Market Share. Journal of Marketing, 49 (Summer) 49-63.

Coyne, K.P. (1985,. Sustainable Competitive Advantage: What it is, What it isn't. Business Horizons: 29 (January-February), 59-61.

Customer Satisfaction Survey Report (2000) - Komfo Anokye Teaching Hospital, Unpublished

Deal, T and Kennedy, A. E (1982, Corporate Culture, Reading, M.A Addison Wesley

Dierickx, I and Cook, K (1989), Asset Stock Accumulation and Sustainability of Competitive Advantage, Management Science, 35 (November) pp 1504-11

Day, G.S and Wensley, R. (1985), Assessing Advantage: A framework for Diagnosing Competitive Superiority, Journal of Marketing Vol.52 (April) pp 1-20.

Dennison, D.R. (1984), Bringing Corporate Culture to the Bottomline, Organizational Dynamics, 13 (Autumn), 4-22.

Donabedian, A. (1966), Evaluating the Quality of medical care. Milbank Quarterly, 44:166-203

Donabedian, A. (1980), Explorations in Quality Assessment and Monitoring. Vol. 1: The Definition of Quality and Approaches to its Assessment, Ann Arbor, MI: health Administration Press.

Financial Statements (1999) - KATH

Financial Statements (2000) - KATH

Grant, R.G. (1998). Contemporary Strategy Analysis: Concepts, Techniques, Applications, 3rd edition, Blackwell Publishers Inc.

Glueck, W.F. (1976). Business Policy: Strategy Formation and Management Action 2nd edition McGraw- Hill Book Company

Hax, A.C and Majuf, N.S. (1996), The Strategy Concept and Process, Prentice Hall, London

Hunt, S.D and Morgan, R.M (1975), The Comparative Advantage Theory of Competitions, Journal of Marketing (April) Vol.59 No.2 pp 1-15

Hunt, S.D and Morgan, R.M (1995), The Resource-Advantage Theory of Competition: Dynamics, Path Dependencies, and Evolutionary Dimensions. Journal of Marketing Vol.60 (October) pp 107-114.

Hamel, G and Prahalad, C.K. (1994), Competing for the Future, Harvard Business Review (July-August) pp 122-128

Johnson, G and Scholes, K (1999), Exploring Corporate Strategy, 5th edition, Prentice Hall, Europe.

Kay, J. (1993), Foundations of Corporate Success, Oxford. Oxford University Press.

Kotler, P (1994), Marketing Management: Analysis, Planning and Control, 7th edition Englewood Cliffs: N.J. Prentice –Hall, Inc.

Kotler, P and Clarke, R.N. (1996), Marketing for Health Care Organizations.

Kropf, R and Szafran, A.J. (1988), Developing a Competitive Advantage in the Market for Radiology Services, Hospital and Health Services Administration Vol. 33 No. 2 (summer) pp 213-220.

Lanning, J. A. and O'Connor S. J. (1990), The Health Care quality Quagmire: Some Signposts, Hospitals and Health Services Administration Vol. 35 No. 1 (Spring) pp 39 – 54.

Leebov, W (1988). Service Excellence, The Customer Relations Strategy for Health Care, American Hospital Publishing Inc.

Loomis, C.I (1984), The Recovery Skips Middle Managers, Fortune, February pp112.

Mahoney, J.T. and Panadian, R. (1992), The Resource-Based View the Conversion of

Strategic Management. Strategic Management Journal, 13 (June) pp 363-80.

Ministry of Health Programme of Work (2000). Draft for Discussion

Montoya-Aguilar, C. (1987), Appropriate Provision and Management of Services, In: Measurement in Health Promotion and Protection, Copenhagen, World Health Organization, (WHO European Series No. 22).

Montoya-Aguilar,C. (1994), Measuring performance of Hospitals and Health Centres. WHO/SHS/DHS/94.2

Nelson, R and Winters. (1982), An Evolutionary Theory of Economic change. Cambridge, MA: Harvard University press

Newman, W et al., (1985), Strategy, policy and Central Management, 9th edition. South Western Publishing Co.

Newman, R (1984), Service Management: Strategy and Leadership in Service Business. Chicester, England, John Wiley.

Quchi, W.G. (1981), Theory 2. Reading . MA Addison Wesley.

Polanyi, M, (1962), personal knowledge: Towards a Post Critical Philosophy, London: Ronteledge

Porter, M (1980), Competitive Strategy, New York: free press

Porter, M (1985), Competitive Advantage: Creating and Sustaining Superior Performance, New York: Free Press

Porter, M (1996), What is Strategy, Harvard Business Review (November-December)

Prahalad, C.K. and Hamel, G. (1990), The Core Competence of the Corporation, Harvard Business Review 68 (May-June) pp 79-87.

Peter Laf, M.A (1993), The Cornerstones of competitive Advantage: Resource – Based View, Strategic Management Manual Journal 14 (1993): 179-192.

Robson, C.R. (1993), Real World Research: A Resource for Social Scientists and

Practioner-Researchers, Blackwell Publishers.

Rust, R.T et al., (1996), Service Marketing, Harper Collins College Publishers.

Reichheld, F.F and Sasser, W.E. (1990), Zero Defections: Quality Comes to Service Harvard Business Review, 68 (September-October) 301-7

Stalk, G et al., (1992), Competing on Capabilities: The New Rule of Corporate Strategy, Harvard Business Review Vol. 70 No.2 pp 57-69.

Stacey, R.D. (1993), Strategic Management and Organizational Dynamics, London: Pitman

Selznick, P (1957), Leadership in Administration, New York: Harper and Row Publishers. Inc.

Thompson, A. A. Jnr and Strickland, A.J. (1990), The Concepts and Techniques of Strategic Management, 5th edition, Richard D. Irwin Inc.

Upah, G. D. (1980), Mass Marketing in Service Retailing: A Review and Synthesis of Major Methods, Journal of Retail, 56 (Fall) pp 59-76.

Williamson, O. E. (1971), The Vertical Integration of Production: Market Failure Considerations, American Economic Review 61(May) pp 112-23.

Williamson, O. E. (1975), Markets and Hierarchies: analysis and Anti-trust Implications, New York: The free Press

Winter, S.G. (1987,. Knowledge and Competence as Strategic Assets in the Competitive Challenge, David J. Teece, New York: Harper and Row, pp 159-84

Walton, J. (1999), Strategic Human Resource Development. Prentice Hall

Woodward, C.A. (2000), Improving Provider Skills- Strategies for assisting health workers to modify and improve skills: Developing quality health- a process of changes, WHO/EIP/050/00.1

Weick, K. (1979), The social Psychology of Organizing Research, M.A Addison-

Wesley pp 188-193.

Webb, E and Weick, K. (1979), Unobstrusive Measures in Organization Theory: A Reminder, Administrative Science Quarterly, 24, pp 650-59

Zeithaml, V and Britner, M. J. (1966), Services Marketing, McGraw-Hill Companies Inc.

APPENDIX I QUESTIONNAIRE

I am a student of the University of Ghana doing my research on Creating and Sustaining Improved Performance in Public Hospitals, the case of KATH. The questionnaire will help me to understand the strengths and weaknesses of KATH and identify improvement opportunities. The purpose of the study is purely academic. However, your candid response is very important.

GENERAL INFORMATION

a) Department /Unit

.....

b) Position.....

c) Grade .....

DIRECTION

1. What has been KATH's major objective for the past three year?

.....

.....

2. Have they been achieved ? Yes / No

Reasons: .....

.....

.....

3. What are the present objectives of KATH?.....

.....

.....

.....

4.Have they been weil articulated and communicated to

a) Employees Yes [ ] No [ ]

b)Customers Yes [ ] No [ ]

c) Shareholders Yes [ ] No [ ]

5. What critical events have given rise to the present objectives. e.g. competition, globalization, inflation, technology, governmental regulations, changes in customer tastes and preferences.

.....

.....

.....

.....

6. What are the objectives of your department?

.....

.....

.....

.....

7. Does KATH have a corporate plan? Yes [ ] No [ ]

b) If Yes, when was it introduced ?

.....

d) If No, have you thought of preparing one and when do you hope to introduce it? .....

RESOURCES

From the following questions I would like to know the resources available to KATH both form within and outside.

ITEMS	QUANITITY	AGE (RANGE)	CONDITION	CAPACITY/SIZE	OWNER
a) Equipment					
(list major ones)	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....
b) Facilities					
.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....
c) Beds					
(indicate types)					
.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....
d) Cots	.....	.....	.....	.....	.....
	.....	.....	.....	.....	.....
e) others	.....	.....	.....	.....	.....
	.....	.....	.....	.....	.....

8. PHYSICAL RESOURCES

f) Does the location of facilities have any impact on their patronage? Yes[ ] No [ ]

Reasons .....

.....

.....

.....

9. HUMAN RESOURCES

a) What is your staff strength?

.....

b) Do your staff have the necessary skills for the Performance of their duties? Yes [ ] No [ ]

c) Indicate the types of skills your staff have

Technical	[ ]
Managerial	[ ]
Computer	[ ]
Clerical	[ ]
Unskilled	[ ]
Others	[ ]

d) Do they have the necessary knowledge about their jobs? Yes[ ] No[ ]

e) How do you rate the adaptability of your staff to changes ?

Very Adaptable	[ ]
Adaptable	[ ]
Not very adaptable	[ ]
Not adaptable	[ ]

f) Do they have innovative capabilities ? Yes [ ] No[ ]

g) Are there any key workers ? Yes [[No [ ]

If Yes, answer (h) and (i)

h) Who are they?.....

i) Are they all under the direct control of management Yes[ ] No [ ]
If No, answer (j) and (k)

j) List those who are not under management's direct control and why?

.....

.....

.....

.....

k) What are the problems that management faces with these staff ?

.....

.....

.....

.....

10. ***FINANCIAL RESOURCES***

a) Specify the sources of funds of the hospital and their reliability. Use 1,2,3,4,5,6, to rate according to their percentage of total funds and 4-very Reliable, 3-Reliable, 2-Not very Reliable 1-Not Reliable

	Sources	Reliable
Government	[ ]	[ ]
Financial Institution	[ ]	[ ]
Shareholders	[ ]	[ ]
Internally – Generated	[ ]	[ ]
Donations	[ ]	[ ]
Others (state)	[ ]	[ ]

b) Please, list the uses of funds.....

.....

.....

.....

c) Does the hospital have a financial policy ? Yes [ ] No [ ]

d) Does it have a financial plan ? Yes [ ] No [ ]

Indicate whether it is a long or short – term.

11. ***INTANGIBLE RESOURCES***

a) How do you rate staff attitude to work ?

Very devoted [ ]

Devoted [ ]

Fairly devoted [ ]

Not devoted [ ]

b) What reputation does the hospital have before the public ?

Excellent [ ]

Good [ ]

Satisfactory [ ]

Not good [ ]

c) Who are the customers / users of the hospital?

.....

.....

.....

d) Has the hospital developed relationships with any of these customers ? Yes[ ] No [ ]

e) If yes, what is the nature of the relationship ? .....

.....

.....

f) Does the hospital have any network / links with other hospitals? Yes / No

g) If Yes, list them and the nature of the relationship.....

.....

.....

h) Do you have access to low cost of supplies? Yes[ ] No [ ]

i) Is there any relationship with suppliers ? Yes [ ] No [ ]

j) If Yes, what is the nature of the relationship?.....

.....

.....

12.How do you see the allocation of resources in the hospital?

Balanced [ ]
Unbalance [ ]
Even [ ]
Don't know [ ]

13.What is the basis for resource allocation in the hospital?.....

.....

.....

.....

STRENGTH AND WEAKNESSES

From the following questions, I would like to know the strengths and weaknesses of KATH. Strengths are resources of advantage or activities that KATH does particularly well relative to competitors. Weaknesses are the opposite.

A relevant competitor is one who fulfils or has the potential of fulfilling one or more of the following conditions:

i) Has a high market share or enjoys high patronage of its services
ii) Has a strong technical / managerial base
iii) Offers quality services
iv) Has demonstrated an aggressive competitive attitude against your entire business or important segments of your business.

14.Using the conditions above which hospital(s) in the Ashanti Region do you think is/are the main competitor(s) of KATH?

.....

.....

15.Which of the resources identified above (ie.Questions 8-11)

a) could be said to be strengths of KATH and
b) which of these strengths cannot be easily or gradually obtained and or / substituted by competitors and provide benefits to customers

	Strengths	Difficult to obtain	Not substitutable	Benefit customers
a) Physical Resources				
b). Human resources				
c) Financial resources				

	----------	----------	----------	----------
	----------	----------	----------	----------
	----------	----------	----------	----------
	----------	----------	----------	----------
d) Intangible resources	----------	----------	----------	----------
	----------	----------	----------	----------
	----------	----------	----------	----------
	----------	----------	----------	----------
	----------	----------	----------	----------
	----------	----------	----------	----------

COMPETENCES

Please, rate the performance of the following activities as seen at KATH, Tick ( ) what is appropriate High Weakness (HW) – 1 Mild Weakness (MW) – 2 Even (E) – 3 Mild Strength (MS) – 4 High Strength (HS) – 5

	1 HW	2 MW	3 E	4 MS	5 HS
16. ***INBOUND LOGISTICS***					
a) Receipt and Inspection of supplies	[ ]	[ ]	[ ]	[ ]	[ ]
b) Stock Control System	[ ]	[ ]	[ ]	[ ]	[ ]
c) Storage of inputs / supplies	[ ]	[ ]	[ ]	[ ]	[ ]

d) Distribution of supplies to user depts.	[ ]	[ ]	[ ]	[ ]	[ ]
e) Timeliness of supplies	[ ]	[ ]	[ ]	[ ]	[ ]

17. ***OPERATIONS/ SERVICE DELIVERY***

a) effectiveness of care	[ ]	[ ]	[ ]	[ ]	[ ]
b) Responsiveness to customers/users	[ ]	[ ]	[ ]	[ ]	[ ]
c) Process of service delivery	[ ]	[ ]	[ ]	[ ]	[ ]
d) Maintenance of facilities	[ ]	[ ]	[ ]	[ ]	[ ]
e) Timeliness of service delivery	[ ]	[ ]	[ ]	[ ]	[ ]
f) Availability of supplies/drugs	[ ]	[ ]	[ ]	[ ]	[ ]

18. ***MARKETING***

a) Pricing strategy	[ ]	[ ]	[ ]	[ ]	[ ]
b) Promotion strategy(Public Relations)	[ ]	[ ]	[ ]	[ ]	[ ]
c) Market Research	[ ]	[ ]	[ ]	[ ]	[ ]
d) Physical environment	[ ]	[ ]	[ ]	[ ]	[ ]

19.SERVICE

a) Customer education/counseling	[ ]	[ ]	[ ]	[ ]	[ ]

20. ***FIRM INFRASTRUCTURE***

a) Top management support	[ ]	[ ]	[ ]	[ ]	[ ]
b) Planning system	[ ]	[ ]	[ ]	[ ]	[ ]
(e.g. goal setting, strategies development)					
c) Control systems	[ ]	[ ]	[ ]	[ ]	[ ]
	1	**2**	**3**	**4**	**5**
	HW	**MW**	**E**	**MS**	**HS**
d) Organizational structure	[ ]	[ ]	[ ]	[ ]	[ ]
e) Corporate culture	[ ]	[ ]	[ ]	[ ]	[ ]
f) Leadership capabilities(Skills)	[ ]	[ ]	[ ]	[ ]	[ ]
g) Communication and information systems	[ ]	[ ]	[ ]	[ ]	[ ]
h) Accounting systems	[ ]	[ ]	[ ]	[ ]	[ ]
i) Financial management/control	[ ]	[ ]	[ ]	[ ]	[ ]

j) Leadership styles	[ ]	[ ]	[ ]	[ ]	[ ]
(e.g. autocratic, bureaucratic,democratic,combination)					
k) Control/influence of board of directors	[ ]	[ ]	[ ]	[ ]	[ ]

21. ***HUMAN RESOURCE MANAGEMENT***

a) Selection / Recruitment	[ ]	[ ]	[ ]	[ ]	[ ]
b) Health and safety measures	[ ]	[ ]	[ ]	[ ]	[ ]
c) Training and Development	[ ]	[ ]	[ ]	[ ]	[ ]
d) Employee empowerment	[ ]	[ ]	[ ]	[ ]	[ ]
e) Reward systems	[ ]	[ ]	[ ]	[ ]	[ ]
f) Promotion system	[ ]	[ ]	[ ]	[ ]	[ ]
g) Appraisal system	[ ]	[ ]	[ ]	[ ]	[ ]
h) Labour / management relationships	[ ]	[ ]	[ ]	[ ]	[ ]
i) Manpower Planning	[ ]	[ ]	[ ]	[ ]	[ ]

22. ***TECHNOLOGICAL DEVELOPMENT***

a) Level of automation	[ ]	[ ]	[ ]	[ ]	[ ]
b) Research and Development	[ ]	[ ]	[ ]	[ ]	[ ]
c) Technology system	[ ]	[ ]	[ ]	[ ]	[ ]
(e.g. computing network, operating system)					
d) Research and development funding	[ ]	[ ]	[ ]	[ ]	[ ]
e) Research and development facilities	[ ]	[ ]	[ ]	[ ]	[ ]
f) Human resources for R & D	[ ]	[ ]	[ ]	[ ]	[ ]

23. ***PROCUREMENT***

a) Selection and evaluation of suppliers	[ ]	[ ]	[ ]	[ ]	[ ]
b) Quality management of purchased	[ ]	[ ]	[ ]	[ ]	[ ]
goods / services					
c) Methods of procurement	[ ]	[ ]	[ ]	[ ]	[ ]
d) Timeliness of procurement	[ ]	[ ]	[ ]	[ ]	[ ]
e)Procurement lead time	[ ]	[ ]	[ ]	[ ]	[ ]

24. Tick [ ] what is appropriate from the activities provided below

(a) the activities which are critical in health service delivery **(CA)**

(b) Which of the strengths identified in questions 16-23 (i) cannot be easily or gradually copied **(NEC)** (ii) cannot be substituted by competitors **(NS)** (iii) provide benefits to customers **(BC)**

ACTIVITY	CA	NEC	NS	BC
INBOUND LOGISTICS				
a) Receipt and Inspection of supplies	[ ]	[ ]	[ ]	[ ]
b) Stock Control System	[ ]	[ ]	[ ]	[ ]
c) Storage of inputs / supplies	[ ]	[ ]	[ ]	[ ]
d) Distribution of supplies to user depts.	[ ]	[ ]	[ ]	[ ]
e) Timeliness of supplies	[ ]	[ ]	[ ]	[ ]
OPERATIONS/ SERVICE PRODUCTION				
a) Quality of service	[ ]	[ ]	[ ]	[ ]
b) Responsiveness to customers/users	[ ]	[ ]	[ ]	[ ]
c) Process of service delivery	[ ]	[ ]	[ ]	[ ]
d) Maintenance of facilities	[ ]	[ ]	[ ]	[ ]
e) Timeliness of service delivery	[ ]	[ ]	[ ]	[ ]
f) Availability of supplies	[ ]	[ ]	[ ]	[ ]
MARKETING				
a) Pricing strategy	[ ]	[ ]	[ ]	[ ]
b) Promotion strategy(Public Relations)	[ ]	[ ]	[ ]	[ ]
c) Market Research	[ ]	[ ]	[ ]	[ ]
d) Physical environment	[ ]	[ ]	[ ]	[ ]
SERVICE				
a)Customer education/training	[ ]	[ ]	[ ]	[ ]

ACTIVITY	CA	NEC	NS	BC
FIRM INFRASTRUCTURE				
a) Top management support	[ ]	[ ]	[ ]	[ ]
b) Planning system	[ ]	[ ]	[ ]	[ ]
c) Control systems	[ ]	[ ]	[ ]	[ ]
d) Organizational structure	[ ]	[ ]	[ ]	[ ]
e) Corporate culture	[ ]	[ ]	[ ]	[ ]
f) Leadership capabilities(Skills)	[ ]	[ ]	[ ]	[ ]
g) Communication and information systems	[ ]	[ ]	[ ]	[ ]
h) Accounting systems	[ ]	[ ]	[ ]	[ ]
i) Financial management/control	[ ]	[ ]	[ ]	[ ]
j) Leadership styles	[ ]	[ ]	[ ]	[ ]
k) Control/influence of board of directors	[ ]	[ ]	[ ]	[ ]
HUMAN RESOURCE MANAGEMENT				
a) Selection / Recruitment	[ ]	[ ]	[ ]	[ ]
b) Health and safety measures	[ ]	[ ]	[ ]	[ ]
c)Training and Development	[ ]	[ ]	[ ]	[ ]
d) Employee empowerment	[ ]	[ ]	[ ]	[ ]
e) Reward systems	[ ]	[ ]	[ ]	[ ]
f) Promotion system	[ ]	[ ]	[ ]	[ ]
g) Appraisal system	[ ]	[ ]	[ ]	[ ]
h) Labour /management relationships	[ ]	[ ]	[ ]	[ ]
i) Manpower Planning	[ ]	[ ]	[ ]	[ ]
TECHNOLOGICALDEVELOPMENT				
a) Level of automation	[ ]	[ ]	[ ]	[ ]
b) Research and Development	[ ]	[ ]	[ ]	[ ]
c) Technology system	[ ]	[ ]	[ ]	[ ]
d) Research and development funding	[ ]	[ ]	[ ]	[ ]
e) Research and development facilities	[ ]	[ ]	[ ]	[ ]
f) Human resources for R & D	[ ]	[ ]	[ ]	[ ]
PROCUREMENT				

a) Selection and evaluation of suppliers	[ ]	[ ]	[ ]	[ ]
b)Quality management of purchased goods / services	[ ]	[ ]	[ ]	[ ]
c) Methods of procurement	[ ]	[ ]	[ ]	[ ]
d)Timeliness of procurement	[ ]	[ ]	[ ]	[ ]
e)Procurement lead time	[ ]	[ ]	[ ]	[ ]

25. Does the performance of the activities of other departments impact on your department?

Yes [ ] No [ ]

26. If Yes, list those departments and indicate those activities

DEPARTMENT	ACTIVITIES
---	---
---	---
---	---
---	---
---	---
---	---
---	---

27. Does the performance of your department's activities impact on the activities of other departments?

Yes [ ] No [ ]

28. If Yes, list the departments and indicate how your department's activities affect theirs.

.....

.....

.....

.....

29. What is the relationship between your department and those you have indicated in 26 and 28?.....

.....

.....

.....

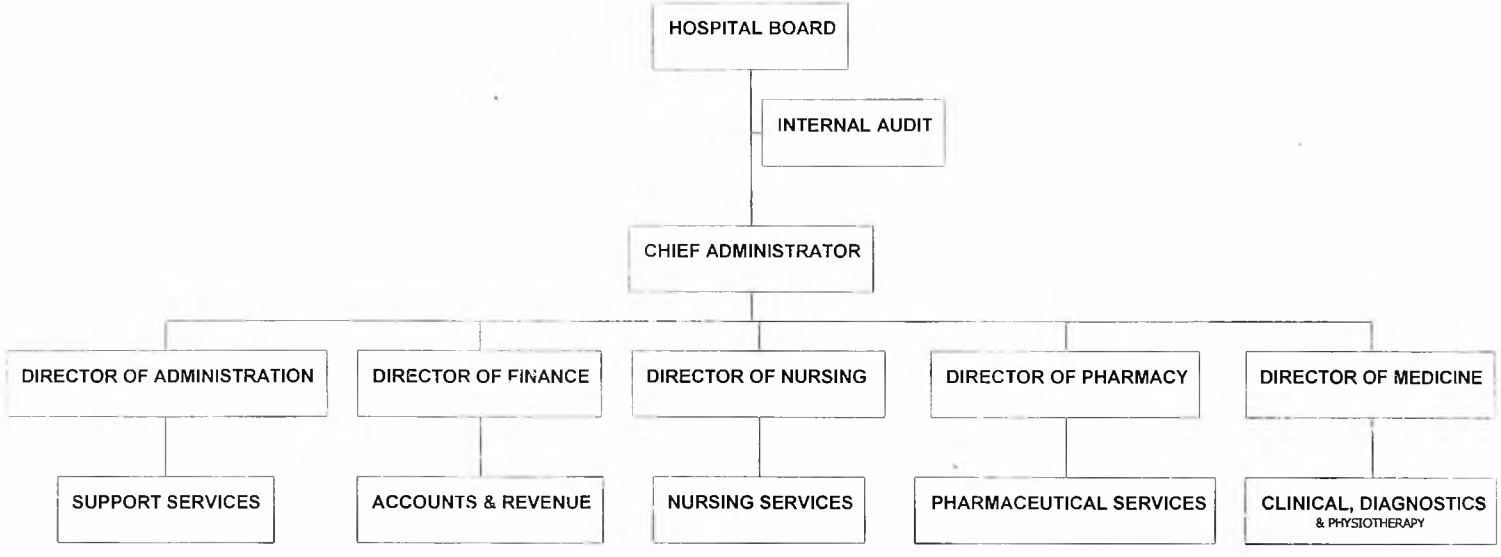
.....

30. Is there team work in the performance of the activities of the hospital as a whole
Yes [ ] No [ ]

31. Is there a forum / meeting where departments are brought together to discuss the performance of the hospital? Yes [ ] No [ ]

APPENDIX II

KOMFO ANOKYE TEACHING HOSPITAL -ORGANOGRAM



APPENDIX III

VARIABLES, INDICATORS AND MEASUREMENTS –Details

RESOURCES

Physical- Age, Condition, Capacity/ Size, Accessibility, Ownership and Uniqueness.

Human – Skills, Adaptability, Innovativeness and Knowledge of staff, Ownership.

Financial –Major Sources, Reliability, Financial Policy and Plans

Intangible – Loyalty and Commitment of Staff, Reputation, Relationships

COMPETENCES

In-bound Logistics
Service Delivery
Marketing
Service
Firm Infrastructure
Human Resources Management
Technological Development
Procurement

UNIQUENESS OF CAPABILITIES
Inimitability
Non-substitutability
Customer Value
Ownership

Crosstabs

Department * what is the first objective of your department Crosstabulation

Count

		what is the first objective of your department				
		to cordinate various departmental activities	Training of staff to improve quality delivery	to provide quality service	public education	increase hospital revenue and reduce expenditure
Department	Accident/Emergency		1	1		
	Accounts					1
	Administration	1				
	Anesthesia			1		
	Blood Bank				1	
	Child Health			2		
	Clinical Biochemistry			1		
	Clinical Microbiology			1		
	Dentistry			1		
	ENT			1		
	Haematology			1		
	Histopathology			1		
	Medical Electronic					
	Medical Records			1		
	Medicine			1		
	Ob and G			1		
	Pharmacy			1		
	Physiotherappy			1		
	Polyclinic Dispensary			1		
	Radiography			2		
	Sugery			1		
	supply and stores management			1		
Total		1	1	20	1	1

Department * what is the first objective of your department Crosstabulation

Count

		what is	
		Installation and maintenace of hospital equipments	Total
Department	Accident/Emergency		2
	Accounts		1
	Administration		1
	Anesthesia		1
	Blood Bank		1
	Child Health		2
	Clinical Biochemistry		1
	Clinical Microbiology		1
	Dentistry		1
	ENT		1
	Haematology		1
	Histopathology		1
	Medical Electronic	1	1
	Medical Records		1
	Medicine		1
	Ob and G		1
	Pharmacy		1
	Physiotherappy		1
	Polyclinic Dispensary		1
	Radiography		2
	Sugery		1
	supply and stores management		1
Total		1	25

osstabs

Department * what is the second objective of your department Crosstabulation

Count

		what is the second objective of your department				
		Training of staff to improve quality delivery	to provide quality service	Increase hospital revenue and reduce expenditure	Research/teaching students and residents doctors	Installation and maintenance of hospital equipment
Department	Accident/Emergency	1	1			
	Accounts			1		
	Administration	1				
	Anesthesia					
	Blood Bank		1			
	Child Health					
	Clinical Biochemistry	1				
	Clinical Microbiology		1			
	Dentistry					
	ENT				1	
	Haematology					
	Histopathology		1			
	Medical Electronic					1
	Medical Records					
	Medicine					
	Ob and G					
	Pharmacy		1			
	Physiotherappy					
	Polyclinic Dispensary		1			
	Radiography		2			
	Sugery				1	
	supply and stores management					
Total		3	8	1	2	1

Department * what is the second objective of your department Crosstabulation

		what is the	
		not applicable	Total
epartment	Accident/Emergency		2
	Accounts		1
	Administration		1
	Anesthesia	1	1
	Blood Bank		1
	Child Health	2	2
	Clinical Biochemistry		1
	Clinical Microbiology		1
	Dentistry	1	1
	ENT		1
	Haematology	1	1
	Histopathology		1
	Medical Electronic		1
	Medical Records	1	1
	Medicine	1	1
	Ob and G	1	1
	Pharmacy		1
	Physiotherappy	1	1
	Polyclinic Dispensary		1
	Radiography		2
	Sugery		1
	supply and stores management	1	1
tal		10	25

APPENDIX V PHYSICAL RESOURCES PROFILE OF KATH

- **CLINICAL**

MEDICINE					
Items **a) Equipment (Major)**	**Quantity**	**Age (range)**	**Condition**	**Capacity**	**Owner**
E.C.G. Machine	4	7 yrs	2 – Good 2 - Faulty	Small	KATH
Hot Air Sterilizer	1	7 yrs	Good	Small	KATH
Sphygmomanometers	1	3 yrs	Good	Small	KATH
Refrigerators	4	5 yrs	Good	Big	KATH
Endoscopy Machine	1	7 yrs	Good	Big	KATH
Dialysis Machine	1	1 yr	Good	Big	KATH
Colonoscopy Machine	3	7 yrs	Good	Big	KATH
Heart Tables	66	4 yrs	Fairly good	Big	KATH
b) Facilities					
Specialist Clinics	7		Good	Small	KATH
E.C.G Services	1		Good	Small	KATH
Endoscopy Services	1		Good	Small	KATH
Dialysis Services	1		Good	Normal	KATH
Colonscopy Services	1		Good	Small	KATH
In-patient (wards)			Good	Normal	KATH
c) Beds (type)					
Normal Beds	130		Satisfactory	Normal	KATH
Cardiac Beds	11		Good	Normal	KATH
Bedside Lockers	98		Fairly good	Small	KATH
OBSTETRICS AND GYNAECOLOGY					
Items **a) Equipment (Major)**	**Quantity**	**Age (range)**	**Condition**	**Capacity**	**Owner**
Resuscitaire	3	15 yrs	Old		KATH
Cardiotocograph	6	4 yrs	Good	Normal	KATH
Ultra-sound Machine	1	10 yrs	Satisfactory	Over utilized	SMS
Diathermy	1	15 yrs	Old	Normal	KATH
Suction Machine	6	5 yrs	Satisfactory	Normal	KATH
Laparoscope		8 yrs	Satisfactory	Normal	KATH

b) Facilities					
Theatres			Good	Small	KATH
Labour Ward			Good	Small	KATH
Ultra Sound Services			Good	Over utilized	SMS
Antenatal			Good	Normal	KATH
Emergency Services			Good	Normal	KATH
Family Planning			Good	Normal	KATH
In-patient				Over utilized	KATH
High Dependency			Poor	Small	KATH

POLYCLINIC DISPENSARY (GENERAL OUTPATIENT PHARMACY)

Items **a) Equipment (Major)**	**Quantity**	**Age (range)**	**Condition**	**Capacity**	**Owner**
Refrigerator	1		Good	Normal	KATH
Furniture				Not enough	KATH
b) Facilities					
Dispensary			Good	Normal	KATH

ANESTHESIA

Items **a) Equipment (Major)**	**Quantity**	**Age (range)**	**Condition**	**Capacity**	**Owner**
Anesthetic Machines	9	5 – 15 yrs	Good	Normal	KATH
Suction Machines	9	5 – 15 yrs	Good	Normal	KATH

ACCIDENT & EMERGENCY/OPERATING THEATRE

Items **a) Equipment (Major)**	**Quantity**	**Age (range)**	**Condition**	**Capacity**	**Owner**
X'ray Viewers	2			Normal	KATH
Autoclave	2	3 yrs	In good condition	Normal	KATH
Diathermy Machine	2		In good condition	Normal	KATH
Suction Machine	2			Normal	KATH
Intensifier	1		Faulty	Normal	KATH
Hand Drill	1		In good condition	Normal	KATH
Hot Air Oven	1		In good condition	Normal	KATH
b) Facilities					
Operating Room	2		In good condition		KATH
Scrub Room	2		In good condition		KATH
Instrument Washing Room	1		In good condition		

Sluice	1		In good condition		
Store Rooms	2		In good condition		
Pre-Anaesthesia Room	1		In good condition		
Recovery Ward	1		In good condition	Small	
c) Beds (type)					
Adjustable the Side Rails	4		Satisfactory		
Normal	2		Satisfactory		
Orthopaedic	2		Satisfactory		
Cots	2		Satisfactory		KATH

DENTISTRY

Items **a) Equipment (Major)**	**Quantity**	**Age (range)**	**Condition**	**Capacity**	**Owner**
Dental Units with Chair	5	1 – 3 yrs	Perfect	Normal	KATH
Dental Lab. Equipment for Removable Prosthodontics	Enough for 2 Labs.	2 – 10 yrs	Satisfactory	Normal	KATH
b) Facilities					KATH
Surgeries	5	1 – 3 yrs	Perfect	Normal	KATH
Laboratory	2	2 – 10 yrs	Satisfactory	Normal	KATH
Ward	1				KATH

EAR, NOSE AND THROAT (E.N.T)

Items **a) Equipment (Major)**	**Quantity**	**Age (range)**	**Condition**	**Capacity**	**Owner**
Audiometers	4	Since establishment of centre	Good	Over utilized	KATH
Tonsilectomy Set	4	3 yrs	Good	Small	KATH
Trachesotomy Tubes	10	3 yrs	Good	Small	KATH
Mastoidectomy Set	1	-	Outmoded		KATH
Aural Syringe	4	3 yrs	Poor	Over utilized	KATH
Mouth Gags	2	3 – 25 yrs	Satisfactory	Over utilized	KATH
Nasal Specula	20	-	Satisfactory	Over utilized	KATH
Tongue Depressors	20	-	Good	Over utilized	KATH
Tonsil Dissectors	3	-	Good	Over utilized	KATH
b) Facilities					
Out-patient Unit					

In-patient Unit					
Audiological Assessment					
Speech Training					
Surgical Services					
c) Beds (type)					
Beds	Shared with Dental and Eye Depts.				

ACCIDENT AND EMERGENCY/CASUALTY

Items **a) Equipment (Major)**	**Quantity**	**Age (range)**	**Condition**	**Capacity**	**Owner**
Dressing Trolleys	6	6 – 12 yrs	Good		KATH
Pats Trolley	6	5 yrs	Good		KATH
Wheel Chairs	6	5 yrs	Satisfactory		KATH
Elec. Suction Machine	1	15 yrs	Satisfactory		KATH
Theatre Table	-	-	-		KATH
P/S Exam Couldi	3	3 yrs	Satisfactory		KATH
Sutaring Lusts		1 yr	Satisfactory		KATH
Trays & Gallipots	10	5 yrs	Satisfactory		KATH
Screens & Covers	6	10 yrs	Satisfactory		KATH
Elec. Sterilizer	3	1 yr	Good		KATH
Paedics Weighing Scale	1	3 yrs	Good	Not enough	KATH
b) Facilities					
O.P.D	1		Good	Small	KATH
Suturing Room	1		Good	Small	KATH
Plaster Room	1		Good	Good	KATH
Adm. Team	1			Small	
Casualty Recover Wards	2		Poor	Small	KATH
In-patient	2		Satisfactory	Over Capacity	KATH
c) Beds					KATH
Normal	85	Old	Poor	Normal	KATH
Adjustable	6		Good		KATH
Orthopaedic	2	Old		Normal	KATH
					KATH

CHILD HEALTH

Items a) Equipment (Major)	Quantity	Age (range)	Condition	Capacity	Owner
Cupboard			Good		KATH
Suction Machine			Good		KATH
Drip Stands			Good		KATH
Instruments			Good		KATH
Boiler			Good		KATH
Sterilizing Drum			Good		KATH
Bed Elevator			Good		KATH
Diagnostic Set			Good		KATH
Weighing Scale			Good		KATH
Oxygen Cylinder			Good		KATH
Incubators	10	2 – 20 yrs	Good	Over utilized	KATH
Radiant Heater	2	2 yrs	Good	Over utilized	KATH
Phototherapy	2	2 yrs	Good	Over utilized	KATH
b) Facilities					
Septic Nurs	1	2 yrs	Good	Small	KATH
Sp. Care Unit	2		Good	Small	KATH
Wards	3		Poor	Small	KATH
O.P.D. Gen.	2		Fair	Fair	KATH
O.P.D. Specialist	1		Good	Small	KATH
M.C.H.	1		Fair	Fair	KATH
c) Beds					
Ordinary Hospital Beds	40	2 – 40 yrs	Fair	Fair	KATH
d) Cots	112	2 – 40 yrs	Good	Over utilized	KATH

SURGERY

Items a) Equipment (Major)	Quantity	Age (range)	Condition	Capacity	Owner
Image Intensifier	3	1 – new 2 – old	1 – good 1- satisfactory		KATH
Arthroscope	1	New	Good		KATH
Cystoscope	1	New	Good		KATH
Ultrasound	1	4 yrs	Good		KATH
Endoscope	3		Good		KATH

Diathermy Machines	4		Good		KATH
Sterile Water Plant	1		Good		KATH
Pneuma Drill	1		Good		KATH
Bedside Lockers	60				KATH
Bedside Tables	-				KATH
b) Facilities					
Well-equipped Theatres	3	2 – 10 yrs	Good	Normal	KATH
Image Intensifier	2	2 yrs	Good	Normal	
Cystoscopy	1	2 yrs	Good	Normal	
Endoscopy	3	5 yrs	Good	Adult size – 1 Paediatric – 2	KATH
Ultrasonography	1	4 yrs	Good	Normal	KATH
Wards	4	50 yrs	Satisfactory	Normal	KATH
c) Beds (types)					
Normal	70	A few new, most very old	Not very good	Normal	KATH
Orthopaedic					
Adjustable	12			Normal	KATH
c) Cots	30	> 20 yrs	Poor	Normal	KATH

- *DIAGNOSTIC*

HAEMATOLOGY

Items **a) Equipment (Major)**	**Quantity**	**Age (range)**	**Condition**	**Capacity**	**Owner**
Microscope	6	5 yrs	Good	Binocular	KATH
Water Bath	1	6 yrs	Good	Medium	KATH
Electrophoresis Tank	2	9-10 yrs	Very Good	Small	KATH
Counter	1		Very Good	8 parameter	KATH
Centrifuge	2		Good	Medium	KATH
Hot Air Oven	1			Large	KATH
b) Facilities					
HS					
Diff. WBC					
Platelet Count					
G-6 PO					

Reticulocyte					
Film Comment					

CLINICAL MYCROBIOLOGY

Items **a) Equipment (Major)**	**Quantity**	**Age (range)**	**Condition**	**Capacity**	**Owner**
Incubator	3	2 – old 1 – new	Good	2 – big size 1 – small size	KATH
Autoclme	1	Old	Good	Large size	KATH
Microscope	3	2 – old 1 – new	Good		KATH
Oven	2	Old	Good	Small size	KATH
Computer	1	New	Good		KATH
Water-Bath	1	Old	Good	Big size	KATH
Auto Analyzer	1	Yet to be use	Good	Normal	KATH
b) Facilities					
Bacteriology	1	Since establishment of hospital	Satisfactory	Normal	KATH
Parasitory	1		Good	Normal	KATH
Mycology	1		Satisfactory	Normal	KATH

CLINICAL BIOCHEMISTY

Items **a) Equipment (Major)**	**Quantity**	**Age (range)**	**Condition**	**Capacity**	**Owner**
Spectrophotometers	4	5 yrs	1 – good 3 - unstable		1 – KATH 3 – SMS
Auto Analyzers	4	2 – new 1 – 2nd hand 1 > 5 yrs	2 – new 2 – broken down		1 – SMS 3 – KATH
Blood Gas Analyzer	1	3 yrs	Broken down		SMS
Flame Photometer	1	5 yrs	Good		SMS
Water Baths	2	5 yrs	Good	1 – medium 1- large	1 – SMS 1 – KATH
Distilling (H_20) Plants	2	1 – new 1 > 10 yrs	Good		KATH
Adjustable Pipettes	6	3 > 5 yrs 3 < 2 yrs			3 – SMS 3 – KATH
b) Facilities					
Airconditioners	2	1 < 3 yrs 1 > 4 yrs	Good	1 – split air 1 – window type	KATH

BLOOD BANK

Items a) Equipment (Major)	Quantity	Age (range)	Condition	Capacity	Owner
Radiber Fridge	1	5 yrs	Good	250 units	KATH
GHT Fridge	2	3 mths	Good	150 units each	KATH
Radiber Freezer	2	5 yrs	Good	100 units	KATH
Meditronic Centrifuge	2	5 yrs	Good	Big	KATH
Diamed Centrifuge	2	1 yr	Good	24 samples	KATH
Diamed Incubator	1	1 yr	Good	100 units	KATH
Imufuge (centrifuge)	2	> 10 yrs	Good	12 samples	KATH
Shaker	2	4 yrs	Good	Big	KATH
b) Facilities					
Donor Clinic	1		Poor	Too small	KATH
Bank- Laboratory	1		Poor	Too small	KATH
Offices	2		Good	Adequate	KATH

RADIOLOGY

Items a) Equipment (Major)	Quantity	Age (range)	Condition	Capacity	Owner
Conventional Radio-graphy Machine	2	4 yrs	Very good	Normal	KATH
Dental Machines	2	1 – 10 yrs 1 – 2 yrs	Good	Normal	KATH
Automatic Processor	2	4 yrs	Good	Normal	KATH
Fluoroscopy Machine	1	Not yet in use	New	-	KATH
Mammography	1	4 yrs	Very good	Under utilized	KATH
Mobile X'rays	1	4 yrs	Very good	Normal	KATH
C-arm Machine	1	4 yrs	Very good	Normal	KATH
b) Facilities					
Accident & Emergency Services				Over utilized	KATH
Mobile Services for In-patients				Normal	KATH
Special Examinations					KATH
Mammography				Under utilized	KATH
Theatre Services				Normal	KATH

- PHYSIOTHERAPY

PHYSIOTHERAPY

Items **a) Equipment (Major)**	**Quantity**	**Age (range)**	**Condition**	**Capacity**	**Owner**
Shortwave Diathemy	4	5 – 20 yrs	Good	Over utilized	KATH
Infra-red	4	15 yrs	Good	Over utilized	KATH
Ultrasound	3	3 – 5 yrs	Good	Normal	KATH
Diadyne	3	2 – 20 yrs	Good	Normal	KATH
Wax Bath	1	< 30 yrs	Good	Over utilized	KATH
Threadmill	1	2 yrs	Good	Over utilized	KATH
Ergometer	1	15 yrs	Good	Over utilized	KATH
Wheel Chairs	4	2 mths	Good	Normal	KATH
b) Facilities					
Electrotherapy	1		Good	Small in number	KATH
Adult Gymnasium	1		Good	Small in number	KATH
Children's Gymnasium	1		Good	Small in number	KATH
In-patient			Good	Small in number	KATH
c) Beds (types)					
Couches	7	15 – 20 yrs	Good	Small in number	KATH

- PHARMACEUTICAL

PHARMACY

Items **a) Equipment (Major)**	**Quantity**	**Age (range)**	**Condition**	**Capacity**	**Owner**
Autoclave	1		Old	Big	KATH
Filtering Unit	1		Unserviceable	Small	KATH
Distilling Plant	1		Unserviceable	Big	
b) Facilities					
Stores	1		Fairly good	Normal	KATH
Dispensaries	5		Fairly good	Normal	KATH
Aseptic Laboratory	1		Fairly good	Normal	KATH
Manufacturing Unit	1		Fairly good	Normal	KATH

- **ADMINISTRATIVE AND SUPPORT SERVICE**

ADMINISTRATION/BOARD ROOM

Items **a) Equipment (Major)**	**Quantity**	**Age (range)**	**Condition**	**Capacity**	**Owner**
Electric Generator	2	1 – 4 yrs 1 – 18 yrs	Good		KATH
Boiler Plant	2	6 yrs	Good		KATH
Laundry Machines	4	6 yrs	Good		KATH
Water Pumps	4	5 yrs	Good		KATH
Computers	30	6 mths	Good		KATH
Oxygen Plant	1	2 mths	Good		KATH
Sterilization Plant	1	6 yrs	Good		KATH
Gas Room Equipment	2 sets	6 yrs	Good		KATH
Incubators	6	4 yrs	Good		KATH
b) Facilities					
Block of Wards	4	48 yrs	Good		KATH

ACCOUNTS

Items **a) Equipment (Major)**	**Quantity**	**Age (range)**	**Condition**	Capacity	**Owner**
Money Counting Machines	3	1 – 7 yrs	Good	Normal	KATH
Adding Machines	2	3 yrs	Good	Normal	KATH
Computers	6	1 – 6 yrs	Good	Normal	KATH
b) Facilities					
Revenue					
Salaries					
Main Accounts					
Costing and Monitoring					

MEDICAL RECORDS AND STATISTICS

Items **a) Equipment (Major)**	**Quantity**	**Age (range)**	**Condition**	**Capacity**	**Owner**
Computers	26	3 mths	Very new		Records Dept.
Shelves	32	1 yr	Very new		Records Dept.
Air Conditioners	2	3 mths	Very new		Records Dept.
Incubators	10				
b) Facilities					

OPD Poly Clinic			Satisfactory	Normal	Records & Stats.
A & E			Good	Small	Records & Stats.
Specialist Consulting			Bad	Small	Records & Stats.
Main Records Offices			Satisfactory	Normal	Records & Stats.
c) Beds (type)					
Adult Beds	813				
d) Cots	74				

MEDICAL ELECTRONICS UNIT/MAINTENANCE

Items a) Equipment (Major)	**Quantity**	**Age (range)**	**Condition**	**Capacity**	**Owner**
Hot Air Sterilizers	6	10 yrs	Working		KATH
Steam Sterilizers	4	2 yrs	Working		KATH
E.C.G	4	6 yrs	2 - faulty		KATH
X'ray Mobile	2	2 yrs	Working		KATH
X'ray Units	2	3 yrs	Not working		KATH
Surgical Diathery	4	4 yrs	3 – working		KATH
Laundry Machines	6 units	2 yrs	Working		KATH
Gas Plant	1	1 yr	Working		KATH
Stand by Generator	1	1 yr	Working		KATH
b) Facilities					
Electronics					KATH
Electricals					KATH
Anaesthetic					KATH
Estates					KATH

SUPPLY AND STORES MANAGEMENT

Items a) Equipment (Major)	**Quantity**	**Age (range)**	**Condition**	**Capacity**	**Owner**
Hand Trolleys	2	18 – 20 yrs	Poor	Small	KATH
Wooden Shelves	47	35 – 40 yrs	Fair		KATH
Sewing Machines	4	30 – 40 yrs	Poor	Small	KATH
Tailoring Machines	1	4 – 5 yrs	Good		KATH
Refrigerators	2	2 yrs	Good	Small	KATH
b) Facilities					
Main Stores	Demarcated	35 – 40 yrs	Poor	Small	KATH

Maintenance Stores		35 – 40 yrs	Poor	Small	KATH
Limb Fitting		40 – 45 yrs	Poor	Small	KATH
Laboratory Stores	1	40 – 45 yrs	Poor	Small	KATH

HISTOPATHOLOGY

Items **a) Equipment (Major)**	**Quantity**	**Age (range)**	**Condition**	**Capacity**	**Owner**
Tissue Processor	1	2 yrs	Good	80 pieces	KATH
Microscopes	5	4 yrs	Good	Binocular	KATH
Oven	1	10 yrs	Good	Medium	KATH
Water Bath	2	2 yrs	Good	Medium	KATH
Microtome	3	15 yrs	Partially	Large	KATH
b) Facilities					
Mortuary	2				KATH
Laboratory	2				KATH

APPENDIX VI
TYPES OF SPECIALIST/ SPECIALIZED CLINICAL STAFF –KATH

Consultants/ Specialists

Physician Specialist
Cardiologist
Ultrasonographer
Nephrologist
Dermatologist
Maxillo Facial Surgeons
Dental Surgeons
Paediatric Surgeons
General Surgeons
Urologist
Plastic Surgeons
Paediatricians
Neo-natal Specialist
Obstetrists/ Gynaecologists
Ophthalmologist
E.N.T. Specialist
Orthopaedic Surgeons
Anaesthesiologist

Nurses

Critical care
Peri-Operative
Diabetic
Paediatric
Burns
Ophthalmic
Anaesthetist
Midwives
Renal

Scientists

Immunologist
Parasitologist
Microbiologist
Biologist
Biochemist

APPENDIX VII

STRATEGIC CAPABILITY PROFILE OF KATH (COMPETENCES) — WEIGHT

INBOUND LOGISTICS

ACTIVITIES	Weighting of Activities				
	HW[1]	MW[2]	E[3]	MS[4]	HS[5]
Receipt and Inspection			2.5		
Stock Control System		2.2			
Storage of Inputs/Supplies			2.6		
Timeless of Supplies		2.3			
Distribution of Supplies to user departments		2.1			
AVERAGE		2.3			

OPERATIONS/SERVICE PRODUCTION

ACTIVITIES	Weighting of Activities				
	HW[1]	MW[2]	E[3]	MS[4]	HS[5]
Quality of Service				3.6	
Staff Responsiveness to Customers/Users			3.2		
Process of Service Delivery			2.9		
Maintenance of Facilities			2.7		
Timeliness of Service Delivery		2.4			
Availability of Supplies/Drugs			2.7		
AVERAGE			2.9		

MARKETING

ACTIVITIES	Weighting of Activities				
	HW[1]	MW[2]	E[3]	MS[4]	HS[5]
Pricing Strategy			2.5		
Promotion Strategy		1.8			
Market Research	1.1				
Physical Environment			2.5		
AVERAGE		2.0			

SERVICE

ACTIVITIES	Weighing of Activities				
	HW[1]	MW[2]	E[3]	MS[4]	HS[5]
Customer Education/Training			3.3		
AVERAGE			3.3		

FIRM INFRASTRUCTURE

ACTIVITIES	Weighing of Activities				
	HW[1]	MW[2]	E[3]	MS[4]	HS[5]
Top Management Support			2.8		
Planning Systems			2.9		
Control Systems			2.7		
Organizational Structure			3.4		
Corporate Culture			2.9		
Leadership Capabilities				3.8	
Communication and Information Systems			2.6		
Accounting Systems			2.6		
Financial Management/Control			2.7		
Leadership Styles			2.9		
Control of Board of Directors			2.7		
AVERAGE			2.9		

HUMAN RESOURCE MANAGEMENT

ACTIVITIES	Weighting of Activities				
	HW[1]	MW[2]	E[3]	MS[4]	HS[5]
Selection and Recruitment		1.9			
Health and Safety Measures		2.4			
Training and Development			3.4		
Employee Empowerment			2.9		
Reward Systems		1.9			
Promotion Systems			2.8		
Appraisal Systems		2.4			
Labour/Management Relationship			2.7		
Manpower Planning			2.8		
AVERAGE			2.6		

TECHNOLOGICAL DEVELOPMENT

ACTIVITIES	Weighting of Activities				
	HW[1]	MW[2]	E[3]	MS[4]	HS[5]
Level of Automation			2.3		
Research and Development			2.6		
Technology System			2.6		
Research and Development Funding		2.0			
Research and Development Facilities		2.3			
Human Resources for Research and Development			3.2		
AVERAGE			2.7		

PROCUREMENT

ACTIVITIES	Weighing of Activities				
	HW[1]	MW[2]	E[3]	MS[4]	HS[5]
Selection and Evaluation of Suppliers			2.6		
Quality Management of Purchased Goods/Services			2.8		
Methods of Procurement		2.3			
Timeliness of Procurement		2.1			
Procurement Lead Time		1.9			
AVERAGE		2.3			

APPENDIX VIII

MINISTRY OF HEALTH

DATA SET ON KOMFO ANOKYE TEACHING HOSPITAL, KUMASI FOR THE YEAR 1998 - THE TEN (10) TOP DISEASES OF THE OUT-PATIENTS

NO.	DISEASE	NO. OF CASES	% OF TOTAL
1.	Malaria	78772	22.04
2.	Acute Eye Infections	15935	4.46
3.	Diseaes of Oral Cavity	14074	3.94
4.	Accidents	12257	3.43
5.	Diarrhoeal Diseases	8175	2.29
6.	Upper Respiratory Tract Infection	6787	1.90
7.	Ear Infection	5945	1.66
8.	Skin Diseases	2622	0.73
9.	Hypertension	2511	0.70
10.	Pregnancy Related Complications	2384	0.67

TOTAL ATTENDANCES = 357407

1998 TEN (10) TOP CAUSES FOR ADMISSION

NO.	DISEASE	NO. OF CASES	% OF TOTAL
1.	Pregnancy Related Complications	12698	34.30
2.	Accidents	2071	5.60
3.	Malaria	1371	3.71
4.	Lobar Pnoumonia	1163	3.14
5.	Cerebrovascular Accident (CVA)	444	1.20
6.	Meningitis	431	1.17
7.	Anaemia	422	1.14
8.	Gynaecological Disorders	376	1.02
9.	Acquired Immune Defficiency Syndrome(AIDS)	356	0.96
10.	Hypertensive Diseases	335	0.91

TOTAL ADMISSIONS = 36987

(BIOSTATISTICIAN)
E. K. APPAH
8/2/99

MINISTRY OF HEALTH

DATA SET ON KOMFO ANOKYE TEACHING HOSPITAL, KUMASI FOR THE YEAR 1999 - THE TEN (10) TOP DISEASES OF THE OUT-PATIENTS

NO.	DISEASE:	NO. OF CASES	% OF TOTAL:
1.	Malaria	71242	19.87%
2.	Acute Eye Infection	16625	4.64%
3.	Disease Of Oral Cavity	12891	3.59%
4.	Accident	12891	3.59%
5.	Upper Respiratory Tract Infection	7362	2.05%
6.	Diarrhoeal Diseases	6757	1.88%
7.	Ear Infection	5887	1.64%
8.	Pregnancy and Related Complications	2218	0.62%
9.	Hypertension	2079	0.58%
10.	Diseases of Skin and Ulcer	1635	0.46%
	OTHERS	219021	61.07%
			100 %

Note: Total Out-Patient Attendances 1999 = 358623

1999 TEN (10) TOP CAUSES FOR ADMISSION

NO.	DISEASE:	NO. OF CASES	% OF TOTAL:
1.	Pregnancy Related Complications	6597	18.98%
2.	Accidents	2018	5.81%
3.	Aplastic and Other Anaemias	1625	4.68%
4.	Malaria	1548	4.45%
5.	Influenza and Pneumonia	940	2.71%
6.	Cerebrovascular Diseases	482	1.39%
7.	Gynaecological Disorders	392	1.13%
8.	Acquired Immune Deficiency Syndrome(AIDS)	373	1..07%
9.	Malignant Neoplasms	326	0.94%
10.	Hypertensive Diseases	240	0.69%
	OTHERS	20209	58.155%
		34750	100 %

Note: Total Admissions 1999 = 34750

162

(SNR. BIOSTATISTICIAN)
N. O. ATRIMPONG

MINISTRY OF HEALTH

DATA SET ON KOMFO ANOKYE TEACHING HOSPITAL, KUMASI FOR THE YEAR 2000

THE TEN (10) TOP DISEASE OF THE OUT-PATIENTS.

A

NO	DISEASES	NO OF CASES	% OF TOTAL
1	MALARIA	39182	11.93%
2	ACUTE EYE INFECTION	16201	4.93%
3	DISEASES OF ORAL CAVITY	13079	3.98%
4	ACCIDENTS	10469	3.19%
5	EAR INFECTION	4917	1.50%
6	UPPER RESPIRATORY TRACT INFN	3715	1013%
7	HYPERTENSION	2353	0.72%
8	DIARRHOEA DISEASES	2025	0.62%
9	URINARY TRACT INFECTION	1451	0.44%
10	DISEASES OF SKIN & ULCERS	1212	0.37%

TOTAL ATTENDANCE O.P.D = 328566

B 2000 TEN TOP CAUSES FOR ADMISSION

NO	DISEASES	NO OF CASES	% OF TOTAL
1	PREGNANCY RELATED COMPLICATIONS	8937	22.01%
2	ANAEMIA	2050	5.05%
3	ACCIDENTS	2007	4.94%
4	MALARIA	1504	3.70%
5	CEREBROVASCULAR ACCIDENT (STROKE)	462	1.14%
6	GYNAECOLOGICAL DISORDERS	414	1.02%
7	LOBAR PNEUMONIA	379	0.93%
8	DIABETES MELLITUS	361	0.89%
9	MENINGITIS	336	0.83%
10	MALIGNANT NEOPLASMS	335	0.83%

TOTAL ADMISSIONS = 40601

C. TOP TEN (10) CAUSES OF DEATH-2000

NO.	DISEASES	ADMISSIONS	DEATHS	% DEATH
1	ANAEMIA	2050	214	6.19
2	ACCIDENTS	2007	178	5.15
3	HIV / AIDS	332	137	3.96
4	MALIGNANT NEOPLASMS	335	118	3.41
5	DIABETES MELLITUS	361	98	2.84
6	MALARIA	1504	76	2.20
7	SEPTICAEMIA	167	75	2.17
8	CEREBROVASCULAR ACCIDENT (STROKE)	462	74	2.14
9	MENINGITIS	336	146	4.22
10	LOBAR PNEUMONIA	379	59	1.71

TOAL DEATHS =3456

D ADMISSION BY SPECIALITY -2000

NO.	SPECIALITY / DEPARTMENT	ADMISSIONS
1	OBSTETRIC	1427
2	GYNAECOLOGY	3966
3	CHILD HEALTH / PAEDIATRICS	7282
4	PAEDIATRIC SURGICAL	1136
5	GENERAL SURGICAL	2437
6	ORTHOPAEDIC	1295
7	GENERAL MEDICINE	6176
8	CHEST CLINIC	166
9	MBU	2894
10	SEPTIC UNIT	963
11	PSYCHIATRY	2
	TOTAL =	40601

BIOSTATISTICIAN.

N.O. FRIMPONG