ASSESSMENT OF INFORMATION MANAGEMENT IN NATIONAL HAJJ COMMISSION OF NIGERIA (NAHCON)

BY

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BEING A THESIS SUBMITTED TO THE SCHOOL OF POSTGRADUATE STUDIES, AHMADU BELLO UNIVERSITY, ZARIA IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF MASTER DEGREE IN INFORMATION SCIENCE (MIS)

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MAY, 2015

Declaration

I declare that this Thesis entitled: “Assessment of Information Management in National Hajj Commission of Nigeria (NAHCON)” was carried out by me. It has never been presented elsewhere, either wholly or partially, for the purpose of the award of a higher degree. All the quotations and sources of information are, however, duly acknowledged by means of references.

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Certification

This Thesis entitled: "Assessment of Information Management in National Hajj Commission of Nigeria (NAHCON)", by Adamu Salamatu meets the regulations governing the award of the degree of Master of Information Science at Ahmadu Bello University, Zaria, and is approved for its contribution to knowledge and literary presentation.

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Dedication

This research work is dedicated to my late father Alhaji Adamu Abubakar and my caring, adoring and thoughtful mother Hajiya Fatima Adamu.

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Abstract

The aim of this study was to assess information management (IM) in National Hajj Commission of Nigeria (NAHCON). Specifically the study sought to; determine the types of information generated and acquired in NAHCON, how information is managed, determine the extent to which information is relevant and useful, determining the extent to which the NAHCON is Psatisfied with management of the available information, and lastly, identify the relevant and available ICTs utilized for information management in the NAHCON. Five research questions were formulated in order to achieve the objectives of the study. A descriptive survey methodology was adopted. The population comprised the entire 94 staff members at the NAHCON's headquarters in Abuja. The study relied on data collected through an open ended and closed ended questionnaire structured to answer the research questions raised. To analyse the data, responses from the questionnaire were tabulated, coded and processed by use of a computer Statistical Package for Social Science (SPSS) version 20.0 programme. The study was significant as it provided a guide that management team will use to review operational procedures and policies to enhance service delivery at the commission. It will help to determine areas of wastage on resources and processes as well as saving on cost effectively. The results found that effective utilisation of ICTs will assist in monitoring operational processes and more critically, improve the level of transparency during reconciliation with stakeholders. The findings have enriched existing knowledge on IM and will be of interest to both researchers and academicians who seek to explore and carry out further research in the field of IM. The major findings from the study revealed that managerial, business, strategic, information on pilgrims' and statistical information were the most generated and acquired information gotten through a set of criterions. The study further revealed that filling cabinets / shelves, hard drives, and audio/video tapes were the central storage devices used in the commission and also the available information was found to be relevant and highly useful to the commission's operations. It was added that most respondents were highly satisfied with information management even though it is basically done manually. Finally, it was confirmed that NAHCON's departments have the required ICTs in place but were faced with a number of challenges in the use of the ICT equipment. It was recommended that the commission should develop and adopt an integrated and accelerated tailored hybrid- management information system (MIS) and thus; align itself to using ICTs as a strategic tool for ensuring global benchmarks are cascaded to all levels of the hierarchy.

Table of Contents

Declaration i

Certification ii

Dedication iii

Acknowledgements iv

Abstract vi

List Of Figures x

List Of Tables xi

Appendix xii

Abbreviations xiii

Chapter One: Introdction 1

1.1 Background to The Study 1

1.1.1 Information Management 2

1.1.2 Application of ICTs to Information Management 3

1.1.3 The National Hajj Commission of Nigeria (NAHCON) 4

1.2 Statement of the Problem 7

1.3 Research Questions 8

1.4 Objectives of the Study 8

1.5 Significance of the Study 9

1.6 Scope and Delimitation of the Study 9

1.7 Limitation of the Study 9

1.8 Operational Definition of Terms 10

Reference 11

Chapter Two: Review of Related Literature 13

2.1 Introduction 13

2.2 Information Management 13

2.2.1 Information 13

2.2.2 Management 14

2.2.3 Information Management 14

2.2.3.1 Information Management Life Cycle 15

2.2.4 Potential Benefits of Information Management 19

2.3 Information Generation and Acquisition 20

2.4 Information Organisation and Storage 22

2.5 Information Retrieval and Access 23
2.6 Information Utilization 25
2.7 Application of ICTs to Information Management 26
2.8 Summary of the Review 27
Reference 29
Chapter Three: Research Methodology 32
3.1 Introduction 32
3.2 Research Methodology adopted for the study 32
3.3 Population of the Study 33
3.4 Sample and Sampling Techniques 33
3.5 Instruments for Data Collection 33
3.5.1 Questionnaire 33
3.6 Validity of the Instruments 34
3.7 Procedure for Data Collection 34
3.8 Procedure for Data Analysis 35
Reference 36
Chapter Four: Data Presentation, Analysis And Discussion 37
4.1 Introduction 37
4.2 Response Rate 37
4.3 Data Presentation and Analysis 39
4.3.1 Descriptive Analysis 39
4.3.1.1 Information Generation and Acquisition in NAHCON 39
4.3.1.2 Information Management in NAHCON 45
4.3.1.3 Relevance and Usefulness of the Available Information in NAHCON 50
4.3.1.4 Levels of Satisfaction with Management of the Available Information in NAHCON 52
4.3.1.5 Application of ICTs to Management of Information in NAHCON 54
Reference 59
Chapter Five: Summary, Conclution and Recommendation 60
5.1 Introduction 60
5.2 Summary of the Study 60
5.3 Summary of Major Findings 61
5.5 Recommendations 62
5.6 Suggestions for Further Study 63

Bibliography 64
Appendix I: Letter of Introduction.....68
Appendix II: Questionnaire on Assessment of Information Management in NAHCON 69

List of Figures

Figure 2.1: Information Management Lifecycle……19

List of Tables

Table 4.1: Summary of Response 37

Table 4.2: Response rate by Departments in NAHCON 38

Table 4.3: Types of Information Generated in NAHCON 40

Table 4.4: Types of Information Acquired in NAHCON 41

Table 4.5: Internal Sources of Information Generation in NAHCON 42

Table 4.6: External Sources of Information Acquisition in NAHCON 44

Table 4.7: Stakeholders Responsible for Organizing Information in NAHCON 45

Table 4.8: Types of Information Storage Devices used in NAHCON 47

Table 4.9: Types of Channels used for Information Dissemination in NAHCON 48

Table 4.10: Reasons for Information Utilisation in NAHCON 49

Table 4.11: Levels of Relevance of the Available Information in NAHCON 51

Table 4.12: Levels of Usefulness of the Available Information in NAHCON 52

Table 4.13: Levels of Satisfaction with Management of the Available Information in NAHCON 53

Table 4.14: Types of ICTs Available and Utilised in NAHCON 54

Table 4.15: Uses of computer in NAHCON 55

Table 4.16: ICTs for Storage and Retrieval of Information in NAHCON 56

Table 4.17: Challenges to using ICTs in NAHCON 577

Appendix

Appendix I: Letter of Introduction……..…….68

Appendix II: Questionnaire on Assessment of Information Management in NAHCON…..…67

Abbreviations

ABU	Ahmadu Bello University.
BTA	Basic Travel Allowance
FCT	Federal Capital Territory
ICT	Information Communication Technologies
IM	Information Management
MIS	Management Information System
NAHCON	National Hajj Commission of Nigeria
SPSS	Statistical Package for Social Science
SPWBs	State Pilgrims Welfare Boards
WWW	World Wide Web

CHAPTER ONE

INTRODCTION

1.1 Background to the Study

Information, an inevitable resource, is needed for effective management of organisational activities. Information is an understanding or impression derived from any form of conscious or unconscious contact or association with anything, item, issue, event, programme, environment formally or informally which adds positively or negatively to one's existing knowledge, skills, predisposition and experiences (Mohammed, 2014). Information, the life blood of modern organisation is needed to control the day to day activities of an organisation (Opara, 2003). Lucey (2002) described information as that which is used and which creates value. She further argued that information has the following attributes: relevance for its purpose; sufficiently accurate for its purpose; complete enough for solving the problem from a source in which the user has confidence; communicated to the right person; communicated in time for its purpose; and enough for solving problems. Information enables organisations to determine the need to create new forms of services or withdraw from existing ones. Without relevant information, services are not properly rendered and customers are not served effectively (Encyclopaedia of Management, 2014). In order to make optimal use of information in various organisational contexts, information ought to be properly managed for adequate usage and reference as appropriate.

Management is the art of getting things done amongst different sets of formally organized groups (Harold et. al. 2004). Management of information becomes imperative for today's modern organisations because it has a profound unifying effect on the use of information throughout an organisation and will also help to identify the needs which enable an organisation to effectively provide relevant, needed and timely information to users. It helps to maintain database integrity, create a powerful and accessible environment for the retrieval

of information, facilitate linkages amongst diverse data sets and provide adequate metadata for data interpretation and analysis (Gries, 2014).

1.1.1 Information Management

Information management (IM) is key to competitiveness and economic growth. Laffan (2008) defined IM as the means by which an organisation efficiently plans, collects, organises, uses, controls, disseminates and disposes its information and through which it ensures that the value of that information is identified and exploited fully. It helps to identify the needs which enable an organisation to effectively provide relevant, needed and timely information to users. It can also be said that IM is the collection and management of information from one or more sources and the distribution of that information to one or more audiences (Encyclopaedia of Management, 2014). James (2005) opined that IM is an umbrella term that encompasses all the systems and processes in an organisation for the creation and use of corporate information. He mentioned systems in terms of technologies such as web content management systems, document management, records management, digital systems management and learning management systems. Essentially, information management entails acquiring, processing, securing, storing, retrieving and maintaining information.

Information Management started as a manual process and over time, gradually moved to Information Communication Technologies (ICT) based. Laudon and Laudon (2007) assert that ICT includes all the technologies that facilitates; the processing, transfer and exchange of information and communication services. It is considered as a subject of expertise that links information technology (computers and applications) and telecommunication networks (intranet and internet), that lets people and computers inter-relate irrespective of physical location. In the early 1970s IM was largely limited to files, file maintenance and the life cycle management of paper-based files. With the advances in ICTs since the 1970s, the job of

information management took on a new dimension and began to include the field of data maintenance. Information Management requires an understanding of the technology involved. The theory behind it became necessary as information storage shifted from manual to electronic means. By the late 1990s when information is being regularly disseminated across computer networks and by other electronic means; information managers found themselves challenged with increasingly complex tasks involving hardware and software. In essence, with the latest ICTs available, information management has become a powerful resource for many organisations. The primary goals of IM according to Legault (2014) is to ensure:

- Quality information is created and provided
- Program and service delivery is efficient
- Decisions are documented
- Information is available (captured, organised, accessible, maintained, and preserved)
- Information is protected in accordance with legislation and policy requirements
- Information is disposed of in accordance with legislation and policy requirements

To become strategic, information must be reliable, understanding and well informed in order to guide actionable plans. While each of these goals are necessary, there is the need for a framework that binds these goals together. For the goals of IM to be achieved, several studies have argued for use of ICTs in organisations.

1.1.2 Application of ICTs to Information Management

The use of ICTs has become very vital to all organisations. Information and communication technology is clearly considered as a key growth area in this century, specifically in a dynamic business and highly competitive environment which requires utilising advanced ICTs to improve efficiency and cost effectiveness while presenting high quality services to customers (Allen and Morton, 2004). The increasing availability and use of ICTs

have begun to create a link in terms of application and competiveness leading to an enhanced productivity of industries, governments and citizens (Olatokun, 2007). As the ICTs are dramatically changing the lives of people around the world, organisations must come to grips with finding solutions that will increase public value to their citizens. The importance of ICTs can also be seen from the information organisations create through virtual worlds e.g. World Wide Web (WWW), electronic mails and voice mails etc.The Internet, as a main stream communication media and as an infrastructure for delivering services has generated a wide range of strategic implications for organisations in general (Li-Hua and Khalil, 2006). Generally, ICTs can be conceived as automated and virtual products (including software and applications) and services that facilitate information generation, identification, location, storage, retrieval, dissemination, access and utilisation (Mohammed, 2014). Hence, sound integration of ICTs into the process of information management for effective service delivery can give rise to new forms of services, management and planning that can master the process of information generation, processing, dissemination, use and adoption of ICT infrastructures by the National Hajj Commission of Nigeria (NAHCON).

1.1.3 The National Hajj Commission of Nigeria (NAHCON)

The National Hajj Commission of Nigeria (NAHCON), formally, the Nigerian Pilgrims Commission was established on 12th October, 2006. The commission is a corporate body with perpetual succession and a common seal (NAHCON: 2011). Some of the objectives of the commission include:

- Issuing License, regulating, supervising and performing oversight functions over organisations, associations (corporate or non -corporate) or similar bodies engaged in organising and co-ordinating the movement of persons from Nigeria to Saudi Arabia to perform the Hajj or Umra.

- Providing accommodation, transportation and other services related to the performance of the Hajj and Umra to pilgrims in Saudi Arabia.
- Co-ordinate the provision of health, financial, security, customs, immigration and related services to persons proceeding to, or returning from Saudi Arabia to perform the Hajj or Umra.
- Establish and maintain an adequate information system and libraries of books and other relevant publications as well as cinematograph and other facilities for use by persons interested in or desirous of undertaking a pilgrimage, however the library shall be opened to the public upon and subject to any conditions the commission may deem fit.
- Establish, supervise and regulate a system of Hajj Savings Schemes to be operated by the State Pilgrims Welfare Boards (SPWBs) of each state and the Federal Capital Territory (FCT) for interested intending pilgrims.

NAHCON (2011) stated that the key activities and processes of NAHCON are carried out at two different levels: state level and national level.

State Level

This is where the enrolment of pilgrims is done. The processes involved at state level are in three stages (3). These stages are as follows:

Stage 1

This involves registration of intending pilgrims' at the various registration centres in the local government areas by the pilgrim registration officers. The state pilgrim welfare boards (SPWBs) ensure that registration officers recruited to enrol pilgrims are computer literate, are not over-aged, have basic knowledge of Islam and must be able to communicate with the intending pilgrims in their local language. The intending pilgrim completes an application

form, his biometrics taken and makes an initial payment. Thereafter, the intending pilgrim is screened to ascertain the pilgrims' religions' knowledge of hajj as well as their health condition.

Stage 2

The pilgrim registration officer forwards the pilgrims' documentation to the zonal office for further screening and verification.

Stage 3

This is where the documentation is passed to the state headquarters for approval and further processing. The state headquarters handle the visa application, sourcing of basic travel allowance (BTA) and other logistics. This is done for intending pilgrims that have fully paid the hajj fare.

National Level

The processes and activities are basically grouped into three phases as follows:

1. Pre - Hajj Phase
2. Hajj - Phase
3. Post - Hajj Phase

Pre Hajj Phase

Some of the key activities/Processes include:

1. Seat Allocation to States and other stakeholders.
2. Selection of Airlines and allocation of operational airport(s).
3. Selection of Tour Operators.
4. Determination of Hajj fares.

5. Arrangements of accommodation in Saudi Arabia.

Hajj Phase

Some of the key activities/Processes include:

1. Transportation of pilgrims from Jeddah Airport to their respective accommodation & various ritual sites.
2. Provision of rooms/tents to pilgrims at various ritual sites.
3. Provision of meals to pilgrims.
4. Provision of medical care and assistance to pilgrims.
5. Departure arrangements.

Post-Hajj Phase

Some of the key activities/Processes include:

1. Luggage collection by pilgrims
2. Discharge of pilgrims
3. Reconciliation with Authorities & service providers in Saudi Arabia
4. Reconciliation with Airlines/Tour Operators
5. Preparation of Hajj report

The foregoing suggest that NAHCON requires the use of information in order to plan, control, make decisions as well as solve problems facing the commission.

1.2 Statement of the Problem

The success of any organisation is seen in terms of its ability to manage information generated for use and services (Ladu, 2010). NAHCON is a service delivery organisation that relates with many stakeholders such as Saudi Arabia Embassy, Pilgrims, Tour Operators and

SPWBs etc. within and outside Nigeria that have varied capacity and focus in information management. The bulk of its work is carried out at national headquarters through SPWB's, where documentation about intending pilgrims' are passed over to the national headquarters from the SPWBs through zonal offices for approval and further processing (NAHCON, 2009). Every year the intending pilgrims encounter delays in processing and receiving their travel documents. This usually leads to a situation whereby the intending pilgrims end up not being granted visas on time. As a result, some of them may end up not being able to undertake the intended pilgrimage. Towards this end, it will be necessary to study how information is being managed in NAHCON for effective and efficient service delivery.

1.3 Research Questions

The study sought to find answers to the following questions:

1. What types of information are generated and acquired in NAHCON?
2. How is information managed in NAHCON?
3. To what extent is the available information relevant and useful to NAHCON?
4. To what extent is NAHCON satisfied with management of the available information?
5. What type of ICTs are available and utilized in the management of information in NAHCON?

1.4 Objectives of the Study

The objectives of the study are;

1. To determine the types of information generated and acquired in NAHCON.
2. To find out how information is managed in NAHCON.
3. To determine the extent to which the available information is relevant and useful to NAHCON.

4. To determine the extent to which NAHCON is satisfied with management of the available information.
5. To identify the ICTs available and utilized in the management of information in NAHCON.

1.5 Significance of the Study

The significance of this study was particularly centred towards providing a guide that management team will use as a base upon which to review NAHCON's operational procedures and policies to enhance service delivery at the commission. The study will help to determine areas of wastage on resources and processes as well as saving cost effectively. The results will establish that effective utilisation of ICTs will assist in monitoring operational processes and more critically, improve the level of transparency during reconciliation with stakeholders. The findings will seek to enrich existing knowledge on IM and will be of interest to both researchers and academics who seek to explore and carry out further research in the field of IM.

1.6 Scope and delimitation of the Study

The study examined information management in the context of information generation, organisation, storage and retrieval, utilisation as well as application and utilisation of ICTs in NAHCON. The study was delimited to assessing information management with particular focus on the activities carried out at NAHCON's headquarters in Abuja.

1.7 Limitation of the Study

The challenges of the study were shortage of time required to tour all the zonal offices of the commission and state pilgrim's welfare boards (SPWBs) across the country, logistics and the recent security threats in the country.

1.8 Operational Definition of Terms

The following terms are defined in the context of this study in order to enhance their understanding and use:

1. **Information -** An understanding or impression derived from any form of conscious or unconscious contact or association with anything, item, issue, event, programme, environment formally or informally which adds positively or negatively to one's existing knowledge, skills, predisposition and experiences.
2. **Management -** The art of getting things done through and with people in formally and informally organised groups.
3. **Information Management (IM)** – This entails acquiring, processing, securing, storing, retrieving and maintaining information.
4. **Information and Communication Technologies (ICTs) -** is a merger of computing and telecommunication technologies for information acquisition, storage, retrieval, and dissemination.

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CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 INTRODUCTION

The chapter reviewed relevant literatures that relates to information management. In other to have an effective review, the following sub-headings were discussed:

2.2 Information management

2.3 Information generation and acquisition

2.4 Information organisation

2.5 Information storage and retrieval

2.6 Information utilization

2.7 Application of ICTs to information management

2.8 Summary of the review

2.2 Information Management

Information Management brings together two basic concepts with many shades of understanding: information and management. The shades become shadows when the words are brought together as information management.

2.2.1 Information

Information is considered to be the life blood of organisations and its management is important for the support of an organisation's business in order to achieve the organisational stated objectives (Schubuer, 2003). Information is important in developmental process. It expands the possibilities of management and also facilitates participatory development and

empowerment. Information is characterized by its accuracy, timeliness and relevance. Adereti, et al (2006) opined that accuracy implies information is free from bias; timeliness means that recipient can get information when they need it and relevance implies whether the piece of information answers the users question of how? Timely, relevant, accurate and appropriate information reduces uncertainty and enable possible actions take place (Lucey, 2002).

2.2.2 Management

Management is the art of getting things done through and with people in formally organised groups (Harold et. al, 2004). Nwadiani (1998) described management as a variety of sequential and related activities that are designed and carried out in order to effectively and efficiently achieve organisational goals in relation to societal needs. Thus, an effective management involves ensuring efficiency and effectiveness in the use of available human and material resources together while combating any constraint that might hamper organisational objectives.

2.2.3 Information Management

Information management is the collection and management of information from one or more sources and the distribution of that information to different audiences (Encyclopaedia of Management 2014). Laffan (2008) defined IM as the means by which an organisation efficiently plans, collects, organises, uses, controls, disseminate and dispose its information and through which it ensures that the value of that information is identified and exploited fully. Information management has effects on how policy makers and managers plan and decide on staffing, finance, production, services and strategic development of their establishment (Mohammed, 2005). It allows processes to be mapped, which facilitates the identification of resources, aid communication about the process, makes it measurable and emphasizes improvement (Davenport, and Marchand, 2000).

The key elements involved in IM according to Wilson (2002) are information generation, processing, organisation, dissemination and utilisation. Information management has gradually evolved to contend with the advent of computers in the preservation, retrieval and dissemination of information. Thus, in recent times, most organisations manage their vast information with the use of a computer system. James (2005) opined that IM is an umbrella term that encompasses all the systems and processes within an organisation for the creation and use of corporate information. He mentioned systems in terms of technologies such as web content management systems, document management, records management, digital systems management and learning management systems. Alesandrini (2000) observed that the technological means of accessing and distributing information has become imperative and plays a strong part in facilitation. He pointed that most traditional information management practice are too limited and sometimes narrower in scope to be able to tackle the new dimensions of information management. For the purpose of this study, the researcher concluded that the focus of IM is the ability of organisations to capture, manage, preserve, store and deliver the right information to the right people at the right time and in the right format. Therefore, organisations should establish structures that are capable of managing information throughout the IM lifecycle.

2.2.3.1 Information Management Life Cycle

Information management life cycle is a comprehensive approach to managing the flow of an information system's data and associated metadata from creation and initial storage to the time when it becomes obsolete and deleted (Rouse, 2005). It automates the processes involved, typically organizing data into separate tiers according to specified policies, and automating data migration from one tier to another based on those criteria. The 7 stages comprising the life cycle of information management is explained by library and archives Canada (2013), as follows:

Stage 1: Planning

Planning is an activity that reflects a wide variety of inputs. Good planning is the key to success of every initiative, large or small. This is the stage where IM practitioners and managers plan measures to support Information life cycle. The most important aspect of Stage 1 is to recognize that any plan is better than no plan. Like many, you may be just beginning the process of incorporating IM into your regular planning cycles. Others may be looking to strengthen their understanding of IM and its principles and practices. Regardless of which stage you are at, undertaking planning to set the stage for effective IM within your initiatives is a best practice that you should feel proud of.

Stage 2: Collection, Creation, Receipt and Capture

This is the stage where information are initially created or obtained. This could include their creation by a member of an organisation at varying levels or receipt of information from an external source. It includes correspondence, forms, reports, drawings, computer input/output and/or other sources. Information centres have the duty of managing and conserving their collectives adequately, conservation in the operations which are intended to prolong the life of an object by forestalling or remedying deterioration.

The most important aspect of Stage 2 is to recognize that information assets have been generated and to encourage employees to assess the value and role of the information at the moment of creation within a recognized framework that makes it easy to support applicable legislation and departmental policies. Good information organisation is a critical aspect of supporting timely and accurate information exchange.

Stage 3: Organisation

Organisation facilitates access to materials. Information is organised according to a structured set of business rules and information technology requirements. These rules and requirements prescribe the ways in which records and information must be stored and handled over time in order to support each organisation's unique policies, procedures, mandates and legislation. This is the stage where information is organised for effective use, dissemination, maintenance and disposition. The most important aspect of Stage 3 is the presence and consistent application of IM guidelines.

Stage 4: Use and Disseminate

This is the stage where information are actively used and shared. All the other Stages support this important phase of the IM life cycle. The purpose of disseminating information is to encourage the sharing of wider spread of information. It makes the retrieval of relevant information more likely and allows new insights to be created by relating disparate items of information. The separation between information provider and user should be dissolved to collaborate as partners in the dissemination and value adding of information to help ensure that the best information is seen by the right persons in the organisation. Also, to encourage users to be active participants, it should be made easy for commentaries and evaluation.

Effective use and dissemination of information yields timely, accurate and available information that is accessible by those who need it when needed for better comprehension.

Stage 5: Maintenance, Protection and Preservation

Maintenance entails filing, retrieval and transfers. During this stage Information are managed to ensure credibility and quality. The requirements for proper maintenance are often unique to each organisation's policies, procedures, mandates and legislation. For example,

records related to history or law may be managed differently than records that provide broad information. Preservation is the maintenance of information resources so that they can be related to the original condition as applicable (Aina, 2004).

The primary goal of preservation is to prolong the existence of an official property. At this stage, the information framework is placed within a larger management framework that allows systems to collate each individual record over time. Stage 5 deals with records and information right up until they are no longer active and hence become ready for disposition.

Stage 6: Disposition

Disposition is the final stage of information management in which a record is either destroyed or permanently retained. In other words the records have reached the end of their life cycles. This is a critical decision stage that is guided by legislation affecting records of archival value, concepts of legal control, and departmental records disposal plans. The most important aspect of Stage 6 is avoiding the wrongful disposition of records. It is important to deal with records as soon as it is determined that they no longer have business value to the organisation to avoid the costly build-up of stored backlogs of records.

Stage 7: Evaluation

This is the stage where the opportunity is taken to really assess how well IM programs are doing in effective IM life cycle and to take corrective actions to obtain better results in the future. This is a permanent and ongoing part of the cycle and an important factor in continuous improvement. Information management practitioners and managers actively evaluate the effectiveness of their IM strategies and processes. Using a number of different evaluation tools, the objective is to assess where programs have been strong and where they have been weak, so that changes can be made in the next planning cycle to achieve better results.

The most important aspect of Stage 7 is having specific performance targets that your IM programs are trying to achieve. In Stage 1: IM Planning, key metrics for performance were established, ideally against benchmark results. The concept of benchmarking or taking a measure of how your programs are performing against set measurement criteria is important in order to be able to see if you have made gains or losses in your IM program effectiveness. Each time a new measure is taken, it can be compared to the earliest and first benchmark, to the last performance measure and to the target objective. As they become available, you may even be able to compare the effectiveness of your programs to external organisations and those who have achieved recognition for best practices.



Fig.2.1: Information Management Life Cycle

2.2.4 Potential Benefits of Information Management

The potential benefits of good IM are sizeable and wide reaching. However, NetMonkeys (2009) asserts that major benefits will be gained in the following areas:

1. Reducing administrative labour cost: Less actual time moving information around and outside the company saves massive amounts of staff time and labour cost.

2. Reducing wasted time and mistakes: Access to constantly updated information from an easy to locate source prevents repetition of work on out of date documents. Staff can add and amend information efficiently and quickly.
3. Better collaboration: Projects requiring content and information from different departments and external parties benefit from easier access, greater team working and faster completion amongst on-site and co-located teams.
4. Increased customer service: Responding to customers quicker with more complete and relevant information gains sales and retains clients.
5. Compliance with regulation: Effective IM will reduce the cost of audits and assist in complying with regulations.

2.3 Information Generation and Acquisition

Information generation refers to the social process that involves interaction and sharing experiences (Ondari – Okemwa, 2006). It is a social interactive process of continuous dialog amongst organisations and stakeholders. In the process of generating information, experiences are converted into information for people to capture and apply as appropriate. The way people acquire, share and apply information facilitates the generation of information; hence there must also be interplay between tacit and explicit information for new information to be generated (Davenport and Marchand, 2000).

Organisations generate information as part of their formal tasks which has direct relevance to the work at hand. The bulk of the work of organisations such as NAHCON is carried out at national headquarters through SPWB's and zonal offices, where each SPWB has its own registration centres at the local government areas headed by the pilgrim registration officers, zonal office staff members at state headquarters and consequently, documentation is

passed to the national headquarters from the state headquarters for approval and further processing (NAHCON, 2011).

Schueber (2003) believe that for any organisation to be effective and efficient, it should be able to generate or acquire the following types of information:

- Information linking inputs and outputs for resource management and performance monitoring.
- Information about work on the ground is crucial for accountability.
- Information about the impact of wider forces helps linking micro and micro tasks, facilitates advocacy and creates awareness of the changing political, economic, social and technical environment to which non-governmental organisations (NGOs) have continually to adjust.
- Information about new methods and approaches facilitate innovation in organisation.

Significant to this process of information generation is the source of its generation. Information is generated formally and informally. Lucey (2002) identify two types of sources of information in organisations: internal and external sources. She divides each of the sources into formal and informal sources.

An internal information source includes:

- Formal information sources include all outputs of the organisation that include control and monitoring reports, budgets, job description, organisational charts, correspondence, video displays.
- Informal information sources include discussion, meetings, social contact, telephone conversations, personal record keeping and correspondence.

External sources include:

- Formal information sources include published reports, government statistics, scientific and technical abstracts, organisation or company reports, commercial data bank, and special investigations.
- Informal information sources include discussion, social contacts or interaction, conferences, correspondence, media coverage etc.

Information source that is trusted by its users creates confidence in decision making in all aspects of project activity and will be visited or used repeatedly. Hence, only information sources that have been evaluated and are relevant and valuable to the mission of the organisation are used in achieving their objectives. Therefore the use of an IM system in generating information will help organisations to efficiently plan, collect, organise, use, disseminate and dispose its information and also ensures that the value of that information is identified and exploited.

2.4 Information Organisation and Storage

The organisations' success in any of its operation is highly dependent on how well the regenerated and recorded information is managed (Davenport, 2001). Information organisation is critical to optimal data use. Part of the information that is acquired or created is physically organised and stored into archives, computer databases, file systems and other information systems in order to facilitate sharing and retrieval. The way information is stored reflects the organisations perception and representation of its own environment, including its labelling of entities, specifying its relationships, tracking of data and measurement of performance. (Stein, 1995). As such, careful consideration should be given to content, access, logical structure, and physical organisation of information (Chu, 2003). To this; all data and information generated or acquired in organisations is given structure and physical organisation in ways that reflect the

interest and information requirement of the organisation. Information organisation facilitates access to materials. So long as the resources are not processed and organised, they can only be available but not accessible. Information organisation like other issues in the field of library and information science is always in a stage of change and evolution due to the impact of information sources (electronic and multimedia) and also of the advent of new technologies. Information storage systems are increasingly called upon to provide the flexibility to capture hard and soft information, supports multiple user views of data, link items that are functionally or logically related and to allow users to explore patterns and connections. Designing websites and providing users with electronic information are now prevalent in managing information of any organisation.

2.5 Information Retrieval and Access

According to Science and Technology Dictionary (n.d.), information retrieval is the technique and process of searching, recovering, and interpreting information from large amounts of stored data, especially in a database stored in a computer. Singhal (2001) categorizes information retrieval into three main areas. They are: content analysis, information structures and evaluation. The first is concerned with describing the contents of documents in a form suitable for computer processing; the second with exploiting relationships between documents to improve the efficiency and effectiveness of retrieval strategies and the third with the measurement of the effectiveness of retrieval. Decision making in organisations is sensitive to the need to appear rational and fair, so the maintenance of stored history of information decisions is necessary.

A wider distribution of information can yield many positive consequences: organisational learning becomes more broadly based and more frequent; retrieval of information becomes more likely; and new information can be created by piecing together

disparate items (Huber, 1991). The primary objective of information distribution is to promote and facilitate sharing of information that is vital to the organisation. In order words; to ensure that the information needs of organisational members and other stake holders are being met through a balanced diet of information products and services. Users want information not just to give answers to questions (‘what is happening here?’) but also to lead to actions that solve problems (‘what can we do about this?’).

The final arbiter of the effectiveness of information management is how it is being accessed. Cooperate organisations have embraced information management with the aim of improving organisational efficiency in terms of productivity. The channels of information dissemination within and outside an organisation vary depending on the target audience. The most prominent channels of information dissemination are interpersonal and the mass media. The interpersonal media is based on oral medium of communication. This medium involves physical contact or face-to-face contact between two or more audience. The mass media communicate to a large number of people via web interfaces, radio, television, cell phones etc. Lucey (2002) enumerates the channels of information dissemination in organisation to include: face-to-face conversations, telephone calls, formal and informal meetings, conferences, memoranda, letters, reports, tabulations, V.D.U transmissions from several sources to create a new document.

In order to achieve the stated objectives, organisations such as NAHCON does not only need efficient internal co-ordination but they should employ information systems combining traditional and electronic media as a key medium of disseminating relevant information within and outside organisation. This will aid effective use and dissemination of corporate information in a timely and accurate manner that will be easily accessible in a reliable format.

2.6 Information Utilization

In the current information-intensive business environment, information utilization is regarded as an integral part of decision making and a critical factor in the achievement of organisational success (Toften and Olsen, 2004). Organisations use information in three strategic arenas: rational approach, knowledge creation and decision making (Choo 2002).

During rational making, the principal of information process is the interpretation of news and messages of the environment. Users must decipher the most relevant information and form possible explanations from past experience while exchanging and negotiating their views in order to arrive at a common interpretation. The main question is "What is going on in the environment?" and the need is for information that provides plausible answers or interpretations.

During knowledge creation, the main information process is the conversion and sharing of knowledge. Members share their personal knowledge through dialog and discourse, and articulate what they intuitively know through analogies, metaphors, as well as more formal channels. Here information needs centre on three questions: "What do we know already?" "What new knowledge is highly credible?" and "Are they relevant to current benchmarks or practices?"

During decision making, the key information activity is the processing and analysis of information about the available alternatives in order to weigh their relative merits and demerits. Information needs focus on questions such as "What type of problem is this?" "What outcomes do we prefer?" and "Where do we look for solutions?" All three modes of information use exhibit common information sharing requirements. First, people use rich channels of communication in face-to-face discourse to focus on issues, deal with vagueness and uncertainty, resolve differences and stimulate creativity. Secondly, people need a continuous

flow of information from the outside to clarify ambiguities, fill in gaps, update interpretations and obtain feedback. Rich channels of information transfer are desirable but may be difficult to achieve in an organisation whose members, expertise and information resources are geographically dispersed. Hence, computer mediated communications such as electronic mail, online discussion groups, video-conferencing and network based information repositories may provide alternative information sharing methods to support and validate remote collaboration.

2.7 Application of ICTs to Information Management

ICT is clearly considered as a key growth area in this century, specifically in a dynamic business and highly competitive environment which requires utilizing advanced technology to improve efficiency and cost effectiveness while presenting high quality services to customers (Allen and Morton, 2004). ICTs have become very vital components of human existence. It is a merger of information for data management, acquisition, storage, retrieval, and dissemination. The increasingly availability and use of ICTs have begun to create relationship between their application, competiveness and productivity of industries, governments and the citizens (Olatokun, 2007). ICTs are playing an increasingly important role in social, economic and political development. Information and communication technology generates fundamental changes in the nature and application of technology in organisations (Gholami *et al*., 2008). ICTs provide powerful strategic and tactical tools for organisations, which if properly applied and used, could bring great advantages in promoting and strengthening competitiveness (Porter, 2001). It has become a global tool for gaining quantum leap and differential advantage by all stakeholders.

The computer is useful for processing information while the telecommunication facilities provide means for information communication or transfer using networks. The network provides a link, and when this link is cuts across the globe, an international network

of Internet results is achieved. The Internet is a connection of millions of computers all over the world by networks (Ogbomo, 2004). The availability of the Internet as a major component of ICT has improved access to information, by providing immense opportunity for accessing and retrieving information resources without the restriction of time, space or format, through on-line database searching, CD-ROM searching, e-mail services, tele facsimile services, Internet services, document delivery services, networking, digitalization and virtual library.

According to Levine (2000), the purpose of ICT is to support organisational management decisions and provide information necessary to carry out its activities. Such activities include planning and scheduling, budgeting, control of operations amongst stakeholders. The researcher concluded that technology is no longer an impediment in information-rich societies. In fact, the use of ICT will act as facilitator for IM in organisations because of the speed of processing and the fact that ICT can take a large amount of information at a time. It will also make way for the right decisions and plans to be taken for the future amongst members, stakeholders and other business partners will be enhanced and dissemination of information will be effective etc.

2.8 Summary of the Review

The chapter broadly presented discussions on information and how its appropriate management is essential for the support of organisation's business processes, in order to achieve the organisation's stated objectives.

IM is seen as an umbrella term that encompasses the systems and processes within an organisation for the creation and use of corporate information and decision making. Generally, ICT is the key enabler of change in today's rapidly evolving business environment. It has turned the world into global village where limits of time and location no more apply. Its revolution has also changed the life style of people in every part of the world. It has eliminated

the geographical distances and due to advance communication facilities, the entire world can be viewed on computer screen by just a click of a button. The review has also shown that once information resources are not processed and properly organised, timely access becomes very difficult.

In this context, IM in organizations such as NAHCON becomes vital. This is true because its adoption by the national body will enhance effective planning, service delivery and decision making, thereby making all their processes and procedures efficient. Effective use of ICTs by NAHCON will be an essential element of competing in the fast-paced, knowledge based economy, this is because ICT 'cross-cuts' all operational functions within the organisation and acts as the fabric that knits together business processes.

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CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The chapter presents the methodology and procedures that was adopted for the study. The following sub-headings were discussed:

3.2 Research Methodology to be adopted for the Study

3.3 Population of the Study

3.4 Sample and Sampling Techniques to be employed

3.5 Instrument for Data Collection

3.6 Validity and Reliability of the Instruments to be used

3.7 Procedure for Data Collection

3.8 Procedure for Data Analysis

3.2 Research Methodology adopted for the Study

Survey research method was adopted for this study. The survey research method will assist the researcher to gather information on the targeted population and allow precise generalisation to be made about the characteristics, opinions and expectations of the entire population that will be studied. Osuala (2005) described survey methodology as a research method that studies both small and large populations by selecting and studying samples chosen from a population. Survey research clearly defines a problem, collects relevant and adequate data from a given sampled population considered to be representative of the entire group,

carefully analyses it and interprets such data in order to come up with skilful findings (Baba, 2005).

3.3 Population of the Study

The population for this study constituted all the ninety four (94) staff members at the NAHCON's headquarters in Abuja (NAHCON, 2013).

3.4 Sample and Sampling Techniques

Sample is a portion selected for study from largely defined population. Rudolph (2002) defined sample as a proportion of an entity or a subset. It is important that sample selected represents its population

The entire ninety four (94) staff members at the commission were adopted for the study. This is because the population was manageable. University of Florida (2013) noted that if research population is 200 or less, the entire population would have to be sampled to achieve a desirable level of precision. This is because it eliminates sampling error and provides data on all the individuals in the population.

3.5 Instruments for Data Collection

The research instrument used for this study was questionnaire. According to Mugenda and Mugenda (2003), questionnaires are commonly used to obtain important information about a population under study. This instrument was carefully designed to ensure that relevant data were collected. The researcher designed the questionnaire in accordance with the research questions raised, the nature of data to be collected and analysed.

3.5.1 Questionnaire

The questionnaire was prepared using closed ended and open ended questions, in a way that the questions gave the respondents series of possible answers from which to choose. Where

possible, they were given the opportunity to express their views on the questions asked. This is useful to obtain factual and reliable information. Mohammed (2005) asserted that the instrument for data collection is said to be valid when it is able to produce correct responses from the subjects of the sample studied. The use of this type of questionnaire was based on its ease of administration. It keeps the respondent's mind fixed on the subject of the study and facilitates data tabulation, analysis and generalization (Ujo, 2004).

The questionnaire that was used for assessing information management in NAHCON has three sections: Section A contained questions on demographic information of the respondents. This is for general information of the respondents and not a direct objective of the study. Section B contained questions on assessment of information management in NAHCON. Section C contained questions on application of ICT to management of information in the commission.

3.6 Validity of the Instruments

The use of questionnaire suggests that internal validity must be addressed. Face and content validity of the instrument for this study was determined by the supervisors of this work and other research experts in information management to ascertain the construct and content of what it was designed to measure. Their comments were used to correct items in the instrument before they were administered to the respondent.

3.7 Procedure for Data Collection

Data collection procedure followed the norms of fieldwork research. A letter of introduction was collected from the department, introducing the researcher as an MSc student conducting research on information management in NAHCON. The letter was passed to the chairman/CEO of the commission to give approval for the researcher to collect data. After an acceptance was given, the researcher used self - administration and two (2) research assistants

to administer and retrieve the structured copies of the questionnaires from the respondents under study within three (3) weeks. This helped the researcher to collect copies of the questionnaire with a minimum loss of the questionnaire. This also increased the reliability of data generated.

3.8 Procedure for Data Analysis

The process of data analysis involved data clean up, analysis and explanation. Frequency tables and percentages were used to present the findings. The responses in the questionnaire were tabulated and processed by use of a computer Statistical Package for Social Science (SPSS) version 20.0 programme to analyse the data.

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CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND DISCUSSION

4.1 Introduction

The chapter presents the data collected for the study under: data presentation; analysis and discussion.

4.2 Response Rate

The response rate of a survey is a measure of how many people whom actually completed the survey, usually expressed as a percentage from 0% to 100%. Table 4-1 shows the response rate.

Table 4.1: Summary of Response Rate

Response Rate	F	Percentage (%)
Copies of Questionnaire issued	94	100
Copies of Questionnaire completed and returned	75	79.8
Copies of Questionnaire not returned	19	20.2

F = Frequency % = Percent

Out of the ninety four (94) copies of the questionnaire administered on the respondents at the headquarters of the commission in Abuja, 75 (79.8%) were duly filled and returned for analysis. The response rate achieved was due to the support of the head of media who personally collected the instruments from the researcher; and with the aid of research assistants,

administered and retrieved them within three (3) weeks. Nineteen 19 (20.2%) were not returned. The response rate was however high.

Table 4.2: Response Rate by Departments in NAHCON

Response	F	Percentage (%)
Planning	21	28.0
Research	12	16.0
Statistics	6	8.0
Operations (OPS)	6	8.0
Administration (Admin)	11	14.6
Library and Information Services (LIS)	17	22.7
Accounts	2	2.7
TOTAL	**75**	**100**

F = Frequency % = Percent

Table 4.2 shows that 21 (28.0%) are from the planning department; 12 (16.0%) from the research department; 6 (8.0%) from the statistics department; 6 (8.0%) from the operations department; 11 (14.7%) from the administration department; 17 (22.7%) from the library and information services; and 2 (2.7%) from the accounts department. This shows that the respondents are corporative and ready to respond to the issues as stated.

4.3 Data Presentation and Analysis

4.3.1 Descriptive Analysis

This involved detailed analysis of the responses from the questionnaire used for answering the research questions raised in order to enhance service delivery at the Commission. Five research questions were raised for this study and discussed accordingly.

4.3.1.1 Information Generation and Acquisition in NAHCON

The first research question sought to identify the types of information generated and acquired in NAHCON. Series of questions that will aid in providing answers were provided to the respondents to respond to.

Information Generation and Acquisition

Information generation and acquisition is perceived as a social interactive process of continuous dialog between and among organisations and stakeholders. In the process of generating and acquiring information, experiences are converted into information for people to capture and apply as appropriate. Tables 4.3 and 4.4 shows the information that are generated and acquired in NAHCON.

Table 4.3: Types of Information Generated in NAHCON

Types of information generated in NAHCON	NAHCON's Departments														TOTAL	
	Planning		Research		Statistics		OPS		Admin		LIS		Account			
	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%
Strategic information	12	57.1	4	33.3	2	33.3	4	66.7	3	27.3	4	23.5	2	100	**31**	**16.8**
Corporate information	7	33.3	4	33.3	3	50.0	3	50.0	4	36.4	5	29.4	2	100	**28**	**15.1**
Managerial information	9	42.9	9	75.0	4	66.7	5	83.3	7	63.6	12	70.6	2	100	**48**	**25.9**
Business information	9	42.9	5	41.7	4	66.7	6	100	6	54.5	3	17.6	2	100	**35**	**18.9**
Financial information	7	33.3	1	8.3	2	33.3	4	66.7	2	18.2	3	17.6	2	100	**21**	**11.4**
Customer related information	8	38.1	3	25.0	2	33.3	3	50.0	3	27.3	2	11.8	1	50.0	**22**	**11.9**
TOTAL	**21**	**100**	**12**	**100**	**6**	**100**	**6**	**100**	**11**	**100**	**17**	**100**	**2**	**100**	**185***	**100**

F = Frequency % = Percent * = Multiple Sources

Table 4.3 shows that 48 (25.9%) indicated that they generate managerial information; 35 (18.9%) generate operational information; 31 (16.8%) generate strategic information; 28 (15.1%) generate corporate related information; 22 (11.9%) generate information from customer related information; and 21 (11.4%) generate information from financial information. The types of information generated repeatedly in NAHCON as shown in table 4.3 by majority of the respondents are managerial information, business information and strategic information The finding is in line with that of Schueber (2003) who specified that the need for information is on managerial information, business information, activity related information and information on new methods and approaches etc. for effectiveness and efficiency in an

organization. The implication of the finding in table 4.3 is that NAHCON requires a variety of information to perform its functions effectively and efficiently.

Table 4.4: Types of Information Acquired in NAHCON

Types of information acquired in NAHCON	NAHCON's Departments														TOTAL	
	Planning		Research		Statistics		OPS		Admin		LIS		Account			
	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%
Information on pilgrims (documentation)	17	81.0	8	66.7	4	66.7	6	100	8	72.7	12	70.6	2	100	**57**	**45.2**
Business information	9	42.9	5	41.7	4	66.7	5	83.3	3	63.6	9	52.9	2	100	**37**	**29.4**
Statistical information	7	33.3	5	41.7	5	83.3	3	50.0	5	45.5	6	58.8	1	50.0	**32**	**25.4**
TOTAL	**21**	**100**	**12**	**100**	**6**	**100**	**6**	**100**	**11**	**100**	**17**	**100**	**2**	**100**	**126***	**100**

F = Frequency % = Percent * = Multiple Sources

The responses from table 4.4 reveals that 57 (45.2%) confirmed that NAHCON principally acquire information about pilgrims; 37 (29.4%) indicated they acquires business information; and 32 (25.4%) acquire statistical information. It is evident from table 4.4 that majority of the respondents across the departments indicated that NAHCON principally acquire information on pilgrims' and business information. Additionally, it was revealed that statistical information is also acquired for effective service delivery at the commission. The findings above is in line with that of Schueber (2003) who stated that for any organisation to be effective and efficient, it should be able to generate or acquire the following types of information: (a) information about work on the ground is crucial for accountability and (b) information linking inputs and outputs for resource monitoring and performance management. By and large, NAHCON requires variety of information to perform its functions effectively and efficiently

since the acquired information are perceived as critical success factor to the commissions stated objectives.

Sources of Information

Significant to information generation and acquisition is their sources irrespective of the departments. Information may come from different sources. The sources are basically divided into external and internal sources. Information from external sources are those that are acquired from outside the organization while information from internal sources are those generated from within the organization and from personal researches. The responses of the respondents on sources of generating and acquiring information are shown in tables 4.5 and 4.6.

Table 4.5: Internal Sources of Information Generation in NAHCON

Internal sources of information generation in NAHCON	**NAHCON's Departments**														**TOTAL**	
	Planning		**Research**		**Statistics**		**OPS**		**Admin**		**LIS**		**Account**			
	F	**%**	**F**	**%**	**F**	**%**	**F**	**%**	**F**	**%**	**F**	**%**	**F**	**%**	**F**	**%**
Control & monitoring reports	9	42.6	7	58.3	5	83.3	3	50.0	5	45.5	7	41.2	2	100	**38**	**27.1**
Budget reports	2	47.6	1	66.7	2	33.3	3	83.3	0	0.0	2	29.4	2	100	**12**	**8.6**
Meetings/discussions/correspondence/Telephone conversations	11	52.4	9	75.0	4	66.7	4	66.7	9	81.8	10	58.8	2	100	**49**	**35.0**
Record keeping (personal / official)	9	42.9	5	41.7	2	33.3	3	50.0	3	27.3	5	29.4	0	0.0	**27**	**19.3**
Feedback from customer forum	4	19.0	2	16.7	1	16.7	2	33.3	2	18.2	3	17.6	0	0.0	**14**	**10.0**
TOTAL	**21**	**100**	**12**	**100**	**6**	**100**	**6**	**100**	**11**	**100**	**17**	**100**	**2**	**100**	**140***	**100**

F = Frequency % = Percent * = Multiple Sources

The responses on the internal sources of information generated from across all the departments as shown in table 4.5 indicates that 49 (35.0%) generate information from meetings / discussions / correspondence / Telephone conversations; On the other hand, 38 (27.1%) generate information from control and monitoring reports; 27 (19.3%) generate information from record keeping (personal/official); 14 (10.0%) generate information from feedback from customer forum; and lastly, 12 (8.6%) generate information from budget. From the responses in table 4.5, it was observed that the most prominent internal sources of information generation are meetings/discussions/correspondence/Telephone conversations, Control & monitoring reports and record keeping (personal / official). This implied that the staff of NAHCON are involved in a lot of activities useful for information generation internally. However, it was noted that other members of staff use other sources such as record keeping (personal/official) and feedback back from customer forum to generate information.

This findings is in agreement with that of Lucey (2002) who identified internal sources of information to include all outputs of the organisation that include control and monitoring reports, budgets, correspondence, video displays etc.

In line with the findings on internal sources of information generation across all the departments, the researcher also tried to find out the external sources through which NAHCON acquires information. The result is shown in table 4.6.

Table 4.6: External Sources of Information Acquisition in NAHCON

External sources of information acquisition in NAHCON	NAHCON's Departments														TOTAL	
	Planning		Research		Statistics		OPS		Admin		LIS		Account			
	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%
Government statistical data	4	19.0	5	41.7	4	66.7	4	66.7	3	27.3	5	29.4	1	50.0	**26**	**19.9**
Published/unpublished reports from zonal offices	11	52.4	11	91.7	4	66.7	5	83.3	6	54.5	10	58.8	2	100	**49**	**37.4**
Conferences/workshops/seminars	6	28.6	4	33.3	4	66.7	3	50.0	4	36.5	6	35.3	2	100	**29**	**22.1**
Special investigations	7	33.3	7	58.3	3	50.0	2	33.3	2	18.2	6	35.3	0	0.0	**27**	**20.6**
TOTAL	**21**	**100**	**12**	**100**	**6**	**100**	**6**	**100**	**11**	**100**	**17**	**100**	**2**	**100**	**131***	**100**

F = Frequency % = Percent * = Multiple Sources

Table 4.6 indicates that 49 (37.4%) from all the departments acquire information from published / unpublished reports from zonal offices. 29 (22.1%) indicated conferences / workshops / seminars; 27 (20.6%) indicated the use of special investigations; and 26 (19.8%) acquire from government statistical data. This inferred that published/unpublished reports from zonal offices, conferences / workshops / seminars and special investigations are the fundamental external sources for securing information in the NAHCON. This finding is line with NAHCON (2011), where it was stated that the bulk of the work of NAHCON is carried out at national headquarters through SPWB's and zonal offices. It is also in line with that of Lucey (2002) who stated that information can be acquired from external sources formally or informally through published reports, government statistics, technical abstracts, commercial data bank, special investigations and conferences etc.

4.3.1.2 Information Management in NAHCON

The second research question sought to discover how information is being managed in NAHCON. Some questions on information organisation, storage and retrieval as well as utilization were raised for the respondents to respond to. Their expressed responses were shown in the tables 4.7 to 4.10.

Stakeholders Responsible for Information Organisation

A stakeholder is any individual or organisation who contribute directly or indirectly to the activities of the organisation on a daily basis or occasionally to ensure that the organisation meets the set operational standards and objectives. The researcher tried to find out who are responsible for organising information in all the departments in NAHCON. The results are shown in table 4.7.

Table 4.7: Stakeholders Responsible for Organizing Information in NAHCON

Stakeholders responsible for organizing information in NAHCON	NAHCON's Departments														TOTAL	
	Planning		Research		Statistics		OPS		Admin		LIS		Account			
	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%
Information officer	9	42.9	8	66.7	4	66.7	4	66.7	6	54.5	8	40.1	2	100	**41**	**41.0**
Librarian	7	33.3	4	33.3	1	16.7	2	33.3	3	27.3	5	29.4	1	50.0	**23**	**23.0**
ICT staff	10	47.6	6	50.0	2	33.3	3	50.0	6	54.5	7	41.2	2	100	**36**	**36.0**
TOTAL	**21**	**100**	**12**	**100**	**6**	**100**	**6**	**100**	**11**	**100**	**17**	**100**	**2**	**100**	**100***	**100**

F = Frequency % = Percent * = Multiple Sources

The responses in table 4.7 shows that 41 (41.0%) indicated that information organisation is majorly handled by the information officer in the respective departments in NAHCON. This is followed by 36 (36.0%) who are ICT staff; and 23 (23.7%) who are

librarians. Most of the respondents in table 4.7 responded that organisation of information in NAHCON is effectively handled by the information officer and ICT staff whilst a few others stated that organisation of information is done by the librarian in NAHCON. The implication of this finding is that information may not be properly managed and easily referred to, as the librarians who by nature of their training and education are not seen as the key officers responsible for organising information.

As a follow up to the above findings on information organisation in the respective departments in NAHCON, the methods adopted for information storage and retrieval in the NAHCON were examined. The responses are presented in tables 4.8 and 4.9 respectively

Information Storage and Retrieval

Information storage and retrieval is critical to optimal data use. According to Chu (2003), the way information is stored i.e. physically organised and stored into archives, ICT systems, file systems and other information systems reflects the organisation's perception and representation of its own environment and also facilitate sharing and retrieval of information.

Table 4.8: Types of Information Storage Devices used in NAHCON

Types of information storage devices used in NAHCON	NAHCON's Departments														TOTAL	
	Planning		Research		Statistics		OPS		Admin		LIS		Account			
	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%
Audio/video tapes	11	52.4	5	41.7	3	50.0	4	66.7	5	45.5	7	41.2	2	100	**37**	**22.6**
Filling cabinets /shelves	16	76.2	9	75.0	5	83.3	5	83.3	9	81.8	11	64.7	2	100	**57**	**34.8**
Hard drives	9	42.9	7	58.3	4	66.7	3	50.0	6	54.5	10	58.8	2	100	**41**	**25.0**
Web server	2	9.5	3	25.0	1	16.7	0	0.0	1	9.1	5	29.4	0	0.0	**12**	**7.3**
Cloud storage system	6	28.6	4	33.3	0	0.0	1	16.7	0	0.0	6	35.3	0	0.0	**17**	**10.3**
TOTAL	**21**	**100**	**12**	**100**	**6**	**100**	**6**	**100**	**11**	**100**	**17**	**100**	**2**	**100**	**164***	**100**

F = Frequency % = Percent * = Multiple Sources

From the responses in table 4.8, it was observed that 57 (34.8%) use filling cabinets /shelves for storage of information; 41 (25.0%) use media drives; 37 (22.6%) use audio/video tapes as their major storage devices; 17 (10.4%) use cloud storage system; and 12 (7.3%) use web server to store their information. Evident from table 4.8, is that a high percentage of the respondents use filling cabinets / shelves for storage of information in the respective departments in NAHCON. The implication of the finding in table 4.8 is that intensive use of filling cabinets / shelves in NAHCON will increase staff involvement in routine clerical tasks, such as organizing pilgrim data; creating reports; increased storage space and costs; and limited simultaneous access to the same data at the same time, which may result into delays especially when processing and disseminating the pilgrims' travel documents.

Channels of Information Dissemination

For information to be usable, it must be transmitted through a reliable medium or channel. Such channels create confidence and ensure that information is sent across for useful decision making and priority setting. Some of the channels in use across the departments include training, emails and print media etc. as indicated in table 4.9.

Table 4.9: Types of Channels used for Information Dissemination in NAHCON

Types of channels used for information dissemination in NAHCON	NAHCON's Departments														TOTAL	
	Planning		Research		Statistics		OPS		Admin		LIS		Account			
	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%
Trainings/meetings	4	19.0	3	25.0	2	33.3	1	16.7	3	27.3	4	23.5	2	100	**19**	**16.8**
Print Media (letters/memos)	10	47.6	8	66.7	4	66.7	4	66.7	8	72.7	9	52.9	2	100	**45**	**39.9**
Social Media	2	9.5	4	33.3	0	0.0	0	0.0	2	18.2	3	17.6	0	0.0	**11**	**9.7**
Emails	4	19.0	3	25.0	1	16.7	0	0.0	1	9.1	3	17.6	0	0.0	**12**	**10.6**
Interpersonal Contact	8	38.1	5	41.7	2	33.3	3	50.0	3	27.3	5	29.4	0	0.0	**26**	**23.0**
TOTAL	**21**	**100**	**12**	**100**	**6**	**100**	**6**	**100**	**11**	**100**	**17**	**100**	**2**	**100**	**113***	**100**

F = Frequency % = Percent * = Multiple Sources

The responses from table 4.8 details that 45 (39.8%) and 26 (23.0%) respectively responded that print media (letters/memos) and interpersonal contact are the most widely used channels for information dissemination in NAHCON. This could be attributed to the fact that NAHCON has not fully automated information management activities. It was however discovered that 19 (16.8%) use trainings; 12 (10.6%) use emails frequently while 11 (9.7%) use social media as a means of information dissemination in NAHCON. This is in agreement with Lucey (2002) who enumerated the channels of information dissemination in organisations

to include: face-to-face conversations, formal and informal meetings, conferences, memoranda, letters, reports etc. This implied that since information is basically stored and retrieved manually, it explains the reason for the delays and discrepancies being encountered as a result of the associated bottlenecks when processing and disseminating travel documents to pilgrims. Moreover, NAHCON will continue to have an increased overhead cost on print materials needed for effective service delivery.

As a follow up, the researcher sought to know the reasons for information utilisation in NAHCON. The responses are contained in table 4.10

Table 4.10: Reasons for Information Utilisation in NAHCON

Reasons for information utilisation in NAHCON	NAHCON's Departments														TOTAL	
	Planning		Research		Statistics		OPS		Admin		LIS		Account			
	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%
For controlling and coordinating operations	11	52.4	9	75.0	4	66.7	3	50.0	9	81.8	11	64.7	2	100	**49**	**19.8**
For accountability	11	52.4	7	58.3	3	50.0	4	66.7	4	36.4	7	41.2	2	100	**38**	**15.3**
For resource management	10	47.6	5	41.7	4	66.7	4	66.7	6	54.5	4	23.5	2	100	**35**	**14.1**
For monitoring and planning	12	57.1	6	50.0	4	66.7	5	83.3	6	54.5	8	47.0	2	100	**43**	**17.3**
For decision making	9	42.9	9	75.0	4	66.7	5	83.3	9	81.8	6	35.3	1	50.0	**43**	**17.3**
For reference & research purposes	11	52.4	11	91.7	2	33.3	4	66.7	7	63.6	4	23.5	1	50.0	**40**	**16.2**
TOTAL	**21**	**100**	**12**	**100**	**6**	**100**	**6**	**100**	**11**	**100**	**17**	**100**	**2**	**100**	**248***	**100**

F = Frequency % = Percent * = Multiple Sources

The responses from across the departments as contained in table 4.10 establishes that NAHCON makes use of the generated and acquired information for its operations. This is because 49 (19.8%) indicated that they use information to control and coordinate operations; 38 (15.3%) use it for accountability; 35 (14.1%) use information for resource management; 43 (17.3%) use information for both monitoring and planning and decision making respectively; and 40 (16.1%) use information for reference and research purposes and this finding is in line with that of Choo (2002), who noted that the use of information in organisations is in three strategic arenas: rational approach, knowledge creation and decision making. This inferred that if NAHCON does not properly manage its information using robust and tailored application, it will stand the risk to fail in its operational procedures as the records may somewhat get missing or altered unofficially.

4.3.1.3 Relevance and Usefulness of the Available Information in NAHCON

The third research question sought to find out the extent to which the available information is relevant and useful to NAHCON's operations in all the departments. The findings are revealed in the tables 4.11 and 4.12.

Relevance of the Available Information in NAHCON

A general question was asked on the relevance of all the information available at their disposal. The responses are shown in table 4.11.

Table 4.11: Levels of Relevance of the Available Information in NAHCON

Types of information available in NAHCON	Levels of Relevance of the Available Information in NAHCON									
	Highly relevant		Relevant		Fairly relevant		Rarely relevant		Not relevant	
	F	**%**	**F**	**%**	**F**	**%**	**F**	**%**	**F**	**%**
Strategic information	21	28.0	46	61.3	5	6.7	0	0.0	0	0.0
Corporate information	14	18.7	40	53.3	10	13.3	0	0.0	0	0.0
Managerial information	59	78.7	5	6.7	0	0.0	0	0.0	0	0.0
Business information	57	76.0	9	12.0	0	0.0	0	0.0	0	0.0
Financial information	7	9.3	35	46.7	20	26.7	0	0.0	0	0.0
Customer related information	11	14.7	23	30.7	32	42.7	0	0.0	0	0.0
Information on pilgrims	61	81.3	10	13.3	0	0.0	0	0.0	0	0.0
Statistical information	17	22.7	32	42.7	22	29.3	0	0.0	0	0.0
TOTAL	**75**	**100**	**75**	**100**	**75**	**100**	**75**	**100**	**75**	**100**

F = Frequency % = Percent

The responses from across NAHCON in table 4.11 shows that information on pilgrims (61: 81.3%); managerial information (59: 78.7%); and business information (57: 76.0%) respectively are highly relevant. The relevant information as shown in table 4.11 are strategic information (46: 61.3.3%); corporate information (40: 53.3%); financial information (35: 46.7%); and statistical information (32: 42.7%). Lastly, customer related information (32: 42.7%) was measured as fairly relevant to NAHCON's procedures. This implied that the available information is relevant to NAHCON's operational procedures.

As part of the above question, the level of usefulness of the available information was also soughed. The findings are presented in table 4.12.

Table 4.12: Levels of Usefulness of the Available Information in NAHCON

Types of information available in NAHCON	Levels of Usefulness of the Available Information in NAHCON									
	Highly Useful		Useful		Fairly useful		Rarely useful		Not useful	
	F	**%**	**F**	**%**	**F**	**%**	**F**	**%**	**F**	**%**
Strategic information	15	20.0	31	41.3	6	8.0	0	0.0	0	0.0
Corporate information	12	16.0	41	54.7	8	10.7	0	0.0	0	0.0
Managerial information	48	64.0	11	14.7	3	4.0	0	0.0	0	0.0
Business information	40	53.3	9	12.0	5	6.7	0	0.0	0	0.0
Financial information	14	18.7	29	38.7	8	10.7	0	0.0	0	0.0
Customer related information	18	24.0	22	29.3	6	8.0	0	0.0	0	0.0
Information on pilgrims	57	76.0	12	16.0	0	0.0	0	0.0	0	0.0
Statistical information	5	6.7	35	46.7	15	20.0	0	0.0	0	0.0
TOTAL	**75**	**100**	**75**	**100**	**75**	**100**	**75**	**100**	**75**	**100**

F = Frequency % = Percent

Table 4.12 shows that information on pilgrims (57: 76.0%); managerial information (48: 64.0%); and business information (40: 53.3%) were rated as highly useful. While corporate information (41: 54.7%); statistical information (35: 46.7%); strategic information (31: 41.3%); financial information (29: 38.7%); and customer related information (22: 29.3%) were rated as useful. Table 4.12 indicated that the information available in NAHCON is useful for carrying out the Commission's operational challenges.

4.3.1.4 Levels of Satisfaction with Management of the Available Information in NAHCON

The fourth research question sought to find out the extent to which NAHCON is satisfied with management of the available information. This question was asked for the purpose of understanding. The findings are revealed in table 4.13

Table 4.13: Levels of Satisfaction with Management of the Available Information in NAHCON

Types of information available in NAHCON	Levels of Satisfaction with Management of the Available Information in NAHCON									
	Highly satisfied		Satisfied		Fairly satisfied		Rarely satisfied		Not satisfied	
	F	**%**	**F**	**%**	**F**	**%**	**F**	**%**	**F**	**%**
Strategic information	10	13.3	38	50.7	6	8.0	0	0.0	0	0.0
Corporate information	29	38.7	13	17.3	5	6.7	0	0.0	0	0.0
Managerial information	43	57.3	3	4.0	2	2.7	0	0.0	0	0.0
Business information	51	68.0	8	10.7	7	9.3	0	0.0	0	0.0
Financial information	12	16.0	40	53.3	11	14.7	0	0.0	0	0.0
Customer related information	15	20.0	28	37.3	9	12.0	6	8.0	0	0.0
Information on pilgrims	49	65.3	11	14.7	4	5.3	0	0.0	0	0.0
Statistical information	19	25.3	35	46.7	2	2.7	0	0.0	0	0.0
TOTAL	**75**	**100**	**75**	**100**	**75**	**100**	**75**	**100**	**75**	**100**

F = Frequency % = Percent

From Table 4.13, it can be seen that while NAHCON is highly satisfied with how business information (51: 68.0%); information on pilgrims (49: 65.3%); managerial information (43: 57.3%) are managed, it is also satisfied with how strategic information (38: 50.7%); financial information (49: 53.3%); statistical information (35: 46.7%) and customer related information (28: 37.3%) are managed. This implied that although the NAHCON is managing its huge information in a paper based environment, there is a need to integrate information management activities with the state of the art tools so as to ensure its stakeholders have maximum satisfaction whenever the need to refer to the available information at the Commission arises.

4.3.1.5 Application of ICTs to Management of Information in NAHCON

The fifth research question sought to know about the availability and use of Information Communication Technologies (ICTs) in NAHCON for information management. For this purpose, the ICT facilities available and used, and the challenges to using them in all the respective departments and the findings are contained in tables 4.14 to 4.17.

Table 4.14: Types of ICTs Available and Utilised in NAHCON

Types of ICTs available and utilised in the NAHCON	**NAHCON's Departments**														**TOTAL**	
	Planning		**Research**		**Statistics**		**OPS**		**Admin**		**LIS**		**Account**			
	F	**%**	**F**	**%**	**F**	**%**	**F**	**%**	**F**	**%**	**F**	**%**	**F**	**%**	**F**	**%**
Computers	12	57.6	8	66.7	3	50.0	4	66.7	11	100	15	88.2	2	100	**55**	**31.1**
Scanners/Printers /Photocopiers/Fax machines	8	38.1	5	41.7	4	66.7	4	66.7	6	54.5	10	58.8	2	100	**39**	**22.0**
Digital cameras	4	19.0	3	25.0	1	16.7	1	16.7	1	9.1	2	11.8	1	50.0	**13**	**7.3**
Internet	11	52.4	8	66.7	3	50.0	2	33.3	6	54.5	11	64.7	1	50.0	**42**	**23.8**
Library portal	3	14.3	3	25.0	1	16.7	1	16.7	2	18.2	5	29.4	0	0.0	**15**	**8.5**
Biometric thumbprint machines	4	19.0	1	8.3	0	0.0	4	66.7	0	0.0	4	23.5	0	0.0	**13**	**7.3**
TOTAL	**21**	**100**	**12**	**100**	**6**	**100**	**6**	**100**	**11**	**100**	**17**	**100**	**2**	**100**	**177***	**100**

F = Frequency % = Percent * = Multiple Sources

The findings from table 4.14 shows that 55 (31.1%) use computers; 42 (23.7%) and 39 (22.0%) respectively have and use Internet and scanners / printers / photocopiers / fax machines respectively; 15 (8.5%) use library portal and 13 (7.3%) have digital cameras and biometric thumbprint machines at their disposal in NAHCON. The finding implied that the computer, Internet and printing devices are the most available and utilised ICTs in NAHCON. Thus,

having identified that computer is the most available and used ICT in all the departments in NAHCON, the researcher sought to know the usefulness of computer in all the departments. The result of the finding is contained in table 4.15

Table 4.15: Uses of Computer in NAHCON

Uses of computer in the NAHCON	**NAHCON's Departments**														**TOTAL**	
	Planning		**Research**		**Statistics**		**OPS**		**Admin**		**LIS**		**Account**			
	F	**%**	**F**	**%**	**F**	**%**	**F**	**%**	**F**	**%**	**F**	**%**	**F**	**%**	**F**	**%**
For creating documents or reports using office suite	9	42.9	5	41.7	3	50.0	4	66.7	5	45.5	7	41.2	2	100	**35**	**29.7**
For sharing or storing documents using office suite	5	47.6	5	41.7	3	50.0	5	83.3	3	27.3	6	35.3	1	50.0	**28**	**23.7**
For sending / receiving / reading email using Outlook	8	38.1	2	16.7	0	0.0	1	16.7	0	0.0	7	41.2	0	0.0	**18**	**15.3**
Accessing databases	0	0.0	0	0.0	1	16.7	0	0.0	0	0.0	0	0.0	0	0.0	**1**	**0.8**
For Internet and intranet	3	14.3	5	41.7	1	16.7	1	16,7	2	18.2	10	58.8	1	50.0	**23**	**19.5**
I do not use a computer at work	3	14.3	4	33.3	2	33.3	1	16.7	3	27.3	0	0.0	0	0.0	**13**	**11.0**
TOTAL	**21**	**100**	**12**	**100**	**6**	**100**	**6**	**100**	**11**	**100**	**17**	**100**	**2**	**100**	**118***	**100**

F = Frequency % = Percent * = Multiple Sources

The table 4.15 shows that 35 (29.7%) use computer for creating documents or reports using office suite; 28 (23.7%) use it for sharing and storing documents made in office suite; 23 (19.5%) use the computer for accessing Internet and intranet information like forms, policy and procedures, company news, staff information etc.; 18 (15.3%) use the computer for sending/receiving/reading email using Outlook and 1 (0.8%) use it for accessing databases. However, 13 (11.0%) do not use computer at work. This is in agreement with the work of

Porter (2001), who stated that ICTs provide powerful strategic and tactical tools for organisations which if properly applied and used, could bring great advantages in promoting and strengthening competitiveness.

With reference to the findings in table 4.15, the researcher tried to know the ICTs used in NAHCON for information storage and retrieval. The result are shown in table 4.16.

Table 4.16: ICTs used for Information Storage and Retrieval in NAHCON

ICTs used for information storage and retrieval in the NAHCON	NAHCON's Departments														TOTAL	
	Planning		Research		Statistics		OPS		Admin		LIS		Accounts			
	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%
Public drive	8	38.1	2	16.7	1	16.7	1	16.7	0	0.0	4	23.5	0	0.0	**13**	**12.0**
Shared departmental drive	2	9.5	4	33.3	1	16.7	3	50.0	2	18.2	10	58.8	0	0.0	**19**	**17.6**
Personal drive	6	28.6	6	50.0	2	33.3	3	50.0	3	27.3	9	52.9	1	50.0	**25**	**23.2**
Computer hard drive	10	47.6	5	41.7	3	50.0	4	66.7	7	63.6	13	76.5	2	100	**30**	**27.8**
Email	6	28.6	2	16.7	1	16.7	1	16.7	2	18.2	4	23.5	0	0.0	**21**	**19.4**
TOTAL	**21**	**100**	**12**	**100**	**6**	**100**	**6**	**100**	**11**	**100**	**17**	**100**	**2**	**100**	**108***	**100**

F = Frequency % = Percent * = Multiple Sources

Table 4.16 shows that 30 (27.8%) store information on the computer hard drive; 25 (23.1%) store information on their personal network drive; 21 (19.4%) store information in their emails; 19 (17.6%) store information on a shared departmental drive; and 13 (12.0%) confirmed that they use public drive to store information whilst at work. The implication of the finding in table 4.16 is that, ICTs are appropriately utilised for storage and retrieval of information in NAHCON. This is in contradiction with the result obtained in table 4.8 which

showed that 57 (76.0%) of the respondents store information in filling cabinets and also that in table 4.9, 45 (39.8%) of the respondents use print media (letters/memos) as the channel of information dissemination. Thus, this explains why the required information may not be readily available and disseminated when the needs arises.

Challenges to Using of ICTs

The success of any ICT system is dependent on its full implementation and usage. It is assumed that a number of challenges ae faced by the NAHCON staff members in the course of implementing and using its ICT facilities. The result of the finding in shown in table 4.17.

Table 4.17: Challenges to Using ICTs in NAHCON

Challenges to using ICTs in the NAHCON	**NAHCON's Departments**														**TOTAL**	
	Planning		**Research**		**Statistics**		**OPS**		**Admin**		**LIS**		**Account**			
	F	**%**	**F**	**%**	**F**	**%**	**F**	**%**	**F**	**%**	**F**	**%**	**F**	**%**	**F**	**%**
Inadequate knowledge of the use of ICT tools	11	52.4	12	100	4	66.7	6	100	8	72.7	9	52.9	2	100	**52**	**19.6**
Delays due to network failures on transactions	10	47.6	10	83.3	6	100	5	83.3	6	54.5	11	64.7	2	100	**50**	**18.8**
Lack of access to the Internet	8	38.1	10	83.3	4	66.7	4	66.7	5	45.6	7	41.2	1	50.0	**39**	**14.7**
Business and ICTs are not integrated	6	28.6	8	66.7	5	83.3	4	66.7	4	36.4	8	47.1	1	50.0	**36**	**13.6**
Slow speed of user adoption	4	19.0	12	100	4	66.7	3	50.0	4	36.4	6	35.3	0	0.0	**33**	**12.5**
Management not committed to ICT use/development	15	71.4	10	83.3	4	66.7	5	83.3	6	54.5	13	76.5	2	100	**55**	**20.8**
TOTAL	**21**	**100**	**12**	**100**	**6**	**100**	**6**	**100**	**11**	**100**	**17**	**100**	**2**	**100**	**265***	**100**

F = Frequency % = Percent * = Multiple Sources

Table 4.17 reveals that all departments in NAHCON are faced with so many challenges when using the available ICTs. From the analysis, 55 (20.8%) tied the challenges around management not committed to use/development of ICTs; 52 (19.6%) indicated inadequate knowledge of the use of ICT tools; 50 (18.9%) indicated delays due to network failures on transactions; 39 (14.7%) related it to lack of internet access; 36 (13.6%) indicated slow speed of user adoption; and 33 (12.5%) attributed it to systems taking too long to respond. The findings in table 4.17 suggests for awareness and adherence to technological development in NAHCON.

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CHAPTER FIVE

SUMMARY, CONCLUTION AND RECOMMENDATION

5.1 Introduction

This chapter presents the summary of the study, findings, conclusion and recommendations.

5.2 Summary of the Study

The purpose of the study was to assess information management in National Hajj Commission of Nigeria (NAHCON). The study specifically sought to; determine the types of information generated and acquired in NAHCON, how information is managed, determine the extent to which the available information is relevant and useful, determine the extent to which NAHCON is satisfied with the management of the available information, and lastly, identify the relevant and available ICTs utilised for IM in NAHCON. The five research questions raised gave useful insights and relevant information that helped in achieving the stated objectives.

The researcher reviewed relevant literature with a view to establishing academic gaps the study sought to bridge. This was done through conducting research basically on the Internet on literatures relating to IM and using past project documentations. The study employed survey research as the main approach to guide the study. The target population included all the ninety four (94) staff at the headquarters of NAHCON in Abuja. The research instrument used for data collection was an open and closed ended structured questionnaire. In order to ensure validity of the instrument, expert opinion was sought. A total of ninety four (94) copies of the questionnaire were distributed and seventy five (75) copies were returned and used for the analysis. The data was analysed using SPSS 20th edition and summarized into frequencies and percentages and presented in tables and the results discussed using descriptive statistics.

5.3 Summary of Major Findings

The study discovered that:

1. Managerial, business and strategic information are the most generated information in all the departments in NAHCON. The acquired information as revealed in the study are information on pilgrims', business and statistical information.
2. Filling cabinets / shelves, hard drives, and audio/video tapes are the central storage devices used. Moreover, print media (letters/memos) are the most widely used and preferred channels of information dissemination in all the departments. Furthermore, it was confirmed that NAHCON makes use of the available information for its operations.
3. The available information are highly relevant and useful to NAHCON's operational procedures.
4. Most of the respondents are highly satisfied with how the available information is being managed in NAHCON.
5. Computers, Internet and printing devices are the ICTs available in NAHCON. It further revealed that computer hard drive is the ICT mostly used as storage device. Lastly, the most perceived challenges to using ICTs in NAHCON are tied to inadequate knowledge of the use of ICT tools, delays due to network failures on transactions and management not being committed to ICT use/development.

5.4 Conclusion

Based on the findings of the study, it is concluded that NAHCON has realized the value of information management and has therefore, made every efforts to generate and manage the required information. Subsequent to information being managed manually; effective and efficient information management system remains a challenge. Timely and accurate access to needed information to support the commission's objectives and to ensure that the needs of its

stakeholders are met, though not fully realized. Utilisation of ICTs is also of vital importance to the success of IM in NAHCON as it will lead to a transformation in the lives of its stakeholders which is the main goals and objectives of the commission.

5.5 Recommendations

The following recommendations were made based on the findings of the study:

1. ICT systems such as computers, internet and intranet, and portals should be installed and put in place for information generation and acquisition while other available sources will serve as a supportive base. This is because ICT is an enabler for fast economic growth and development. Likewise, information from sources that are reliable by its users creates confidence in decision making and will be visited or used repeatedly.
2. An integrated and accelerated management information system (MIS) should be adopted for all aspects of the discipline as it will assist NAHCON to efficiently plan, collect, organise, store, use, disseminate and dispose its information while ensuring that the value of the information is completely identified and exploited. Likewise, for the reason that paperless environment reduces costs and promotes a greener approach, provides robust systems to support operations and ensures remote access redundancy.
3. The available ICT equipment in NAHCON should be used for managing information. This is because it will allow information required for operations to be easily accessed and used accordingly.
4. ICTs in NAHCON should be effusively embraced in the process of IM. This is because they create a competitive edge, provides stakeholder satisfaction and reliability and control in any business process.

5. A tailored approach should be in place for the adoption and maintenance of technology and solutions as they emerge, and ensure stakeholders responsible partake on the latest training in managing information. IT policies and procedures should be developed with the management enforcing strict adherence at all cost so as to mitigate discrepancies and potential abuse. This should be reinforced with sustainable backup plans as well as alternative options involving human interactive inputs that may require precision and due diligence.

5.6 Suggestions for Further Study

The following are the suggested areas for further study.

1. Development and implementation of a Hybrid-MIS for NAHCON.
2. Information maintenance and security in NAHCON.

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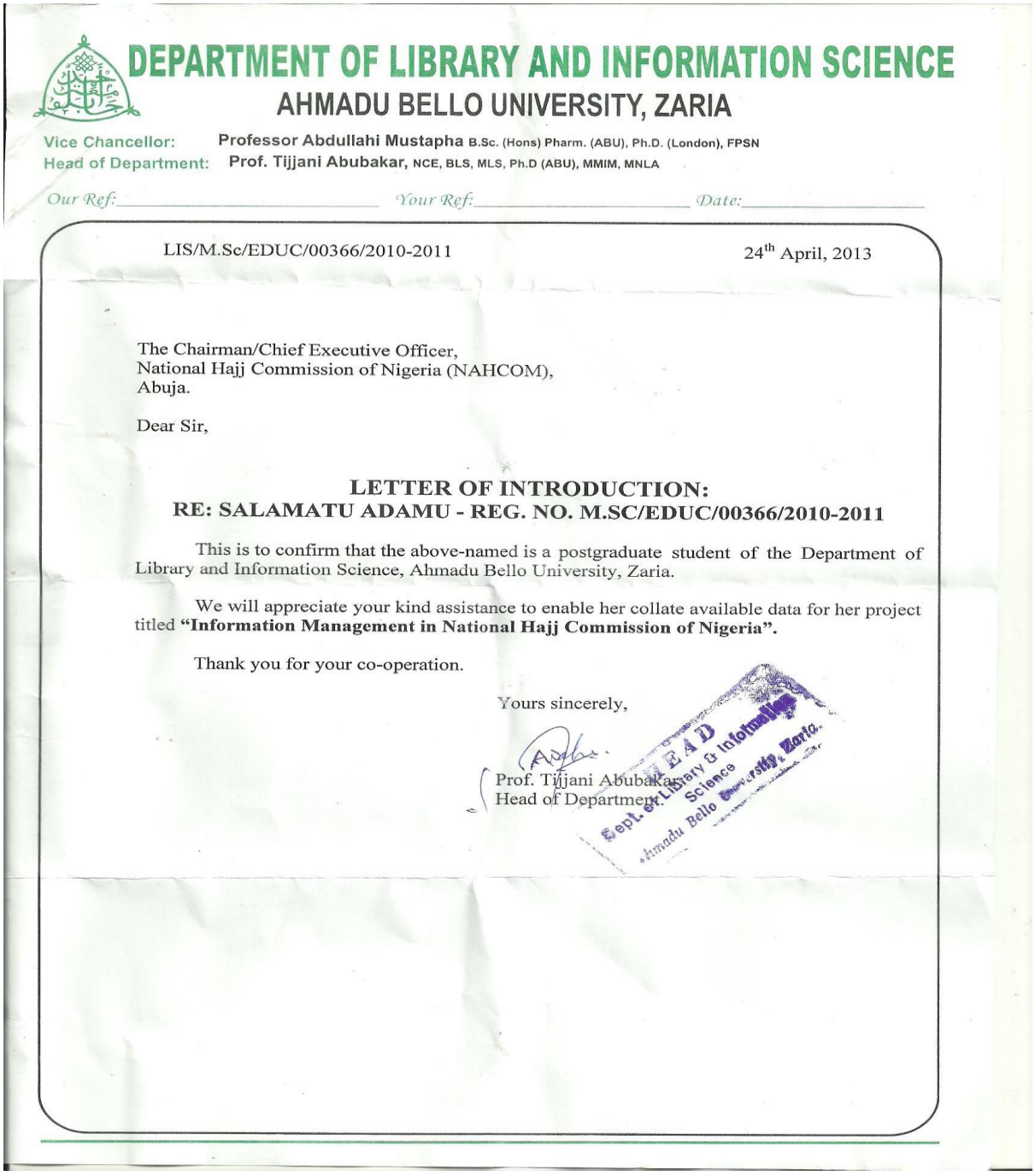
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APPENDIX I

LETTER OF INTRODUCTION



DEPARTMENT OF LIBRARY AND INFORMATION SCIENCE
AHMADU BELLO UNIVERSITY, ZARIA

Vice Chancellor: Professor Abdullahi Mustapha B.Sc. (Hons) Pharm. (ABU), Ph.D. (London), FPSN
Head of Department: Prof. Tijjani Abubakar, NCE, BLS, MLS, Ph.D (ABU), MMIM, MNLA

Our Ref: _____ *Your Ref:* _____ *Date:* _____

LIS/M.Sc/EDUC/00366/2010-2011 24th April, 2013

The Chairman/Chief Executive Officer,
National Hajj Commission of Nigeria (NAHCOM),
Abuja.

Dear Sir,

LETTER OF INTRODUCTION:
RE: SALAMATU ADAMU - REG. NO. M.SC/EDUC/00366/2010-2011

This is to confirm that the above-named is a postgraduate student of the Department of Library and Information Science, Ahmadu Bello University, Zaria.

We will appreciate your kind assistance to enable her collate available data for her project titled **"Information Management in National Hajj Commission of Nigeria".**

Thank you for your co-operation.

Yours sincerely,

Prof. Tijjani Abubakar
Head of Department

HEAD Dept. of Library & Information Science Ahmadu Bello University, Zaria.

APPENDIX II

QUESTIONNAIRE ON ASSESSMENT OF INFORMATION MANAGEMENT IN NAHCON

Department of Library and Information Science,

Faculty of Education,

Ahmadu Bello University Zaria.

Dear Respondent,

I am a postgraduate student in the Department of Library and Information Science Ahmadu Bello University, Zaria. I am currently undertaking a research on the topic: Assessment of Information Management in National Hajj Commission of Nigeria (NAHCON).

All responses will be treated confidentially and purely for academic purpose. Please kindly complete the attached questionnaire.

Thank you in anticipation of your kind response.

Yours faithfully,



Adamu Salamatu.

M.Sc/EDUC/00366/2010-2011

Instruction:

Please tick against the answers that represent your response to the questions below. You can select as many options as possible where necessary and also provide additional information where the options provided did not cover your view.

SECTION A: Respondents Demographic Information

NAME (Optional)	
GENDER	☐ Male ☐ Female
AGE	☐ 20 – 29 ☐ 30 – 39 ☐ 40 – 49 ☐ Above 50
LANGUAGES SPOKEN	☐ English ☐ Hausa ☐ Igbo ☐ Yoruba Others (Please Specify)……
EDUCATION	☐ Diploma/NCE/OND/HND ☐ Bachelor's Degree ☐ Masters ☐ PhD and above Others (Please Specify)……
CURRENT POSITION	☐ Executives (Chairman/CEO, Commissioner) ☐ Senior Manager ☐ Assistant Manger ☐ Unit Head ☐ Team Member Others (Please Specify)……..
DEPARTMENT	☐ Planning ☐ Research ☐ Statistics ☐ Operations ☐ Admin ☐ Library and Information Services ☐ Accounts Others (Please Specify)……
NUMBER OF YEARS WITH THE NAHCON	☐ 0 – 5 ☐ 6 – 10 ☐ 11 – 15 ☐ 16 – 20 ☐ Above 20

SECTION B: ASSESSMENT OF INFORMATION MANAGEMENT IN NAHCON

Information generation and acquisition

1	What types of information are generated in NAHCON?	☐ Strategic information (used to implement business strategies) ☐ Corporate information (responds to corporate business initiatives) ☐ Managerial information (for Processing and improving decision making Performance) ☐ Business information (helps to control the details of the business) ☐ Financial information (for accounting, budgeting & finance operations) ☐ Customer related information Others (Please Specify) ……
2	What types of information are acquired in NAHCON?	☐ Information on Pilgrims' (documentation) ☐ Business information (helps to control the details of the business) ☐ Financial information (for accounting, budgeting & finance operations) Others (Please Specify) …….
3	What are the internal sources through which NAHCON generates its information?	☐ Control and monitoring reports ☐ Budget reports ☐ Meetings/discussions/correspondence/Telephone conversations ☐ Record keeping (personal / official) ☐ Feedback from customer forum Others (Please Specify) ……
4	What are the external sources through which NAHCON acquires its information?	☐ Government statistical data ☐ Published / unpublished reports from zonal offices ☐ Conferences / workshops / seminars ☐ Special investigations Others (Please Specify) …….

Information organisation, storage and retrieval

5	Who is responsible for organizing information in NAHCON?	☐ Information officer ☐ Librarian ☐ ICT staff Others (Please Specify) ……
6	What type of information storage devices are being used in the NAHCON?	☐ Audio/video tapes ☐ Filling cabinets /shelves ☐ Hard drives ☐ Web server ☐ Cloud storage system Others (Please Specify) ……
7	What channels are used to disseminate information to staff and stakeholders?	☐ Trainings / Meetings ☐ Print Media (letters / Memos) ☐ Social Media ☐ Emails ☐ Interpersonal Contact Others (Please Specify) ……

Information utilization

8	What do you use the information acquired and generated for?	☐ For controlling and coordinating operations ☐ For accountability ☐ For resource management ☐ For monitoring and planning ☐ For decision making ☐ For reference and research purposes Others (Please Specify) ……

9	How would you rate the relevance of the available information to achieving the goals and objectives of NAHCON? Choose from **HR**=(Highly relevant), **R**=(Relevant), **FR**=(Fairly relevant), **RR**=(Rarely relevant), **NR**=(Not relevant)		HR	R	FR	RR	NR
		Strategic information	☐	☐	☐	☐	☐
		Corporate information	☐	☐	☐	☐	☐
		Managerial information	☐	☐	☐	☐	☐
		Business information	☐	☐	☐	☐	☐
		Financial information	☐	☐	☐	☐	☐
		Customer related information	☐	☐	☐	☐	☐
		Information on pilgrims	☐	☐	☐	☐	☐
		Statistical information	☐	☐	☐	☐	☐
10	How would you rate the usefulness of the available information by NAHCON? Choose from **HU**=(Highly useful), **U**=(Useful), **FU**=(Fairly useful), **RU**=(Rarely useful), **NU**=(Not useful)		HU	U	FU	RU	NU
		Strategic information	☐	☐	☐	☐	☐
		Corporate information	☐	☐	☐	☐	☐
		Managerial information	☐	☐	☐	☐	☐
		Business information	☐	☐	☐	☐	☐
		Financial information	☐	☐	☐	☐	☐
		Customer related information	☐	☐	☐	☐	☐
		Information on pilgrims	☐	☐	☐	☐	☐
		Statistical information	☐	☐	☐	☐	☐
11	To what extent are you satisfied with the information in National Hajj Commission of Nigeria? Choose from **HS** = (Highly satisfied), **S**=(Satisfied), **FS**=(Fairly satisfied), **RS**=(Rarely satisfied), **NS**=(Not satisfied)		HS	S	FS	RS	NS
		Strategic information	☐	☐	☐	☐	☐
		Corporate information	☐	☐	☐	☐	☐
		Managerial information	☐	☐	☐	☐	☐
		Business information	☐	☐	☐	☐	☐
		Financial information	☐	☐	☐	☐	☐
		Customer related information	☐	☐	☐	☐	☐
		Information on pilgrims	☐	☐	☐	☐	☐
		Statistical information	☐	☐	☐	☐	☐

SECTION C: APPLICATION OF ICT TO THE MANAGEMENT OF INFORMATION

12	What type(s) ICT equipment / facilities are available and utilised in the NAHCON?	☐ Computers ☐ Scanners / Printers / Photocopiers / Fax machines ☐ Digital cameras ☐ Internet ☐ Library portal ☐ Biometric thumbprint machines Others (Please Specify) ……
13	What do you use your computer at work for?	☐ For creating documents or reports using office suite ☐ For sharing or storing documents made in office suite ☐ For Sending/receiving/reading email using Outlook ☐ Accessing databases ☐ Internet and intranet (accessing information like forms, policy and procedures, company news, staff information, etc.). ☐ I do not use a computer at work Others (Please Specify) ……
14	Which ICTs do you use for information storage and retrieval?	☐ Public drive ☐ Shared departmental drive ☐ Personal drive ☐ Computer hard drive ☐ Email Others (Please Specify) ……

15	What are the challenges to the use of ICT tools in the NAHCON?	☐ Inadequate knowledge of the use of ICT tools ☐ Delays due to network failures on transactions ☐ Lack of access to the Internet ☐ Business and ICT activities are not integrated ☐ Slow speed of user adoption ☐ Management not committed to ICT use/development Others (Please Specify) ……

Thank you for your assistance.