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**Knowledge Production in a Think Tank: a case study of the Africa Institute
of South Africa (AISA)**

By

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DECLARATION

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ABSTRACT

The study sought to investigate the system of knowledge production at AISA and assess the challenges of producing knowledge at the institution. The objectives of the study were to: identify AISA's main achievements in knowledge production; determine AISA's challenges in producing knowledge; find out how AISA's organizational culture impacts on internal knowledge production; and suggest ways of improving knowledge production at AISA. A case study was used as a research method and purposive sampling used to select 50 cases out of a study population of 70. Questionnaires were prepared and distributed to AISA employees and where possible face-to-face interviews were conducted. Both quantitative and qualitative methods were used to analyze the data which were collected. Findings of the study may be used by governments across sub-Saharan Africa to produce relevant knowledge for formulating and implementing economic, social and technological policies. It is also important in identifying challenges that may hinder the successful production of knowledge. The study revealed that AISA has a well defined system of knowledge production and has had many achievements that have contributed to its relevance as a think tank today. The study found out that AISA has faced different challenges with the main one being organizational culture. From the findings, the researcher recommended that AISA should establish itself as a knowledge-based organization. It should also create a knowledge friendly culture as a framework for addressing the issue of organizational culture.

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LIST OF ACRONYMS

AISA	Africa Institute of South Africa
AYGS	AISA Young Graduates Programmes
BRN	Bibliographic Record Number
CDE	Centre for Development and Enterprise
CEO	Chief Executive Officer
CFO	Chief Executive Officer
CODESRIA	Council for the Development of Social Science Research in Africa
CSIR	Council for Scientific and Industrial Research
EPRI	Economic Policy Research Institute
GIS	Geographical Information Services
HCD	Human Capacity Development
HR	Human Resources
HSRC	Human Sciences Research Council
IAS	International Accounting Standard
ICT	Information and Communication Technology
IM	Information Management
KM	Knowledge Management
KP	Knowledge Production
LDS	Library and Documentation Services
NGO	Non-Governmental Organization
OC	Organizational Culture
OIL	Outreach and International Liaison
PMDS	Performance Management and Development Systems
SADC	Southern Africa Development Community

SANERI	South Africa's National Energy Research Institute
SDI	Selective Dissemination of Information
SPSS	Statistical Package for the Social Sciences
UNISA	University of South Africa

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CHAPTER ONE

INTRODUCTION AND BACKGROUND TO THE STUDY

1.1 Introduction

This study is about knowledge production and investigates how knowledge is produced at the Africa Institute of South Africa (AISA), a think tank. A think tank is an organization, institute, corporation or group that conducts research and advocates in social policy, economy, science and technological issues, industrial or business policies (McGann, 2007). By their nature, think tanks are learning organizations in which members are expected to collectively learn from continuously acquiring new knowledge, skills and capabilities. This is supported by the cognitive system, memories, networks and the learning culture created by the organization to enhance knowledge transfer (Popper and Lipshitz, 2000).

Major changes like Information and Communication Technologies (ICTs) have brought about faster production and processing of information, thereby increasing people's knowledge, demand for it and the need to organize it (Bhatt, 2002). In this study ICTs are defined as a diverse set of technological tools and resources used to communicate, and to create, disseminate, store, and manage information for example computers, the Internet, broadcasting technologies (radio and television) etc. We have passed into a new era where knowledge, not capital or technology, is the primary driving force in think tanks (Wiig, 1994). Wiig (1994) further argues that without knowledge, an organization could not continue to operate and exist, its structures, traditions and culture, technology and operations, system and procedures and the quality of its services and products are all based on and embedded in the organization's knowledge and expertise. Therefore, the creation of new knowledge is the key to almost every domain in a society, business

or think tank, more so, if the main product or service is focused on knowledge (Peschl and Fundneider (2008).

1.1.1 Knowledge Production

Knowledge production (KP) or creation, as defined by Nonaka (1994) 'is the formation of new ideas through interactions between explicit and tacit knowledge in individual human minds.' Explicit knowledge is knowledge that can be processed i.e. collected and stored within databases and expressed in words or using a system of symbols and comes in the form of books and documents, databases, and manuals (Nonaka and Takeuchi, 1995). Tacit knowledge is knowledge that is unstructured and based in people's expertise and rooted in action, experience, and subjective insights. It is hard to catalogue because it is highly personal and difficult to document in any detail (Nonaka and Takeuchi, 1995) for example indigenous knowledge found in traditional healers. A traditional healer is a person who uses application of knowledge, skills, and practices based on the experiences indigenous to different cultures to the maintenance of health, as well as the prevention, diagnosis, and improvement of physical and mental illness (World Bank Group, 2009).

Davenport and Prusak (2000) explain that knowledge exists within people and that knowledge derives from information as information derives from data. Data represents unorganized and unprocessed facts that are static in nature and are a prerequisite to information. Information is processed data, which makes decision making easier and usually has meaning and purpose. Knowledge is usually based on learning, thinking, and proper understanding of the problem area (Davenport and Prusak, 2000). Knowledge is produced in think tanks through teamwork. Awad and Ghaziri (1994) suggest with a simple way of explaining how this is done (cf. figure 1). A team can

commit itself to performing a job over a specific period of time. A job can be regarded as a series of specific tasks carried out in a specific order. When the job is completed, then the team compares the experience it had initially (while starting the job) to the outcome (successful/disappointing). This comparison translates experience into knowledge. While performing the same job in future, the team can take corrective steps and/or modify the actions based on the new knowledge they have acquired. Over time, experience usually leads to expertise where one team (or individual) can be known for handling a complex problem very well. This knowledge can be transferred to others in a reusable format (Awad and Ghaziri, 1994)

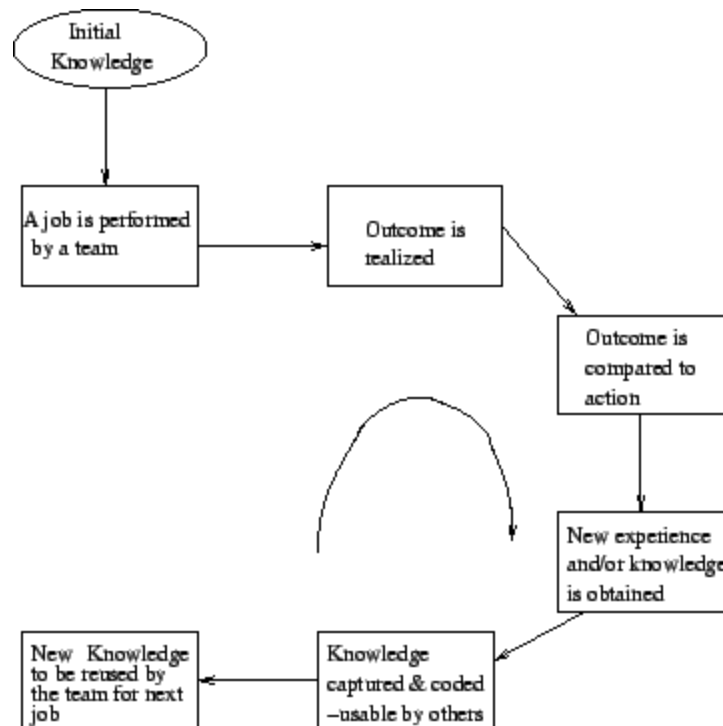


Figure 1.1: Knowledge production and knowledge sharing via teams. Source: Awad and Ghaziri (1994)

1.1.2 Knowledge Management

Knowledge production is only but a phase of the process of knowledge management (KM) in that knowledge has to be produced before it is managed in order to reap its

maximum benefits. Snowden (2002) explains that knowledge management comprises a range of practices used in an organization to identify, create, represent, distribute and enable the adoption of insights and experiences (otherwise known as knowledge). Individuals strive to explicitly encode their knowledge into a shared knowledge repository, such as a database, as well as retrieving knowledge they need that other individuals have provided to the repository. A strategy of KM involves individuals making knowledge requests of experts associated with a particular subject. Other KM strategies for think tanks include, rewards (as a means of motivating for knowledge sharing), storytelling (as a means of transferring tacit knowledge), knowledge mapping (a map of knowledge repositories within an organization accessible by all), collaborative technologies (groupware, etc) and knowledge repositories (for example databases).

1.1.3 Information Management

The distinction between Knowledge Management (KM) and Information Management (IM) is far from being well articulated in the KM literature and this is compounded by the confusion around the question of how knowledge management and information management are different. The term information management came into existence when people realized the mounting tangible sources of information such as books that needed to be managed so as to be useful to organizations. Reitz (2004) describes information management (IM) as 'the skillful exercise of control over the acquisition, organization, storage, security, retrieval, and dissemination of the information resources essential to the successful operation of a business, agency, organization, or institution, including documentation, records management, and technical infrastructure.' In contrast, KM involves management of the tacit form of information, that which is embedded in people's minds, one's skills, expertise and etc that has become knowledge. Therefore,

IM deals exclusively with explicit knowledge while KM deals with both explicit and tacit knowledge. The researcher believes that it is vital for think tanks or any organization to have both types of management. For example, tacit knowledge in the form of human expertise can be converted to explicit knowledge in a usable form for the organizational members through knowledge management systems. The explicit knowledge then needs to be organized, categorized, indexed and accessed through information management for more efficient and effective use by the members, (Awad and Ghaziri, 1994).

1.1.4 Organizational Culture

An information system is an integral part of the wider culture and society of an organization. Knowledge production would then take place within organizational culture (Griffiths and Remenyi, 2007). Organizational culture (OC) is a complex concept that includes the values and norms that are shared by people and groups in an organization and that control the way colleagues call on each other to obtain advice, insights and information both within and outside the organization (Parker, 2000). In this study, organizational culture will refer to how people communicate with each other within the organization, the tone of messages (formal, informal, pleasant, and hostile), attitudes and beliefs (for example their thoughts on promotions, dress code) and the extent to which organizational members freely share knowledge amongst themselves.

Ott (1989) explains the fundamental meaning of organizational culture. He explained that OC theories are based on assumptions on organization and challenge issues on for example how and why people in organizations behave as they do. He contends that many organizational behaviours and decisions are almost predetermined by the patterns existing in the organization. Those patterns have continued to exist and influence

behaviours because they have repeatedly lead people to make decisions that have usually worked for the organization. With repeated use, the patterns slowly drop out of people's consciousness but continue to influence organizational decisions and behaviours, even when the organization's environment changes. The patterns become the unquestioned but virtually forgotten reasons for 'the way we do things here' even when the ways are no longer appropriate. They are so basic and so totally accepted as the norm or culture that no one thinks about or remembers them. Thus a strong organizational culture controls organizational behaviour (Ott, 1989).

According to Schein (2004), think tanks face innumerable challenges in producing, nurturing, sharing and managing knowledge and this may be as a result of organizational culture. In order to understand or predict how an organization will behave under different circumstances, one must know what its patterns of basic assumptions are, which is its organizational culture (Ott, 1989). Organizational culture may negatively shape how organization members feel, think and behave and could hinder continuous learning, transfer and production of knowledge in organizations, for example it can block an organization from making changes needed to adapt to a changing environment.

Most organizations recognize the importance of culture but they find it difficult or impossible to articulate the culture-knowledge relationship in ways that lead to action (De Long and Fahey, 2000). Several organizational cultural problems have been noted that hinder effective knowledge production such as reluctance to share information and knowledge. Bartol and Srivastava (2002) support this view by saying that an employee's attitude and competencies may impede knowledge sharing, for example employees who fear a loss of superiority and knowledge ownership after sharing their own personal knowledge. If think tanks fail to consider organizational culture, knowledge production

cannot be effectively addressed since organizational culture is embedded into an organization's system of norms, beliefs, values, and rules (Holowetzki, 2002). Technology driven solutions such as the internet (Web2.0), Bluetooth, intranet etc. that facilitate knowledge sharing often fail to achieve their objectives because they do not consider cultural factors critical to KP such as information sharing through personal interview techniques.

1.1.5 Think Tanks

At the time of research the researcher found about 30 research institutes/think tanks in South Africa, 27 were found on the following website: http://en.wikipedia.org/wiki/Category:Research_institutes_in_South_Africa and did not reflect any recent changes made after 1 October 2007 (last day of modification on the website). Core functions of most of these think tanks include brainstorming, research, education, convening discussions, and communication of results. Many of these research institutes are perceived to influence political thinking and public policy (McGann, 2007). These think tanks however have different subject areas, for example:

The Centre for Development and Enterprise (CDE) - an independent policy research and advocacy think tank focusing on critical national development issues and their relationship to economic growth and democratic consolidation. Through examining South African realities and international experience, CDE formulates practical policy proposals outlining ways in which South Africa can tackle major social and economic challenges. CDE has a special focus on the role of business and markets.

The Council for Scientific and Industrial Research (CSIR) - conducts scientific and technological research for socio-economic growth. The generation and application of knowledge reside at the core of the CSIR with various knowledge application activities.

This takes place in domains such as biosciences, the built environment, defense, peace, safety and security, materials science and manufacturing, and natural resources and the environment.

The Economic Policy Research Institute (EPRI) - was founded to support the process of South Africa's socio-economic transformation and development. It conducts economic research and capacity building for the public sector, especially the senior management of various government branches and Parliament. It strives to contribute meaningfully and ongoing debates surrounding economic and socio-economic policies of South Africa, both with academia within the country and abroad as well as with the government of South Africa and the civil societies.

South Africa's National Energy Research Institute (SANERI) - is a public entity entrusted with the coordination and undertaking of public interest energy research, development and demonstration. SANERI is tasked with developing human capital in the energy research sector and also with funding fundamental and applied research in the following specific portfolios; clean energy solutions, end use and infrastructure management, advanced fossil fuel use, energy data and knowledge management and green transport.

After having read on what the Africa Institute of South Africa (AISA) is about, the researcher was motivated into investigating knowledge production in think tanks, looking into factors such as organizational culture that may impede knowledge production at AISA. Unlike most think tanks in South Africa that mainly focus on South African issues, AISA broadens its focus on Africa in its research, publications and resource library. It also houses one of the most impressive libraries for documentation on African affairs.

1.2 Overview of the South African Institute of South Africa (AISA)

1.2.1 Mission Statement

AISA is dedicated to knowledge production, education, training and the promotion of awareness on Africa, for Africans and the international community. This is achieved through independent policy analysis, the collection, processing and interpretation and dissemination of information, AISA Annual Report 2007/08.

1.2.2 Objectives of AISA

As stated in No.68 of 2001 Africa Institute of South Africa Act, 2001, the objectives of the Institute are to: –

- promote knowledge and understanding of African affairs through leading social scientists acting in concert and across all disciplines and through training and education on African affairs;
- collect, process and disseminate information on African affairs, give effective advice and facilitate appropriate action in relation to the collective needs, opportunities and challenges of all South Africans; and
- to promote awareness and consciousness of Africa at grassroots level (cf. appendix 1).

1.2.3 Overview

AISA, established in 1960, is a statutory body of the Department of Arts and Culture and of the Department of Science and Technology. It is located in the City of Tshwane, the Province of Gauteng, South Africa. According to AISA, it is a government funded research organization and think tank focusing on the production of knowledge on political, socio-economic, international and development issues in contemporary Africa. This was a major consideration for the researcher to conduct research at AISA. It is dedicated to knowledge production, education, training and promotion of awareness on

Africa for Africans and the international community. This is achieved through independent policy analysis, the collection, processing, interpretation and dissemination of information and knowledge. Clients of AISA include research institutions such as universities, individual researchers, the private sector such as businesses, the public sector such as various government departments, students and the general community who want information about Africa.

AISA is said to have been able to produce research findings on contemporary African affairs by having its researchers conduct field research every year throughout the African continent. AISA's vision is to become the independent authoritative centre of excellence for the production of knowledge in Africa, and to promote awareness as well as the importance of unity, peace, prosperity and democracy on the African continent. The following values form the cornerstone to their existence: transparency, reliability, integrity, independence and partnership (AISA Annual Report 2007/08). AISA operates in an open environment in which management keeps employees informed about issues that affect their work and they share decision making and problem solving tasks with their employees and encourage teamwork. This open environment also has bureaucratic leadership elements in it, in which managers do everything according to procedure or policy. The majority of management consists of researchers from the research division who support knowledge production at AISA by producing the bulk of research and contributing to development and knowledge production on Africa.

1.2.4 Policies

AISA has an internal shared drive in which one can find all of AISA's documents, policies and software. At the time of research there were a total of 14 policies:

- absenteeism and desertion policy;

- discrimination policy;
- employment equity policy;
- internal communication policy;
- labor relations procedure;
- recognition of long service policy;
- records keeping policy;
- training and development policy;
- working hours policy;
- South African social policy;
- finance policy;
- budget management policy;
- procurement policy; and
- delegation of authority policy.

AISA currently does not have a specific policy on knowledge production, knowledge management or information management except the Records Keeping Policy designed for the human resources division. The purpose of this policy is to ensure that files should contain all human resources (HR) information, except medical and health insurance files. It provides the procedure upon which a human resources officer can make a follow-up of. Among other things it provides a list of records which should be maintained in an employee's personal folder and conditions under which that file should be kept, for example an employee file should be kept till that person leaves, then placed in archives for 5 years and then digitalized and kept for a further 5 years before it is destroyed (AISA online, 2009) (cf. appendix 2).

1.2.5 Organizational Structure

As mandated by the Africa Institute of South Africa (AISA) Act 68 of 2001, a nine member council, appointed by the Minister of Science and Technology, commenced its

three year term in January 2007. The council basically ensures that AISA keeps focused on its vision and abides by its mission statement in the execution and implementation of its tasks. Among other things, the council provides advice on the direction of the research agenda. The AISA management structure at the time of reporting included the chief executive officer, chief financial officer, corporate affairs manager who is also the acting Outreach and International Liaison (OIL) manager, human resources manager, director of research, director of publications, director of Library and Documentation Services (LDS) and an office manager. AISA's organogram can be found in appendix 3. It has about 70 staff members categorized into the research division, the library and documentation services (LDS), outreach and international liaison (OIL) department, corporate affairs, human resources, finance, the Chief Executive Officer (CFO) and housekeepers.

Research Division – this division is the core of AISA and is the reason for its existence. It is charged with a number of tasks that are critical to knowledge production in support of Africa's aspiration for sustainable development. It undertakes research on African affairs, networks with other institutions producing knowledge, undertakes capacity building activities and hosts research interns that are mentored within the division. They also carry out the AISA Campus Lecture Series and host the Young Graduates Programmes (AYGS). As part of their work, the researchers constantly interact with the outside world through attendance at conferences nationally and internationally, as well as undertake briefings and consultations with stakeholders, including policy and decision-makers, researchers and academics interested in African affairs. The range of outputs achieved in all their activities include books, chapters in books, occasional papers, policy position papers, journal articles and book reviews. There are 17 employees in the research division. The research division has the highest number of

employees. The overall strategic objectives, key performance measures and targets are summarized below in Table 1.2

Strategic Objectives	Key Performance Measures	Target	Actual Figures in AISA Annual Report 2007/08
Promote knowledge and understanding of African affairs through leading social scientists acting in concert and across all disciplines and through training and education on African affairs	Conduct 2 fieldwork projects per researcher in terms of research agenda of AISA	11 researchers x 2 fieldwork per researcher per annum = 22 manuscripts	1 sole authored book (7 chapter) 27 book chapters 6 co-edited books 7 monographs 16 Policy Position papers 15 Journal articles 2 book reviews
	Develop 4 high-level position papers per researcher	11 Researchers x 4 position papers per annum = 52 electronic monographs or publications in Inside AISA newsletter	
	Networking/seminar attendance	One per researcher per year	52
Increase the International profile of AISA	Encourage researchers to deliver papers at International conferences	11 researchers to each attend 1 international conference per annum and present a paper	12 National 27 International 1 National (CEO) 2 International (CEO)
Support National System of Innovation (NSI) objectives by creating a pool of highly-trained researchers from disadvantaged groups	Recruit interns from historically disadvantaged backgrounds for a period of six months (renewable contract)	Appoint 10 interns	5 with extended contracts to one year for some of them
	Train 100 post-graduate students in research methodology from historically	100	192

	disadvantaged institutions		
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Table1.2: Output of Research Division. Source: AISA Annual Report 2007/08

The division is divided into 5 research desks, namely Central Africa and the Great Lakes, East Africa and the Horn, North Africa, West Africa and the Southern Africa Development Community (SADC).

Publications Division – this is where AISA’s research output from both internal and external research is disseminated. It publishes policy briefs, newsletters, monographs, occasional papers and books and journals. For example, Africa Insight, Africa at a Glance and Africa A-Z. Peer reviews are also done in this division, as well as conferences in which the division markets itself and identify potential clients. It uses a lot of freelancers, type setters, printers and other service providers to publish. This division has got 5 employees.

Library and Documentation Services (LDS) – this division houses approximately 85 527 volumes in its library providing information to a wide clientele both internally and externally. The internal clients are AISA’s employees while external clients include diplomatic missions, tertiary institutions, other researchers, companies, clients abroad, academic institutions, scholars, education departments, policy makers, government entities, parliament, non-governmental organizations and students. LDS disseminates the knowledge and information that AISA generates through publication articles for example through Africa Insight, Africa A-Z and Africa at a Glance, book chapters, policy briefs, seminars, interviews with various media (both print and radio), papers, books, emails, posters, newsletters, maps, pamphlets, sample material at seminars/workshops, school outreach projects, memos and embassies. Other forms of disseminating knowledge and information generated at AISA include AISA Online AISA Web. The

newsletter provides users with bibliographic information of the newly acquired information materials. LDS has also an inter-library loan system which only caters for the University of South Africa (UNISA). An inter-library loan system (ILL) is a service whereby a user of one library can borrow books or receive photocopies of documents that are owned by another library. They only lend out photocopies. LDS also has an archive that stores journals dating back to 1970. LDS has a total number of 12 employees; these are divided amongst professional librarians, information professionals and technicians.

Services Provided by LDS

The following are the major services rendered by the Library and documentation

Services division of AISA:

- cartography (production of maps and diagrams in A3 or A4 format);
- provision of information services to on-site and distance users through database searches printouts, e-mailing on request and fax;
- handling of telephone, fax and e-mail enquiries;
- access to electronic news clippings through an electronic management system storing full- text documents;
- photocopying of selected materials in accordance with South African copyright legislation;
- provision of updated information and statistics on Africa (Knowledge Bank) and incorporating data analysis into flagship publications (Africa A-Z and Africa at a Glance);
- access to Africa fast facts, Africa in focus and South Africa (map posters in A1);
- online versions of flagship publications Africa A-Z and Africa at a Glance;

- internet access to our bibliographic database for distance users;
- selective dissemination of information (SDI) service, alerting clients of newly acquired materials, as per subject of their choice;
- outreach programmes to rural schools;
- ready reference, in which clients call in and are given information from this section telephonically; and
- provision of spatial information (GIS) (AISA online, 2009).

Cataloguing System

LDS has an in-house cataloguing system which is basically a unique system that they have come up with to suit what they have in stock and is not a formal or widely recognized system. For example, cataloguing of journals is done by either reading a shorter article of the journal in a pamphlet form or by actually reading the whole journal and then putting the keywords into a Web based knowledge management system called WizCat which will then do everything including giving accession numbers and shelf numbers. An example of a shelf number would be AFR 566.098. AFR stands for Africa and then 566 would be the beginning of each reference section and then the numbers after would be the book's unique number. Books that fall under the General books section would have the letters AL then the unique number. All these are then shelved alphabetically according to country under their reference section. When books come into the LDS they are given either one of three labels, Pay for (books that have been ordered and paid by AISA), Gifts or Exchanges (between them and other organizations). Books not on Africa, or are in foreign languages are not catalogued. All articles that come into the library are given files for easier cataloguing purposes.

WizCat

AISA uses a knowledge management system called WizCat for cataloguing, tracking for quality control purposes, handling of information resources and enabling of most of the services provided by LDS. It is a tool for corporate information centers and special libraries. System features include:

- instant access from anywhere using the internet browser;
- stores data in HTML (hyper text mark up language) and XML format, using Dublin Core compliant metadata elements;
- full text and automatic authority-controlled subject indexing;
- can upload text and images from anywhere to the AISA database;
- web data mining and web-redirected searching facility;
- electronic publishing of newsletter and SDI in HTML;
- integrated with traditional library management functions;
- supports multiple consortium configurations; and
- integrated interactive online help desk and user group facilities.

Main entries used by the LDS cataloguer when capturing an article or book are title(s), date of publication, type for example book, article, chapter etc, format for example text/HTML, language, ISBN/ISSN, publisher, source, short description, subjects in the book, author etc. From there it will provide a bibliographic record number (BRN) or what is called an accession number.

Newspaper Clippings Section

Different types of newspapers are processed in this section of the LDS on a daily basis especially those with articles pertaining to African affairs and which mainly researchers

can use for their research and seminars. These newspaper articles/ clippings are scanned to the LDS email using software called Advanced Document Management, version 5 (ADM5). ADM5 is a database which allows the user to select newspaper clippings and other information for usage. Newspaper clippings are profiled onto the database using title, author, type for example newspaper article, source, keywords, website, abstract, date of publication, page etc. Once all the details are entered it generates a number for the article. When researchers want to search they use windows explorer using keywords, abstract, title, author etc. LDS staff members have meetings with the manufacturers of ADM5 to share knowledge and ideas amongst themselves on how to improve services and the latest trends in the database. Original newspapers are then kept for three months before being disposed of.

Evaluation of LDS services

LDS has taken measures to evaluate its services and currency of materials they house. One of the ways is that they frequently carry out surveys and ask clients what they think about their collection. LDS also has a measurement or assessment system that acknowledges all books that come in against a recommended list for quality assurance purposes. Lastly it has a library visitor's statistics form that asks the visitor a number of questions that help in rating certain aspects of the library (cf. appendix 4).

Outreach and International Liaison (OIL) – the marketing, communications and event management functions are located within the OIL division. Among others, OIL facilitates meetings for the CEO with government departments, non-governmental organizations (NGOs), public entities and heads of diplomatic missions. It also pursues strategic relationships with identified partners, with whom AISA hopes to team up with in various research initiatives. OIL is under corporate affairs.

Corporate affairs – this division acts as council secretariat, the corporate governance reporting channel and the caretaker of the OIL division. It develops processes and tools to help the CEO evaluate divisional performance against the business plan and shareholder compact agreement. Staff interventions such as team building, staff meeting, and celebration of significant days are also incorporated into the Corporate Affairs activities to ensure improved harmony amongst AISA employees. Both OIL and corporate affairs have only got 6 employees in total.

Human Resources Division (HR) – this division uses various processes to ensure that employees are well skilled and evaluated. For example in the year 2007-2008 HR made great strides in internalizing and using Performance Management and Development systems (PMDS) as a management tool by conducting performance management training to all management staff on an individual basis. Also, HR has an electronic system which can record employee skills development programmes, track human capacity Development (HCD) and draw the necessary reports. This division has got 4 employees.

Finance – this division deals with all the finances of AISA such as property, plant and equipment, provision for penalties, investments not in the name of AISA such as employee housing loans, revenue and post-employment benefits. It also makes sure that AISA's financial policies are aligned to the International Accounting Standard (IAS) and related treasury regulations. This division has got 15 employees.

1.2.6 Key AISA Programmes

AISA has a number of capacity building programmes that draw on students and help identify and raise potential researchers. These are namely AISA's Young Graduates Students (AYGS), Internships, Fellowships, AISA Campus Lecture Series and Outreach. The capacity building programmes hold national/regional activities for and by young Africans such as presentations on Papers that these people might be writing. AISA believes that ideally, young people represent the future of each and every nation. But the future for African youth is becoming endangered. The number of deprived black youths, female and male, between the ages of 18 and 35 is increasing. Many do not have access to basic necessities for a dignified life and continue to be at the receiving end of injustices. Global African youth have, fundamentally, been disconnected from their historical heritage as a result of slavery, colonialism, neo-colonialism and poor governance. Despite the many negative factors, there is also a critical need to look at the numerous positive initiatives by young Africans around the world to overcome challenges and pave new ways. There is a need to identify a vision and strategies to change the future, for example, through the AISA Campus Lecture Series, an annual training programme that educates students from disadvantaged universities on research methodologies. AISA has contributed to fostering a new generation of research specialists. This means that all research output is based on first hand empirical evidence (AISA, 2009)

Through AISA fellowships, people are empowered with knowledge generation capacity and encourage all researchers to contribute to the development of a knowledge based economy in Africa. AISA realizes that knowledge and development often go hand in hand and in order for Africa to achieve its potential, knowledge generation and dissemination are key areas where academics and researchers must contribute. The

fellowship programs at AISA are therefore designed with knowledge production in mind. Fellows are given the opportunity to contribute to the research of AISA and to publish in AISA's fully accredited journal, Africa Insight. Visiting fellows are exposed to a comprehensive library holding on African affairs. AISA has six fellowship programs, with opportunities for researchers from a wide range of backgrounds, namely; Archie Mafeje Fellowships Program, Bernard Magubane Fellowships Program, AISA Distinguished Scholar Fellowship Program, AISA Visiting Fellowships Program, AISA Resident Fellow Program and AISA Emerging Scholar Fellowships Program. AISA is also involved in community outreach programs, by doing all it can to provide maps and other resources to under-privileged schools in rural South Africa and aims to encourage research as a career choice for young people as they leave school (AISA, 2009).

Most interns at AISA are found in the research division. They go with researchers to the field to conduct research and come back with output such as journal articles that they would have written and then hold seminars to impart the knowledge they have acquired. They are also entitled to publish at least 4 articles, 1 policy brief or a chapter as part of knowledge production on return from the field.

1.3 Statement of the Problem

Changes in technology have brought about increases in the production of information and knowledge, thereby increasing the demand for information and knowledge. This has resulted in many knowledge-based organizations streamlining. AISA is one knowledge-based organization. To effectively meet its objectives, AISA has to acquire knowledge from external sources and also internally produce knowledge which it uses and is used by its clientele. AISA's knowledge production efforts are confronted by a number of

challenges. Among the challenges are organizational culture and employee's attitudes towards sharing knowledge freely. This results in individual employees encountering difficulties in finding the information and knowledge they need for day-to-day work, thereby impeding knowledge production. If these challenges could be identified and clearly confined, it is argued that AISA would be in a better position to effectively produce and utilize knowledge, enabling it to more efficiently achieve its objectives. This study looks at AISA as a model think tank which makes use of the knowledge it acquires and produces to influence government policies in sub-Saharan Africa.

1.4 Research Questions

The study will attempt to find answers for the following research questions:

- What are AISA's major achievements in knowledge production?
- What are AISA's main challenges in producing knowledge?
- To what extent does AISA's organizational culture promote knowledge production?
- In what ways may knowledge production be enhanced at AISA?

1.5 Aim and Objectives

The aim of this study was to assess the system of knowledge production at AISA and further assess the challenges of producing knowledge embedded in AISA's organizational culture or environment and recommend ways of producing and sharing knowledge. The study sought to achieve the following objectives:

- identify AISA's main achievements in knowledge production;
- determine AISA's challenges in producing knowledge;
- find out how AISA's organizational culture impacts on internal knowledge production; and

- suggest ways in which knowledge production at AISA may be improved.

1.6 Significance of the Study

This researcher is not aware of any major structural research on the production of knowledge in a think tank in South Africa and has seen that many researchers have conducted research on knowledge management rather than knowledge production. Also, considering the importance of think tanks in coming up with research findings which governments apply in formulating economic, social and technological policies, this study is important in identifying challenges that may hinder the successful production of knowledge. The study will also provide a basis for the development of a strategy that could guide the implementation of knowledge production programmes within AISA and other think tanks in South Africa and sub-Saharan Africa. This is also a worthwhile study to the academic community for it will add to the existing body of knowledge on think tanks as well as provoke further research.

1.7 Limitations

The information obtained was limited to researchers and other employees in other cadres within AISA. The data was influenced by the people's perceptions and can not be generalized for other organizations. Respondents' attitude, beliefs, degree of truthfulness, cooperation and experiences may greatly jeopardize research results and therefore the researcher tried to guard against these attitudes, beliefs etc, by remaining neutral in opinions and by observing respondents behavior. Respondents were also very busy in their daily activities which involved conducting research outside AISA. This meant that it took longer for them to respond to questionnaires as well as it took time to conduct the face-to-face interviews. The researcher had to make appointments with

them and also wait to see if anyone else was free at the given time. Another limitation was that the results which were obtained from the study can not be generalized to the world-wide situation since communities differ from place to place due to differences in culture, nationality, government bureaucracy and state of the economy and the development level of different countries.

1.8 Definition of Terms

Below are the definitions for operational terms used in the study and derived from dated sources:

Explicit Knowledge - is knowledge that can be processed i.e. collected and stored within databases and expressed in words or using a system of symbols (Nonaka and Takeuchi, 1995)

Information - is a message specifically designed to inform its recipient, usually in the form of a document or an audible or visible communication (Davenport and Prusak, 2000)

ICTs (stands for information and communication technologies) - In this study they are defined as diverse set of technological tools used to communicate, create, disseminate, store, and manage information

Knowledge - is information that is relevant, actionable, and at least partially based on experience. It includes the insights, understandings, and practical know-how that employees possess (Davenport and Prusak, 2000)

Knowledge Assets - often referred to as intellectual capital. The knowledge that has been identified, captured, and leveraged to produce higher-value goods or services or some other competitive advantage for an organization (Pearlson, 2001)

Knowledge Management - is the process through which organizations create and use their institutional and collective knowledge (Rastogi, 2000)

Knowledge Production - is the formation of new ideas through interactions between explicit and tacit knowledge in individual human minds (Nonaka and Takeuchi, 1995)

Organizational Culture - a collection of values and norms that are shared by people and groups in an organization and that control the way they interact with each other and with stakeholders outside the organization (Parker, 2000)

Organizational Structure - is the physical and social environment within which an organization operates. This includes elements such as physical office space, departmental or lines of authority, and definition of employee roles

Tacit Knowledge - is knowledge that is unstructured and based in people's expertise and rooted in action, experience, and subjective insights. (Nonaka and Takeuchi, 1995)

1.9 Organization of the Thesis

Chapter 1: Introduction to the study. This provides a background, statement of the problem, objectives, research questions, significance of the study and the limitations. It also gives an overview of the organization studied.

Chapter 2: Literature Review. Reviews recorded literature resulting from research works conducted by other researchers on knowledge production. The chapter also covers the theoretical framework on which this study is based.

Chapter 3: Research Design and Methodology. This chapter discusses the case study method and the sampling procedure that was used in the research as well as other data collection techniques such as face-to-face interviews that were used.

Chapter 4: Data presentation and analysis. The results are presented and analyzed in relation to the research questions presented in chapter one.

Chapter 5: Recommendations and conclusions. The results are summarized and recommendations and conclusions given based on the results. It also highlights topics of further research.

1.10 Summary

This chapter gives the general introduction of the study. It looks at what think tanks are and how major changes in technology have increased the demand for knowledge. Knowledge production is defined and how there are numerous challenges faced in producing knowledge, specifically organizational culture which may negatively affect knowledge production. An overview of AISA is also given. The chapter then presents statement of the problem, research questions, aim and objectives, significance of the study, limitations and the structure of the thesis. The next chapter presents the theoretical framework and literature that was reviewed.

CHAPTER TWO

THEORETICAL FRAMEWORK AND LITERATURE REVIEW

2.1 Introduction

The study aimed at assessing the system of knowledge production at AISA and further assessed the challenges of producing knowledge at the institute of AISA. Knowledge production (KP) is the formation of new ideas through interactions between explicit and tacit knowledge in individual human minds (Nonaka, 1994). AISA's foundation lies in knowledge production and without knowledge AISA as a think tank can not continue to operate and exist. Think tanks face innumerable challenges in producing, nurturing, sharing and managing knowledge and which in turn may be as a result of organizational culture. Organizational culture may negatively shape how organization members feel, think and behave and could hinder continuous learning, transfer and production of knowledge in organizations (Schein, 2004). Assessing the system of knowledge production could not have been done without looking at the theoretical framework on which this study is based and also reviewing literature by other authors or researchers.

2.2 Theoretical Framework

A theory is a well-substantiated explanation, a logical statement(s) of some aspect or an expectation of what should happen (Wikitionary, 2009). The reason for aligning a study to a theory is that theories attempt to explain observed phenomena and enables one to deduce the possible results of every experiment for your study. Some of the theories on knowledge production include Pierre Bourdieu's Social Theory of Knowledge production found in the natural and social sciences, Ikujiro Nonaka's Organizational Knowledge Creation Theory and Mode 1 and Mode 2 Knowledge Production theories by Gibbons *et*

al. The study's theoretical framework was based on Mode 2 theory of Knowledge Production.

Mode 1 and Mode 2 Theories of Knowledge Production

Gibbons *et al.* (1994) came up with theories of knowledge production which they labeled Mode 1 and Mode 2. The traditional form of knowledge production, Mode 1, takes place within disciplinary communities, its outcomes are those intellectual products produced and consumed within research-oriented institutes such as universities. The legitimacy of such knowledge is determined by institutional standards and academic values such as peer review. Within the knowledge area or discipline, academic journals disseminate the knowledge to others in the field. Career paths follow traditional academic paths. The most legitimate form of knowledge is produced in the scientific disciplines. Students have no control over how their knowledge is judged. This is laid down according to academic testing traditions.

Mode 2 involves the identification and solution of practical problems in the day-to-day life of knowledge and information practitioners and organizations. Rather than focusing on the academic interests of a discipline or community, Mode 2 is concerned with problem-solving around a particular application and context. Mode 2 does not replace Mode 1 rather it builds on the knowledge base while drawing on different sets of cognitive and social practices (Grosjean, 2004). In today's academic society filled with emerging practical orientated academic disciplines, Mode 2 is applicable in disciplines such as development studies, HIV/AIDS studies, knowledge management, gender studies, etc. It is accommodative but not exclusive. Mapping these distinctions between academic and practical intelligence onto theories of knowledge production, suggests a distinction between the passive learning (Mode 1) and active learning through the performance of

authentic tasks (Mode 2). In Mode 1, academic intelligence is judged by the ability to reproduce knowledge acquired in the classroom. This is laid down according to academic testing traditions that remove knowledge from an individual's ordinary experience and usually requires one correct answer by way of one correct solution, (Grosjean, 2004). This then has made Mode 1 slightly inapplicable to other situations that are outside academic institutions such as in research institutes and think tanks.

Mode 2 holds practical intelligence which engages problems in the workplace. Such problems are usually unformulated and relate to everyday experience, and characterized by multiple correct solutions, none of which is without flaws. Growth in Mode 2 has been fueled by the rapid expansion of higher education and increased interaction between 'theory' and 'practice'. Mode 2 has been seen as bringing new forms of knowledge production and bringing about new forms of research assessment in the basic sciences. The concept of 'tacit knowledge' enriches understandings of knowledge production. Tacit knowledge is the result of experience. It is created in 'here and now' situations in which individuals develop ways of knowing that are not readily describable in formal terms. Tacit knowledge can be seen, therefore, as an integral aspect of Mode 2, (Grosjean, 2004).

While the notion of Mode 2 knowledge production has attracted considerable interest, the claim about Mode 2 made by Gibbons *et al.* (1994) has been contested on many grounds. Frenken, Boschma, Hardeman (2009) think that 'the various claims regarding the nature of Mode 2 knowledge production have not been analyzed empirically in any systematic manner so far. We argue that the needed empirical research is hampered by the lack of a common analytical and theoretical framework.' They further argue that the poor empirical basis of the Mode 2 concept is a marginal phenomenon representative for

only a small subset of scientific research, and that from a long-term historical perspective, Mode 2 is not really a new mode of knowledge production. Critics such as Gulbrandsen and Langfeldt (2004) ask the questions ‘could it be that Mode 2 is nothing but traditional ‘academic’ science with a stronger emphasis on public and commercial application? If so is it actually being assessed, and supported, by the different public and commercial criteria?’ They also argue that growth of Mode 2 is not just due to the expansion of higher education but the creation of a surplus of highly skilled graduates that could not be absorbed into the academy.

Despite these questions and other criticism in the literature that critique Mode 2, the framework remains suitable in addressing the relationship between knowledge production and organizational culture. Mode 2 characteristic features like applicability to the work place; ability to bring new forms of knowledge production and ability to bring about new forms of research assessment makes it the most suitable framework for this study. Mode 2 allows individuals at AISA such as interns to acquire a broad-based, general education and discipline-specific work experience and at the same time be part of continuous learning.

Interns at AISA go with researchers to the field to conduct research and come back with output such as journal articles that they would have written and then hold seminars to impart the knowledge they have acquired. They are also entitled to publish at least 4 articles, 1 policy brief or a chapter as part of knowledge production on return from the field, thereby bringing in new forms of knowledge production as well. This means that the students who would have come from academic institutions (Mode 1) supplement Mode 1 foundational understandings from the classroom with Mode 2 broad-based, experimental learning from the workplace. This strengthens their experience, and

provides opportunities for the interns to benefit from participation in both modes, (Grosjean, 2004). As they learn from their supervisors and co-workers they participate at more responsible levels of professional activities. In this way they begin to develop tacit knowledge and its accumulation constitutes Mode 2 knowledge production.

2.3 Literature Review

According to Leedy and Ormrod (2001) 'literature review is a systematic review of an existing body of research retrieved from valid and reliable sources, such as books, indexes, abstracts, and other general references, relevant to a research problem.' It can also mean the works you consulted in order to understand and investigate your research problem (Language Centre, 2009). A literature review needs to be conducted because it gives a critical analysis of segments in a published body of knowledge through summary, comparison of prior research studies and provides the background for your research by looking at what work has already been done in that research area.

2.3.1 Think Tanks

Until around 1970, there were no more than several dozen think tanks, mostly focused on offering non-partisan policy and military advice to the United States and generally with large staffs and research budgets. After 1970, the number of think tanks exploded, as many smaller new think tanks were formed to express various ideological views. A think tank is an organization, institute, corporation or group that makes use of knowledge from multiple disciplines to help identify and understand policy problems, craft possible solutions, and evaluate or critique their implementation (McGann, 2007). Thus, you will find that researchers, policy makers, publishers and political activists work for think tanks. In recent times, the phrase 'think tank' has become applied to a wide range of institutions such as marketing or public relations organizations (McGann, 2007).

Although a precise definition of a think tank remains elusive, there are basic features that most think tanks share. They operate as non-profit organizations, and engage in research on issues of concern to public policy makers. As nonprofit organizations, think tanks are reliant to some extent on philanthropic gifts or a limited number of sponsors. Some struggle to maintain their independence and objectivity while others willingly embrace the ideologies of their principal donors or funders (McGann, 2007). In most cases these donors or funders are government departments and non-governmental organizations (NGOs). AISA is pre-dominantly funded by the South African government.

Supporters like the National Institute for Research Advancement hail them as 'one of the main policy actors in democratic societies...assuring a pluralistic, open and accountable process of policy analysis, research, decision-making and evaluation.' However, critics such as Ralph Nader (2004) (Attorney and Political Activist in the United States) have suggested, in a documented argument that because of the private nature of the funding of think tanks, their results are biased to a varying degree. He argues that members will be inclined to promote or publish only those results that ensure the continued flow of funds from private donors. Nader (2004) goes on to assert that think tanks are little more than propaganda tools for promoting the ideological arguments of whatever group established them. The researcher partly agrees with the fact that donors do have a say in what is produced and disseminated but believes that the positives that come out of think tanks overshadow donor interests that may be negative.

The Council for the Development of Social Science Research in Africa (CODESRIA) (2005) indicated that in Africa, think tanks are centers for production of knowledge on Africa and they promote awareness as well as the importance of unity, peace, prosperity and democracy on the African continent. For example, the Economic Community of West African States has extended its concerted efforts to include research centres and

think tanks active in West Africa in its internal dynamics of producing, harnessing of knowledge and knowledge resources on political, economic, socio-cultural, peace building and conflict management initiatives. This researcher has however discovered that there is not a lot of literature on African think tanks as compared to those based in European countries and therefore when conducting research on think tanks based in Africa, literature is limited to the European perspective of think tanks (CODESRIA, 2005).

According to those institutions responding to McGann's 2007 survey, the first African think tanks were founded in the 1920s. Sub-Saharan Africa was not home to a significant number of think tanks until the 1960s. This increase can be attributed to the decolonization of African nations. In a newspaper commentary, Vale and Carter (2008) opine that South African think tanks are entrepreneurs intent on embedding particular policy outcomes at the intersection of politics and management. Mainly this is done by emulation: drawing uncomplicated analogies between two sometimes wholly different situations and suggesting outcomes. Vale and Carter (2008) argue that the problem is that contemporary think tanks seldom offer anything new –certainly never anything out of the ordinary. Vale and Carter (2008) further claim that in their methods think tanks borrow from another approach to understanding social relations in South Africa, the scenario keenly associated with the names of Clem Sunter and Anglo-American.

2.3.2 Knowledge Producing Institutions vs. Think Tanks

A comparison between knowledge developing institutions for example academic and think tanks reveals that part of the difference is that the research of professors is unmanaged and undirected; the object of research is up to the whim of the professor. The goal may or may not be to solve an important problem. Think tanks, by contrast,

tend to be very goal-orientated. They employ or contract with scholars to research specific topics and encourage solutions to well-defined problems. Universities tend to be graded based on academic prestige of their faculty members. Think tanks tend to be graded based on their success in solving real world problems (SourceWatch Encyclopedia, 2009). According to Snider (2009) think tanks are conceived as universities without teaching or the students and minus the system of peer review. They have a decided political leaning and have become increasingly involved in advocacy usually indirectly. Vale and Carter (2008) however critique think tanks by saying that 'the knowledge produced by think tanks invariably mimics mainstream academic work, even though the search for truth is said to be 'the purpose of all serious scholarship' is of little concern within the think tank community. They continue to say one of the biggest problems being that the public can not readily draw a distinction between the knowledge produced by think tanks and knowledge produced by universities,' unless if of course think tanks and academic institutions collaborate in ways that the public can decipher between knowledge from each institution but be able to acknowledge and value the collaborated knowledge.

Those against think tanks such as Nader (2004) argue that think tanks are ideal for salesmanship, because they lack many of the checks and balances that keep academia honest. In academia, the peer-reviewed journal and the scientific conference are two important tools for keeping research honest. They allow scholars to confront their opponents and argue out their differences in sometimes brutal and extensive debate. No such policy exists for think tanks. Think tanks must be debated in the media, a severely limited forum which provides them with a great deal of intellectual cover. In academia, scholars have an important position in the National Academy of Sciences, which comprises many of the nation's most respected scientists. Think tanks, on the other

hand, submit their work to the general public, who are usually unqualified to give an expert critique of the study. Academics conduct their research first and draw their conclusions second. But think tanks do this exactly backwards: they reach their conclusions first and conduct their research second. The sheer size of academia also works to keep research more accurate. There are a lot of higher academic institutions but only a few dozen think tanks. Academia therefore has a vastly larger talent pool and considerably greater research facilities than think tanks. This then draws us back to the debate between Mode 1 knowledge production (in academic institutions) and Mode 2 knowledge production (think tanks).

In spite of this criticism, today's society of globalization and change, think tanks are already playing a bigger role because of the complexity of the new challenges and the quick answers that are required to respond to those challenges. Governments are overstretched in their daily tasks and obligations and are increasingly dividing tasks related to research to think tanks and other such institutions.

2.3.3 Knowledge Production

Gupta, Iyer and Aronson (2000) define knowledge as the 'understanding obtained through the process of experience or appropriate study. This can develop over time through successful experience, and experience can lead to expertise.' Knowledge comes from data and information. Davenport and Prusak (2000) state that data represents unorganized and unprocessed facts that are static in nature and are a prerequisite to information. Information is processed data, which makes decision making easier and usually has meaning and purpose. Knowledge is usually based on learning, thinking, and proper understanding of the problem area and is derived from information in the same way information is derived from data. We can view it as an understanding of

information based on its perceived importance or relevance to a problem area. Knowledge is an ongoing experience in a specific domain and using the new knowledge in combination with the existing knowledge to come up with updated knowledge for sharing, Davenport and Prusak (2000). For example, it can be done through teamwork.

Organizational Knowledge Creation Theory

Nonaka (1994) proposes the Organizational Knowledge Creation Theory which states that organizational knowledge is created through a continuous dialogue between tacit and explicit knowledge via four patterns of interactions, socialization, combination, internalization and externalization.

The ideas, experiences, expertise and knowledge contained in the mind of an individual and similar individuals or subunits are combined and used to create new knowledge, the resulting tacit and explicit knowledge can be called organizational knowledge. Since learning within organizations is seen as encoding inferences from history into routines that guide behavior, it could be said that organizational knowledge is the product of those routines. By sharing those lessons explicitly across all groups, organizational knowledge is created. The process of reviewing those lessons and providing responses that change routines already in place in a way that improves the performance of the organization or speeds decision processes constitutes organizational learning (Schulz, 2002).

Individual knowledge can be defined simply as knowledge possessed by the individual. This knowledge is most often tacit unless the individual possesses explicit knowledge that is not shared with anyone or any organization other than the individual. A private journal might be considered explicit individual knowledge. Individual knowledge can be

acquired through experiences, and at times it can be acquired without language. Individual knowledge becomes organizational knowledge when the individual contributes to the knowledge sharing and creation process by allowing their knowledge to be internalized by others or socializing their knowledge with others, which leads to the creation of organizational knowledge (Hatch, 2009)

According to Nonaka and Takeuchi (1995) 'explicit knowledge is knowledge that may be quantified and structured, can be processed i.e. collected and stored within databases and expressed in words or numbers, manuals, scientific formulae etc. It can be expressed formally using a system of symbols, and can therefore be easily communicated or diffused. It comes in the form of books and documents, databases, and manuals. Tacit knowledge is knowledge that is unstructured in nature and is based in people's expertise. Tacit knowledge is rooted in action, experience, and subjective insights. It is hard to catalogue tacit knowledge because it is highly personal and difficult to document in any detail, for example indigenous knowledge found in traditional healers. Tacit knowledge is uncodified and difficult to diffuse.'

In Nonaka's Theory of Knowledge Creation, socialization represents tacit to tacit communication which takes place between people in meetings or in team discussions. Externalization represents tacit to explicit communication through dialogue in brainstorming for example. Combination, also known as communication, represents explicit to explicit. This transformation phase takes place through meetings and conversations supported by technology or information systems. Explicit knowledge can be easily captured and then distributed or transmitted to worldwide audience. Internalization represents explicit to tacit communication. This implies taking explicit knowledge (for example a report) and deducing new ideas or taking constructive action.

One significant goal of knowledge management is to create technology to help the users to derive tacit knowledge from explicit knowledge. Organizational knowledge creation takes place when all four modes of knowledge conversion form a continual cycle triggered by such actions as team interactions, dialogue, metaphors, coordination, documentation, experimentation, and learning by doing, etc (Jin, 2005).

As much as the researcher acknowledges that Nonaka's theory has laid a foundation for knowledge creation in organizations, the researcher cannot ignore limitations to the theory. Much debate lies on the issue of whether all knowledge can be codified. Explicit knowledge is easy to transform from educators to learners through syllabuses, study guides, and course materials. Thus, explicit knowledge is processed, transmitted and stored with relative ease. On the other hand, tacit knowledge is highly personal and is a comprehensive of the human mind. Therefore, tacit knowledge is of limited representation to learners and difficult to communicate to others. Others in the debate for Nonaka can argue that educators can apply narration, animation and commentary to represent individual knowledge as effectively as they can so this point is less important.

Another problem with knowledge production is reapplying the individual's knowledge and controlling the quality of the knowledge. The quality of information is one of the most important factors that affect the transformation of individual knowledge into organizational knowledge. In online learning environments, learners usually retrieve information on their own. After that, they contribute to the creation of a knowledge base. There are no monitors or control measures to legitimate or credible information. The problem is most serious when a knowledge base is growing and people continue to use it. If this problem deepens, it might make an adverse impact on knowledge sharing and ultimately on knowledge creation (Huang and Liaw, 2004).

2.3.4 Knowledge Management

Produced knowledge then needs to be managed so that the think tank gets maximum benefits from it. Knowledge Management (KM) is a fairly new research area that is still at its nascent stages as an academic discipline, with opinions about the paths, methods, and even the objectives varying. However, the intricacy of knowledge management and its importance in an organization's long term success and survival has been widely recognized. According to Morrow (2001) KM 'is a term used loosely to refer to a broad collection of organizational practices and approaches related to generating, disseminating and applying knowledge. It incorporates having knowledge about your organization, staff, competitors and products and using this knowledge to the organization's advantage. Implementing a KM programme can help an organization improve its services in this era of information through creating an organizational culture of sharing knowledge and expertise within the organization.'

Barclay and Murray (1997) gives other reasons for having knowledge management in organizations today:

- marketplaces are increasingly competitive and the rate of innovation is rising;
- reductions in staffing create a need to replace informal knowledge with formal methods;
- competitive pressures reduce the size of the work force that holds valuable business knowledge;
- the amount of time available to experience and acquire knowledge has diminished;
- early retirements and increasing mobility of the work force lead to loss of knowledge;

- changes in strategic direction may result in the loss of knowledge in a specific area;
- cost of our work is information based;
- organizations compete on the basis of knowledge;
- products and services are increasingly complex, endowing them with a significant information component; and
- the need for life-long learning is an inescapable reality (Barclay, 1997).

Unfortunately, the very little empirical work in the area of knowledge production has limited our understanding of this important phenomenon of knowledge management. Specifically organizational culture emerged as one of the biggest impediments to effective knowledge production and in turn effective KM. Much literature on KM gives a picture of practices, recipes, and tools associated with KM as being very mechanistic, (Scarborough and Swan, 2001). Scarborough and Swan (2001) view the available literature on KM as glossing over important issues such the impact of organizational culture on knowledge production. Also, certain areas lack thorough research such as the impact of organizational culture on implementing knowledge management practices and producing knowledge. Previous studies have focused on limited aspects of the overall knowledge production process, for example, the importance of informal networks found in organizational culture as important sources of information. As a result, the understanding of knowledge production is limited to certain aspects, rather than understanding the whole process that incorporates environmental and organizational factors found in culture.

Early KM technologies included online corporate yellow pages as expertise locators and document management systems combined with the early development of collaborative

technologies (in particular Lotus Notes). Subsequent KM efforts leveraged semantic technologies for search and retrieval and the development of e-learning tools for communities of practice (Capozzi, 2007). More recently, development of social computing tools (such as blogs and wikis) have allowed more unstructured, self-governing or ecosystem approaches to the transfer, capture and creation of knowledge, including the development of new forms of communities or networks (Andrus, 2005). However such tools for the most part are still based on text and code, and thus represent explicit knowledge transfer. These tools face challenges in producing meaningful re-usable knowledge and ensuring that their content is transmissible through diverse channels.

2.3.5 Organizational Culture

There exists factors that encourage or retard knowledge production or knowledge sharing with the biggest being organization's culture which comprises, the attitudes, experiences, beliefs and values of an organization that control the way members interact with each other and with stakeholders outside the organization. From organizational values develop organizational norms, guidelines or expectations that prescribe appropriate kinds of behavior by employees in particular situations and control the behavior of organizational members towards one another (Hill and Jones, 2001). Organizational culture is created by a variety of factors, organizational values (honesty, transparency, innovation), work environment (how staff interact, degree of competition, mood of the office, collaboration with coworkers, time employees spend outside office with coworkers), responsibilities, work and life balance (hours per day or week), office environment (cubicles, windows, display of personal items, gym or daycare facilities onsite), dress code (suit, business casual, informal Fridays) and training (emphasis on development, skill building, investment in growth) (Ott, 1989).

Organizational culture may negatively shape how organization members feel, think and behave and could hinder continuous learning, transfer and production of knowledge in organizations. According to Bock and Kim (2002), knowledge sharing is the most important part of knowledge production. Additionally sharing activities have to be voluntary and cannot be forced (Ka"ser and Miles, 2002). An employee's attitude and competencies may impede knowledge sharing and in turn knowledge production. For example, many employees are unaware of the importance of sharing and transferring knowledge. According to Bartol and Srivastava (2002), 'some individuals possess an attitudinal "unwillingness to share" due to personal insecurity, such as a fear of being seen as ignorant.' This of course may not be true and the source of this insecurity may be lack of information on the benefits of sharing to both the employee and the organization. Bartol and Srivastava (2002) continue to say that employees may also fear a loss of superiority and knowledge ownership after sharing their own personal knowledge.

In such a case the employees would need to be trained and well informed on knowledge production practices. Parker (2000) says 'that it is perfectly reasonable to suggest that complex organizations might have many cultures and that such sub-cultures might overlap and contradict each other. The neat typologies of cultural forms found in textbooks rarely acknowledge such complexities, or the various economic contradictions that exist in organizations.' Hence, knowledge production cannot be effectively addressed without addressing organizational culture.

Another example of how organizational culture affects behavior is through personality. Extrovert (loud, outgoing) people usually possess self-confidence, feel secure, and tend to share experiences more readily than introvert (quiet, reserved) and security-conscious

people. People with positive attitudes, who usually trust others and who work in environment conducive to knowledge sharing tend to be better in sharing knowledge. Vocational reinforcers are the key to knowledge sharing. People whose vocational needs are sufficiently met by job rewards (promotions, salary increases etc) are usually found to be more likely to favor knowledge sharing than the people who are deprived of one or more reinforcers (Bartol and Srivastava, 2002). This goes back to what kind of norms an organization has that may or may not have these vocational reinforcers that make employees want to share and produce knowledge effectively.

Literature suggests that organizational culture remains an important aspect of effective knowledge production. If think tanks fail to consider organizational culture, problems involving knowledge production in this regard cannot be effectively addressed as an organization's system of norms, beliefs, values, and rules are embedded in culture (Holowetzki, 2002). The researcher sees organizational members as interpreting the behavior and language of others through their own cultural biases. Each member's set of beliefs, values, and assumptions become their 'reality' and perceive behavior inconsistent with their own biases as irrational. Because culture is so deeply rooted in an organization's history and collective experience, working to change it requires a major investment of time and resources. Without such help, it is difficult for organizational members to view their 'reality' as something they have constructed, and to see meaning in things they normally take for granted.

Knowledge production for all think tanks is the reason for their existence and although it is vital for survival, organizations have not dwelt on the fact that organizational culture might negatively impede knowledge production in their think tank. A strong organizational culture controls organizational behavior thereby blocking a think tank from

making changes needed to adapt to an information and knowledge changing environment. This in turn affects knowledge management as knowledge production is its foundation. The literature on knowledge management seems to gloss over topics on the impact of organizational culture on knowledge production, thereby providing very little knowledge for think tanks to refer to when dealing with such issues. Even theories on knowledge production have not considered the element of organizational culture in full. Enquiries by the researcher into knowledge production at AISA and also a look at its organizational culture might bring up information that will help knowledge professionals get a more in-depth understanding of the relationship between organizational culture and knowledge production.

2.4 Summary

This chapter discussed the theoretical framework (Mode 2) that this study is based upon. It also gave a literature review on think tanks, knowledge production, knowledge management and organizational culture, linking each subject together. The researcher also took a look at knowledge producing institutions versus think tanks. A theory by Nonaka (1994) called the Organizational Knowledge Creation Theory was also reviewed. The next chapter is on the research methods that were employed in this study.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

In order to meet the aim and objectives of the study and to answer the research questions, the researcher came up with a research design and methodology described in this chapter.

3.2 Description of Study Area

AISA is located at the City of Pretoria in a suburb called Arcadia, Corner of Bailey Lane and Edmond Street. Pretoria is a city located in the northern part of Gauteng Province, South Africa. It is one of the country's three capital cities, serving as the executive (administrative) and national capital. The others are Cape Town which serves as the legislative capital, and Bloemfontein, the judicial capital. Pretoria is within the Tshwane Metropolitan Municipality with approximately a population of 2 345 908. The main languages spoken in Pretoria include Tswana, Afrikaans, Ndebele, Sesotho and English.

3.3 Research Design and Methodology

De Vos (2005) defines research design as a preliminary plan for conducting research. A research design is there to plan and structures a given research project in such a manner that eventual validity of the research findings is maximized (Mouton and Marais, 1990). A design is used to structure the research, showing how all of the major parts of the research project, that is cases or groups, measures, treatments or programmes and methods of assignment work together to try and address the central research question. By reading and putting down how the research will be conducted, it helps the researcher see factors that he or she would not have seen if they had gone directly into the field.

Such factors for example are costs and sample sizes so as to make an accurate selection. It also makes the researcher prepare thoroughly for data collection.

3.3.1 Research Method

A case study was conducted at AISA over a period of 5 weeks as a research method. A research method is an instrument used to systematically investigate and produce new knowledge or establish facts. Research methods are directly connected to your problem statement and goal of research. Blanche, Durrheim, Painter (2006) describe case studies as intensive investigations of particular individuals. They may also be studies of single families, units (for example hospital wards), organizations (for example non-governmental organizations), communities (for example an informal settlement), or social policies. De Vaus (2001) states that 'a distinguishing characteristic of case studies is that contextual information is collected about a case so that we have a context within which to understand the processes.'

Case studies are usually descriptive in nature and provide rich longitudinal information about individuals or particular situations (Blanche, Durrheim, Painter, 2006). Among its advantages, a case study will allow new ideas to emerge from careful and detailed observation and you can also develop understanding not obtained from examining experimental findings (De Vaus, 2001). The researcher will also be given an opportunity to learn. Babbie (2001) points out that the case being studied may refer to a process, activity, event, programme, individual or multiple individuals. In this study, the case being studied is how knowledge is produced and shared at AISA.

Critics of the case study method believe that the study of a small number of cases can offer no grounds for establishing reliability or generality of findings. Others feel that the

intense exposure to study of the case biases the findings. Some dismiss case study research as useful only as an exploratory tool. Yet researchers continue to use the case study research method with success in carefully planned and crafted studies of real-life situations, issues, and problems. Reports on case studies from many disciplines are widely available in the literature (Soy, 1997).

3.3.2 Reliability and Validity

There possibly might be problems in the reliability and validity of information, cognitive elements are difficult to test, and generalizations cannot be made from a single case study. Reliability is a central concept in assessing the quality and firmness of the research. Reliability according to Hammersley (1992) refers to the degree of consistency with which instances are assigned to the same category by different observers or by the same observer on different occasions. For example, consistency of the questionnaire will produce the same results when employed under the same conditions. Validity is another of the central concepts in assessing the quality and rigor of the research. It's the extent to which an account accurately represents the social phenomena to which it refers (Hammersley, 1990). For example, does your method measure what you said you would be measuring?

However, case studies often generate information that may be tested by other research methods and also contemporary case studies often use methods such as video or audio tapes, which provide data that can be re-analyzed by other researchers (Blanche, Durrheim, Painter, 2006). The term reliability is used to refer to the extent of consistency applied by the researcher in conducting interviews or constructing the questionnaire. Validity is the extent to which an account accurately represents the social phenomena to

which it refers (Silverman, 1993). This study took steps to ensure data reliability and validity by: -

- employing more than one technique to collect data (triangulation);
- having a number of fixed-choice answers in the questionnaires to maximize the chances of getting similar responses from the respondents;
- observed behavior, asked questions and analyzed documents pertaining to AISA; and
- did a literature review to provide the context with which to interpret the data that has been generated.

3.4 Data Collection Methods

Case studies provide in-depth data collection that involves multiple sources of information such as documents, observations and archival records. Golden (1976) supports this by saying the most widely used techniques involve use of questionnaires, interviews, document analysis and observation.

3.4.1 Questionnaires

Questionnaires were prepared and distributed to AISA employees as the main technique for collecting data (cf. appendix 5). The researcher targeted 50 respondents and prepared 50 questionnaires. 45 questionnaires were filled in and returned with very few queries or need for clarification, meaning that the researcher got a 90% response rate. The queries and clarifications were attended to on the spot while interviewing or through email. The questionnaire had fixed-choice answers in which respondents could answer as many questions as they thought were right. It also had semi-structured questions with fixed-choice answers in the first part of the question, for example, 'yes' or 'no' and then the second part of the question would ask for an explanation depending on whether they

answered 'yes' or 'no'. There were also open ended questions especially in the Organizational Culture, Section E, which allowed the respondent to fully explain.

Advantages of using a questionnaire as a data collection instrument include feedback from the respondents and it is relatively quick to collect information using a questionnaire. It also reduces interviewer bias as respondents are left on their own to complete questionnaires. Information can also be collected from large groups of people. However, questionnaires have their limitations. Open-ended questions can generate large amounts of data that can take a long time to process and analyze. One way of limiting this would be to limit the space available to the respondents so their responses are concise. Respondents may answer superficially especially if the questionnaire takes a long time to complete; therefore it should not be too long (De Vaus, 2001).

3.4.2 Face-to-face Interviews

Face-to-face interviews of approximately 20 minutes each were conducted and results recorded by the researcher. The researcher chose 10 respondents for interviews. These consisted of 5 knowledge producers from the research division who were available at the time of collecting data and the rest were the heads of other AISA divisions or sections. Basically these were the key knowledge producers (those who produced most of the information and knowledge for example the researchers) and those directly involved in knowledge facilitation or management (staff members of the LDS division).

Interviews can be very time-consuming: setting up, interviewing, transcribing, analyzing, feedback, and reporting but are worth the distress when you have a full and detailed picture of what you are investigating. Interviews also have a high risk of the interviewer's biases for example differences in questioning methods, interpretation of response are

also high. Another drawback is that respondents might feel uneasy about the anonymity of their responses when they interact face to face. These biases and fear of not being anonymous are reduced by minimizing the number of interviews and increasing the questionnaires. At AISA the researcher faced problems of not being able to schedule interview times with respondents for interviews as most respondents especially those in the research division were busy or unavailable. At times, respondents would not be present at agreed times. This was very time-consuming. Respondents were also afraid of not being anonymous and this made them hesitant to reveal what they thought.

Despite the negatives, the advantages outweigh the disadvantages. Interviews are useful in obtaining detailed information about personal feelings, perceptions and opinions especially through observation. They allow more detailed questions to be asked and usually achieve a high response rate. Respondents own words are recorded and the respondent is not influenced by others in the group. Precise wording can be tailored to respondent and precise meaning of questions clarified (for example for those with English as a Second Language) (Silverman, 1993).

The researcher mostly used open ended questions that allowed the respondent to talk freely about the subject. This also allowed respondents to state their own points of view on the various issues. Questions asked during the face-to-face interviews were selected from the main questionnaire and further questions asked from what the respondent would answer. The interviewee was then given the full questionnaire to fill in the minor questions alone.

3.4.3 Document Analysis

Document analysis is a methodology for studying the content of communication such as books, websites, paintings, policies and laws. It is most commonly used by researchers

in the social sciences to analyze recorded transcripts of interviews with participants and any other document found pertaining to the person, organization or situation (Babbie, 2001). The researcher chose this method because it was beneficial in answering the research questions and also in giving supporting evidence to what the researcher had found.

Document analysis can be extremely time consuming and is often devoid of theoretical base, or attempts too freely to draw meaningful inferences about the relationships and impacts implied in a study. It also often disregards the context that produced the text, as well as the state of things after the text is produced and can be difficult to automate or computerize. However: -

- it looks directly at communication via texts or transcripts, and hence gets at the central aspect of social interaction and what the organization's culture is like;
- it can also be used to interpret texts for purposes such as the development of expert systems such as knowledge management systems (since knowledge and rules can both be coded in terms of explicit statements about the relationships among concepts);
- is an unobtrusive means of analyzing interactions; and
- provides insight into complex models of human thought and language use, based on hard facts (Busha and Harter, 1980).

The researcher collected any document, newspaper clipping, article, journal and paper that pertained to AISA and that would be beneficial in answering the research questions. Documents analyzed included those which contained the mission statement, vision, Employee Labor Acts, procedures, guidelines and policies, organogram of AISA, annual reports, AISA publications and evaluation forms. The researcher also conducted Internet

searches on the AISA Website for more information. These were then analyzed for the introduction and background of the study and the next chapter of data analysis and presentation (cf. chapters 1,4).

3.4.4 Observation

The study made use of observation as another data collection technique. This involved the researcher spending time (5 weeks, approximately 175 hours) in the Institute studying AISA's employees as they carried out their daily activities and how they interacted with one another on a daily. The observation method of research is basically developed for observing people in their natural setting. It focuses on their everyday normal life. The researcher chose this method because it helped determine what kind of culture was at AISA and explained certain aspects of the organization's culture that could not be asked or written down by the subject in the questionnaire for example attitudes (whether hostile, pleasant etc).

The strengths of using such a method are that it helped in overcoming issues of validity, bias etc and was useful when the subject could not provide information such as when the subject was busy. It made it possible to record behavior as it occurs and when subjects were unable to give verbal reports of either behavior or their feelings (De Vos, 2005). However, the method has weakness that the researcher had to guard against like frequently measuring attitudes or opinions. Another weakness is that subjects observed can be too few or too many to make an end conclusion to the study. In this regard the researcher did not have this problem, the number of employees were sufficient for the study. Observing showed the researcher that knowledge production is the core function of AISA and all activities revolve around producing knowledge. Observation also revealed that AISA has no formal system for knowledge sharing or knowledge

management. It is up to individuals to find and acquire knowledge so as to get work done.

3.5 Study Population

The study population consisted of 70 employees including housekeepers. These were categorized into the research division, the library and documentation services (LDS), outreach and international liaison (OIL) department, corporate affairs, human resources, finance and housekeepers.

3.6 Sampling Procedure

Sampling is the selection of research participants from an entire population, and involves decisions about the people, settings, events, behaviors, and or social processes to observe. A sample of fifty was taken from the 70 staff members. The sample comprised those who are directly involved in knowledge production. The main concern in sampling is representativeness. The aim is to select a sample that will be representative of the population about which the researcher aims to draw conclusions. Representative cases are especially important in descriptive surveys that estimate accurately the properties of populations (Blanche, Durrheim, Painter, 2006). According to De Vaus (2001) since case studies are used for theoretical rather than statistical generalization there is little point in selecting cases because they are in some sense representative of some wider population. So it would be best to try and use everyone relevant to the research as a sample.

How many cases one is to use will depend on a number of factors. One of the factors is knowledge of external factors that might affect results. For example, not knowing if all levels of the organization will be positive about participating in the research. In the face

of such uncertainties one may have to include many cases that will accommodate some of these differences. Another factor that may affect the number of cases is the conceptual framework with which the researcher will work in. For example, if social class is an important concept in the study it would be necessary to include cases from each of the different social classes (De Vaus, 2001).

Purposive sampling was used in selecting 50 cases. It is a non-random method of sampling where the researcher selects information-rich members for study in depth. Purposive sampling has categories such as model instance sampling, expert sampling, quota sampling, heterogeneity sampling and snowball sampling (De Vaus, 2001). The researcher chose to use expert sampling which chose those who are directly involved in knowledge production for example the researchers and the LDS staff members. Expert sampling involves the assembling of a sample of people with known or demonstrable experience and expertise in some area (Trochim, 2006). In this study, it would be the areas of knowledge production and knowledge management. It was the best way to elicit the views of persons who have specific expertise. Although purposive sampling does not achieve the best representativeness, it can be used when a sampling frame is not available (like in case studies) and is useful when obtaining a range of responses on ideas that people have (De Vaus, 2001).

3.7 Seminar

In order to conduct research at AISA, the researcher was given some terms and conditions by the AISA Research and Publication Committee (RPC) and were as follows:

- Development of a tool of data collection (questionnaire) and send it to AISA before starting to collect data.

- Development of a work plan based on an accurate list of people in the divisions you indicated interest in.
- Commitment that you will make two presentations at AISA upon arrival and before your departure and
- That a copy of your thesis will be deposited with the AISA Library on completion of your Master's degree (cf. appendix 6).

The researcher did not make two presentations in the end because AISA staff members were busy with events such as conferences and seminars that had been scheduled from the beginning of the year and could not be moved around. The researchers of AISA spent most of their time abroad during the time that the researcher was collecting data. It was then concluded that the researcher hosts a seminar on the theme: Knowledge Production in a Think Tank: a case study of the Africa Institute of South Africa (AISA). Even though the seminar was meant to be on the theme knowledge production, the researcher was asked to present her proposal.

This seminar was held on the 20th of August 2009 (cf. appendix 7) for approximately 3hrs and was attended by librarians, knowledge and information professionals. There was also a discussion on how to improve the researcher's proposal including what to add to the literature review and how to down-size on the questionnaire as most people felt it was too long. One of the questions asked after the presentation was how the researcher would capture organizational culture as it was a broad topic. The researcher responded that the study would be looking at just a few aspects which are communication, attitudes and beliefs and the extend to which they share knowledge. A member of the RPC was eager to see the results of the study but unfortunately the researcher was still collecting and analyzing the data. After the discussion, a

presentation was done by the Director of the South African National Defense Force libraries. He briefly talked about the Digital Library and how it started and where it has put us today. He also showed us the South African Defense Force digital library online. He concluded by saying that the terms information and knowledge manager, specialist or professional are just the same as the term librarian except that times are changing and different aspects are being added onto the librarian that has forced the change in terminology. This was up for much debate as the audience had a mixture of these different professions and different opinions.

3.8 Data Analysis

Data analysis is a process of gathering, modeling, and transforming data with the goal of highlighting useful information, suggesting conclusions, and supporting decision making. Data analysis has multiple facets and approaches, encompassing diverse techniques under a variety of names, in different business, science, and social science domains, (Lewis-Beck, 1995). The study used both quantitative and qualitative methods for analyzing data.

Quantitative methods are those where you make measurements using some relatively well-defined measurement tool such as statistics, tables and graphs, which present the results of this method. These have been developed with emphasis on the reliability or stability of the measurement. The objective of quantitative research is to develop and employ mathematical models, theories and/or hypotheses pertaining to natural phenomena. It provides the fundamental connection between empirical observation and mathematical expression of quantitative relationships (Answers Corporation, 2009).

Qualitative methods aim to gather an in-depth understanding of human behavior and the reasons that govern such behavior. The qualitative method investigates the *why* and *how* of decision making, not just *what*, *where* and *when*. Qualitative methods often categorize data into patterns as the primary basis for organizing and reporting results. Qualitative researchers typically rely on the following methods for gathering information, participant observation, non-participant observation, field notes, reflexive journals, structured interview, unstructured interview, analysis of documents and materials, pictures and other materials (Answers Corporation, 2009).

Quantitative methods were used to analyze data collected through the questionnaires. This method seeks to quantify data by applying some statistical analysis. Qualitative methods were also used to analyze data found in the open-ended questions on the questionnaire, especially when asking questions about the norms, values and beliefs of the staff members. The advantages of using such a technique include feedback from the respondents and eliminating interviewer bias as respondents are left on their own to complete questionnaires. Using both approaches cross checked one method against another thereby producing quality data. For example, when a question was asked through qualitative methods, quantitative methods would show how many were involved. Using both quantitative and qualitative methods involved usage of Statistical Package for the Social Sciences (SPSS) to determine relations between concepts and variables. SPSS is among the most widely used programs for statistical analysis in social sciences. It provides over 50 statistical processes, including regression analysis, association and analysis of variance. The researcher coded the data before entering it into SPSS. Coding is an interpretive technique that organizes the data and provides a means to introduce the interpretations of it into certain quantitative methods (Answers Corporation, 2009).

Coding was done by reading the data and demarcating segments within it. Each segment was labeled with a “numerical code”. The researcher then summarized the codes, discussing related codes and comparing the relationship between one or more codes. SPSS enhanced the analyst’s efficiency at data storage/retrieval and at applying the codes to the data. A frequent criticism of coding method is that it seeks to transform qualitative data into quantitative data, thereby draining the data of its variety, richness, and individual character. Analysts respond to this criticism by thoroughly processing their definitions of codes and linking those codes soundly to the underlying data, therein bringing back some of the richness that might be absent from a mere list of codes (Answers Corporation, 2009).

The only extremes that the researcher saw in the quantitative approach is that quantitative researchers believe that all data should be tightly defined and validated; that any other data is purely exploratory and impressionistic. They believe that social research should be carried out with the same quantitative rigor as is supposed to exist in the physical sciences. The extreme end of the qualitative approach is the belief that the only truly viable form of data collection is through open, unstructured methods (Monash University, 2005).

3.9 Ethical Considerations

Ethical considerations serve as standards on which researchers are supposed to adjure to in their conduct (De Vos, 2005). When collecting data there were some ethical concerns involving participants’ rights such as the right to privacy. The researcher looked at the extent to which participants wished to be identified as the individuals

involved in the research and then employed a number of methods. The researcher ensured that participants did not engage in interviews or filling in of the questionnaire without their consent. This was done by stating it on the cover page of the questionnaire, telling them verbally and also distributing the questionnaire and proposal prior to data collection so that they knew about the study and what it involved.

Confidentiality and anonymity was ensured in handling of information provided as stated on the cover page and of then verbally asking the respondents not to identify themselves so as to make sure that contributions were anonymous when reporting the results. The researcher also assured the respondents that questionnaires would be personally collected and that no one would have access to them. The researcher did not have any ethical problems that she encountered except for one minor issue. Respondents complained that a question in section (a) asking for the department the respondent was attached to would reveal their identity and they would not be comfortable in answering that question. The researcher asked the respondents not to respond to that particular question after discovering that each person in AISA has a unique job title (except for interns). Wanting a response for that question would easily reveal their identity. The question was later removed from the questionnaire.

3.10 Summary

The researcher used a case study as a research method and then employed questionnaires, face-face interviews, document analysis and observation as data collection techniques. Since case studies do not have a specific number of cases, the researcher selected 50 cases using purposive sampling to choose respondents. The researcher also interviewed 10 key knowledge producers in sessions of approximately 20 minutes each. Although these techniques have their disadvantages, the researcher

saw that the advantages overshadowed the disadvantages and therefore decided to use them. The data collected will be analyzed and presented in the next chapter.

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

4.1 Introduction

Data analysis is an investigation of collected facts from which conclusions may have been drawn and any relations that these facts may have. This chapter therefore deals with the processing, presentation and analysis of the data collected at AISA for the study. To achieve this, a Statistical Package for the Social Sciences (SPSS) was used and it also helped in determining relations between concepts and variables. Among others, variables investigated related to the general practices and procedures of knowledge production in the organization, knowledge sharing, knowledge management and organizational culture.

4.2 Profile of the Respondents

This section was meant to collect information on the background of the respondents and provide the researcher with biographical data that would give an overall picture of the attributes of the respondents. While doing a background check for the study, the researcher found out that most employees had a unique job title. Therefore, employee's positions and their respective departments at AISA were not asked as these would defy the concept of anonymity.

4.2.1 Gender

The research arena has only begun to have an increase in female researchers because women were previously disadvantaged in terms of obtaining education. According to Mutanyatta (1994) in Africa, women have been and still are the victims of poverty,

illiteracy, discrimination, and powerlessness. Factors accounting for gender inequalities include cultural attitudes toward women, discrimination in employment, and lack of training and education. Development projects had in the past been met with little success. It has only been recent that educational activities have fostered emancipation and empowerment for women and is involving work-oriented, functional adult literacy activities (Mutanyatta, 1994). Gender is a division between classes or kinds, in this case the difference between men and women, male and female. Below, Chart 4.1 shows the number of male respondents as 24 (53.3%) and female respondents as 21 (46.7%).

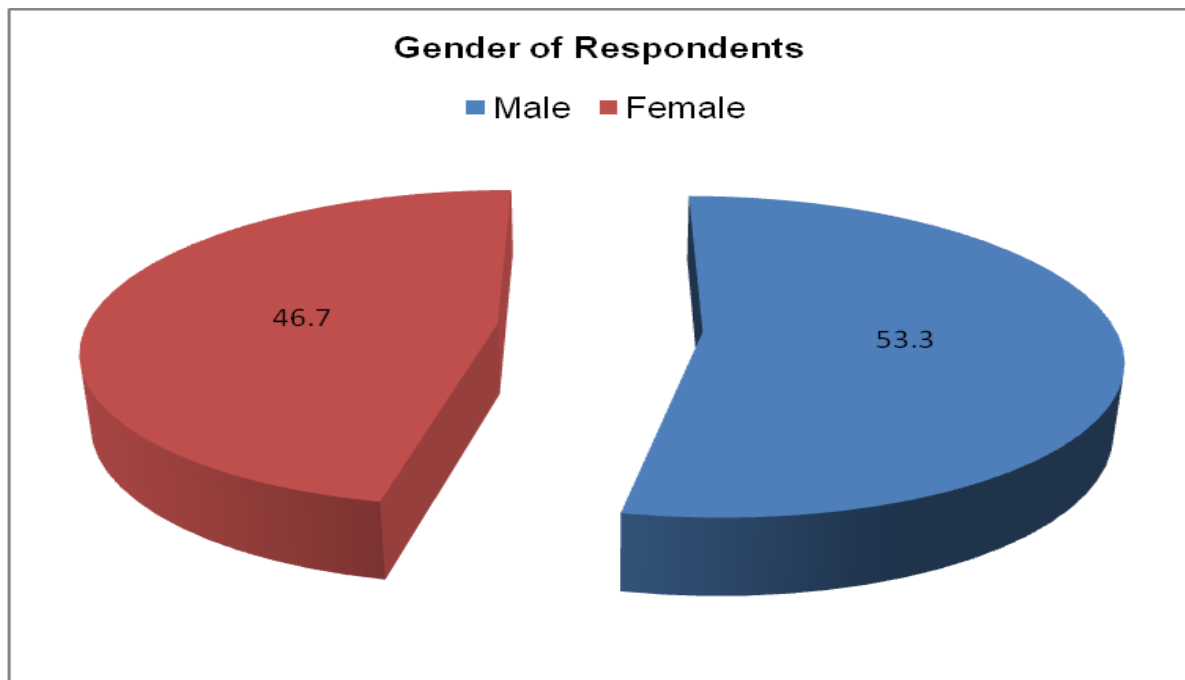


Chart 4.1: Gender distribution of respondents (n=45)

As seen there are more male respondents than female ones and this may be attributed to the fact that the organization has more male employees who are directly involved in knowledge production.

4.2.2 Age Categories

Age is generally considered to be an important factor in relation to tacit knowledge as older people are assumed to be rich in tacit knowledge which they acquire over time with work experience, training and many years of continuous education (Nonaka and Takeuchi, 1995). The researcher asked the respondents to indicate their age brackets. The age brackets provided were between 25 and 35 years, 36 and 46, 47 and 57, 58 and 65, and above 65. The researcher noticed that the majority (33.3%) of employees at AISA were fairly young and had mostly been employed within the last 2 to 5 years. This made the researcher widen the range of ages to accommodate everyone.

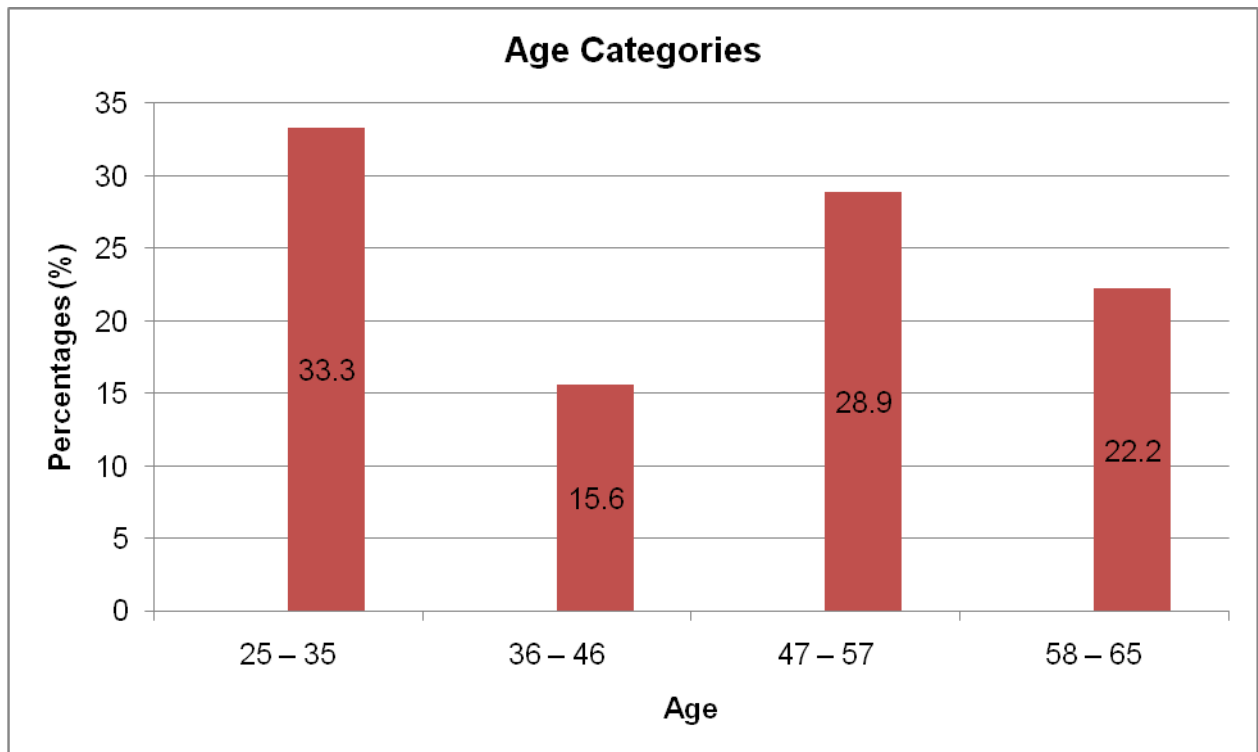


Chart 4.2: Age categories (n=45)

From Chart 4.2 it can be seen that the highest proportion of the respondents were between 25 and 35 years of age (33.3%) and the much smaller proportions were between 36 and 46 years of age, with none above the age of 65 years. The number of

respondents who were between the ages of 25 and 35 years were 15, 36 and 46 years were 7, 47 and 57 years were 13, and 58 and 65 years were 10.

4.2.3 Education Levels

Inadequate education levels remain a barrier to successful knowledge production and as a result employees have started to recognize the need to improve the organization's skills base. According to Wiig (1994), workplace sophistication continues to increase and this requires extensive knowledge and capabilities to operate effectively in such an environment. Such capabilities and knowledge may be acquired through formal training and education or by work experience and informal training and education. All respondents had some level of formal education attained both prior and after joining AISA. Looking at Chart 4.3 qualifications ranged from Matric 2.2%, Diploma 6.7%, B.Tech/Bachelors/Honours 35.6%, Master's 31.1%, PhD 15.6% and Post Doctoral 8.9%

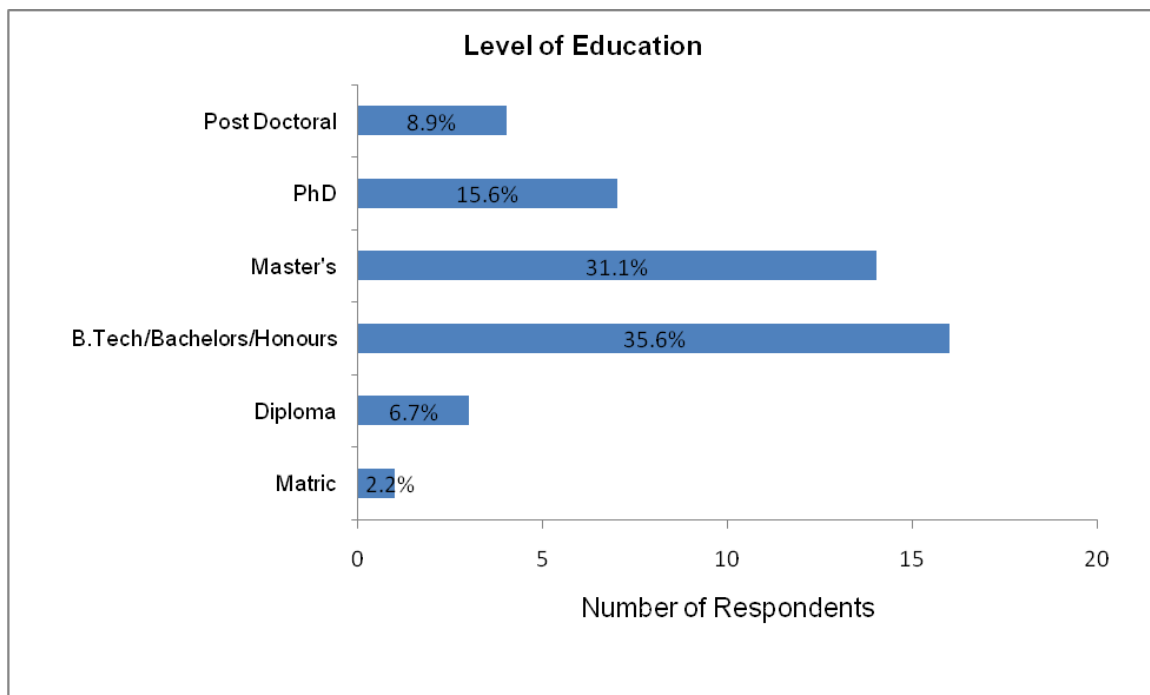


Chart 4.3: Education levels of respondents (n=45)

The past has shown that most people went and got their post graduate qualifications such as Master's and PhD late in life whilst being fully employed or after retiring. But because of the increased competition in the job sector and the need to obtain higher levels of educational qualifications, people are now getting as far as they can educationally before entering the workplace. AISA encourages its employees to acquire higher qualifications while they are on employment.

4.3 Practices and Procedures of Knowledge Production

This section sought to collect information on knowledge production practices and procedures. It is the view of this researcher that the basic core components that relate to practices and procedures of AISA are creation and sharing of knowledge hence emphasis is placed on knowledge generation, knowledge sharing, primary roles and learning capabilities. The researcher also looked at whether or not AISA's practices and procedures are effective.

4.3.1 Availability of Specific Practices and Procedures

Respondents were asked if they knew of any specific practices and procedures of knowledge production at AISA. 31 (68.9%) of the respondents said 'yes' and 14 (31.1%) respondents said 'no' as shown in Chart 4.4 below

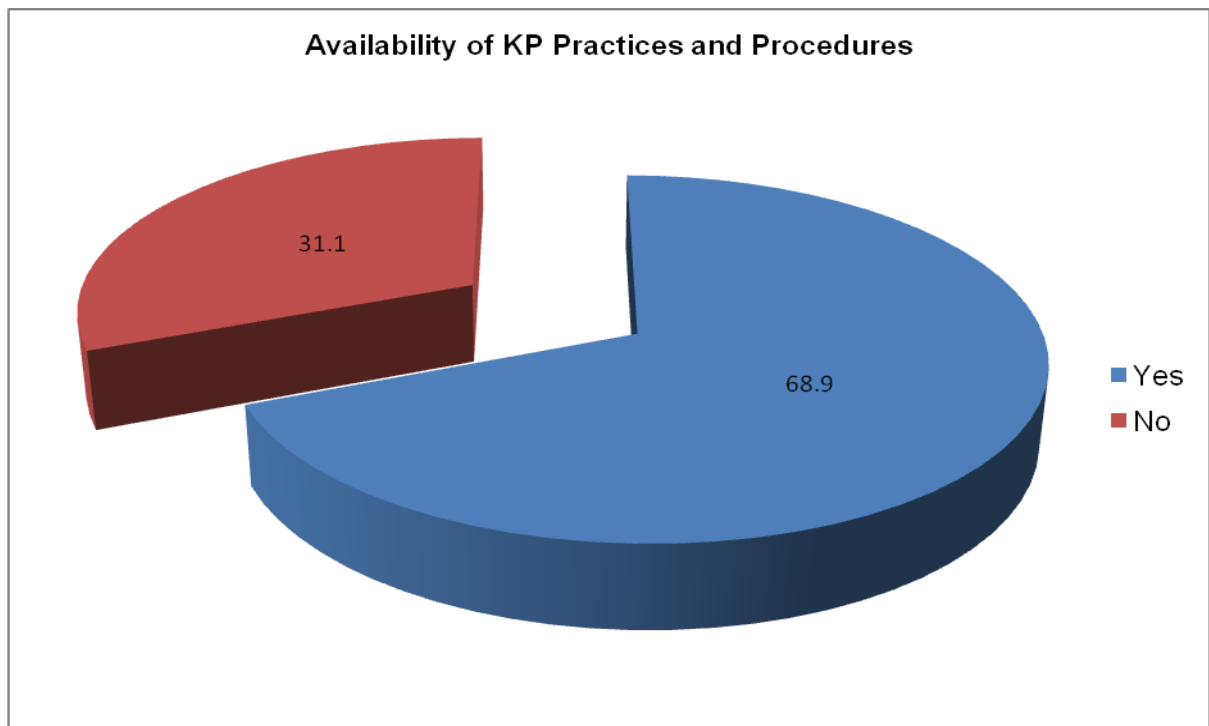


Chart 4.4: Availability of KP practices and procedures (n=45)

Those who said 'no' mostly did not understand the meaning of knowledge production even though they were involved in its production on a daily basis. Others who said 'no' were not sure or were unaware of any practices or procedures. To those who answered 'yes' the researcher then asked them to briefly explain how the practices and procedures of knowledge production are put into practice at AISA. The respondents mainly cited popular practices and procedures of research. Researchers are required to hand in a project proposal for conducting fieldwork which needs to be approved first. The proposal has to centre on socio-economic issues in African countries and that there is limited desktop research done. On return, researchers have to present at a seminar and produce a policy paper, journal article or a book chapter. The journal article should have been internally and externally peer-reviewed before publication. All project proposals must be guided by the research policy and should be in line with the research agenda. More practices and procedures of KP were discussed in Chapter 1 (p11-21). It was

noted that a significant number (68.9%) of employees at AISA are aware of the knowledge production practices and procedures in the organization.

The researcher also asked how effective these practices and procedures are 17 (37.8%) of the respondents said that they were effective, while 28 (62.2%) said they were not. Those who think that the practices and procedures are not effective might not be seeing enough results of these practices except through the number of journal articles and the number of journals published. They might also not be aware of intangible effects such as increased knowledge.

4.3.2 Good Knowledge Production Practices

A number of possible benefits of good knowledge production practices were listed and respondents were asked to select what they considered to be good knowledge production practices. The benefits listed included fast decision-making, job satisfaction, high staff motivation, faster acquisition of useful information, faster acquisition of useful knowledge, collaboration problem solving, and faster production of publications and increased areas of research. A respondent added under the 'any other' section as a practice, special research collaboration amongst research staff on areas that are relevant and topical across areas of research areas. The respondents were asked to select as many as they thought relevant, Chart 4.5 shows the results

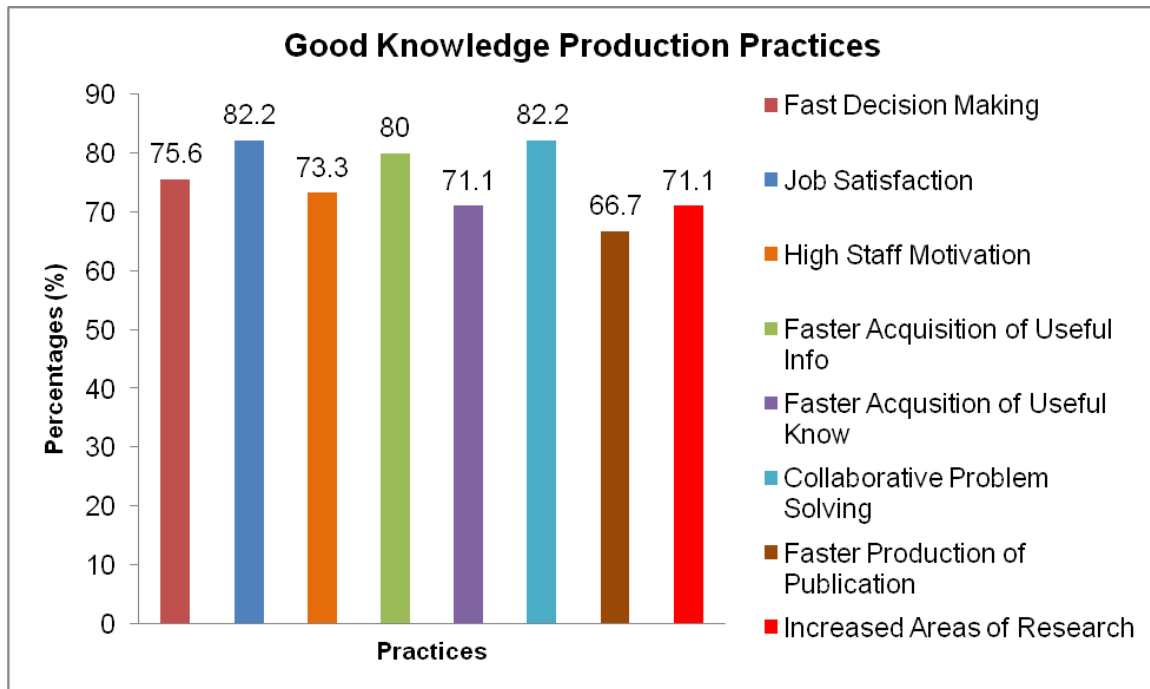


Chart 4.5: Good knowledge production practices (n=45)

4.3.3 Primary Roles

Respondents were asked to state their primary roles at AISA. The primary roles listed included knowledge producer, knowledge manager, knowledge user, knowledge disseminator and supervisor of knowledge workers. Chart 4.6 below shows that the majority of respondents (73.3%) considered their primary role to be that of knowledge producers followed by knowledge users (64.4%), knowledge disseminators (60.0%), knowledge managers (37.8%) and supervisor of knowledge workers (22.2%)

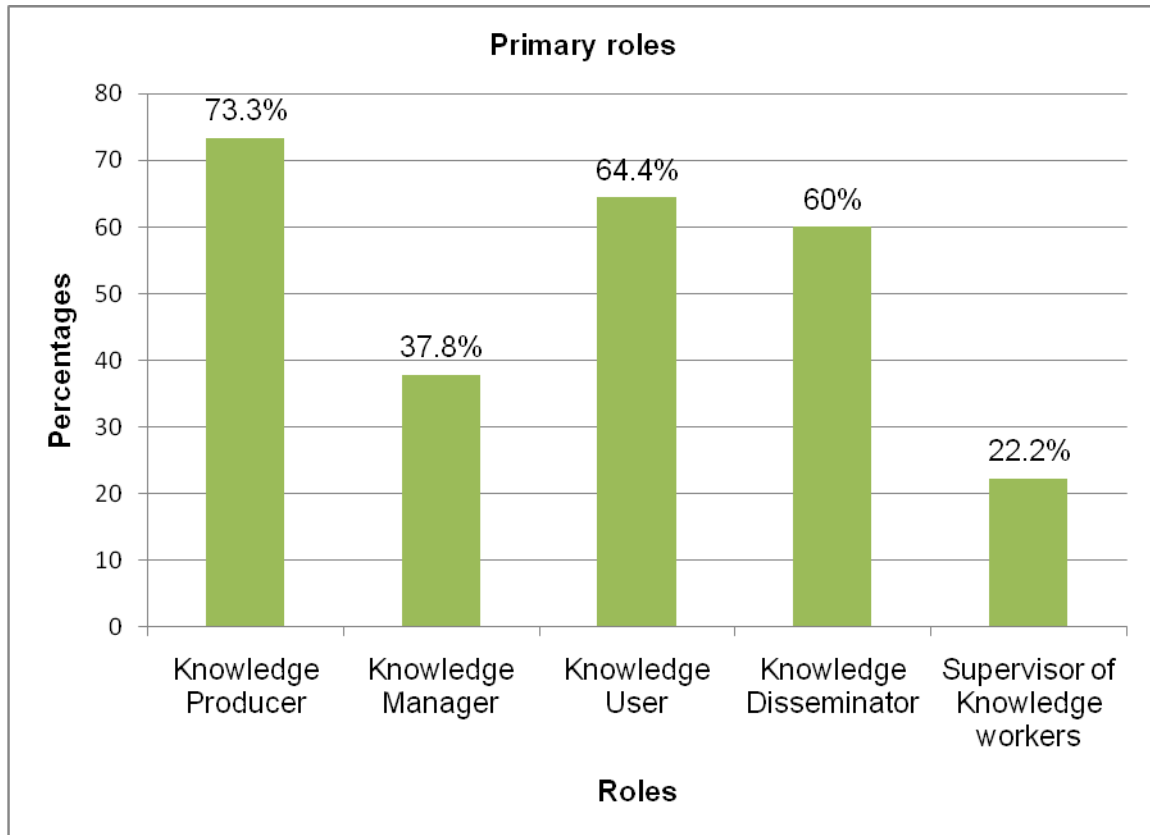


Chart 4.6: Primary roles (n=45)

4.3.4 Acquisition of Knowledge and Information

The researcher wanted to know if acquiring knowledge and information was a top priority at AISA as it is generally accepted that knowledge production succeeds in an environment where acquisition of knowledge and information is a main concern. Thirty-five respondents (77.8%) thought that knowledge and information acquisition was a priority and ten respondents (22.2%) did not. Perceptions of finding and utilizing knowledge were assessed amongst the knowledge professionals (researchers) at AISA. The respondents were requested to indicate how easy or hard it was to find and utilize the acquired information and knowledge. Table 4.1 clearly shows both response and frequency recorded

Reponses	No. of respondents	Percentage
Very Easy	2	4.4%
Easy	28	62.2%
Hard	14	31.1%
Very Hard	1	2.2%
Total	45	100%

Table 4.1: Perceptions of finding and utilizing knowledge

The respondents who said they found it hard or very hard were of the opinion that knowledge produced was not being well utilised, informed the researcher that knowledge was not being utilised to the full but this is negatively impacted by the general knowledge access challenges in Africa. Respondents from other divisions said AISA has in place a Geographical Information Services (GIS) section whose role is not understood by most AISA employees. What they do is not shared nor their maps marketed. This means that knowledge is not utilised fully and therefore it becomes a challenge to external people as well. On a larger scale, others said that AISA books are not widely distributed and seminars not well attended so knowledge is not utilized by those outside AISA.

A culture that encourages acquisition and utilization of knowledge and information as a priority promotes knowledge production (Chen and Hatzakis, 2008). An attempt was made by the researcher to assess the extent to which AISA's organizational culture promotes the acquisition and utilization of knowledge and information in relation to work time. A working environment that promotes KP motivates professionals to spend most of their time on finding and utilizing knowledge (Chen and Hatzakis, 2008). Therefore an organization can not underestimate the importance of time in the workplace because it helps one prioritize work and keeps one on track with the Institutes' goals, time allocated

and boundaries set by policies and procedures. The respondents were asked approximately what percentage of time they spent on knowledge production. This was asked in order to find out if knowledge production was seen as an important part of the activities of the AISA employees. It was understood that those with high percentages of time spent producing knowledge are the researchers and that some departments do not produce knowledge directly but provide support, manage or disseminate, for example Human Resources department.

Most respondents (62.2%) indicated that finding and utilizing information is easy at AISA. The results were reflected by the percentage of working time that each respondent spent on knowledge production against his/her perception (very easy, easy, hard and very hard). Cross tabulations can be used to assess the relationship between variables (Punch, 2005). As may be seen in Table 4.2 below, high work time percentages were recorded for those who found utilization of knowledge and information easy. The percentages get higher for those who found utilization of knowledge and information hard or very hard and as a result spent less work time on knowledge production. Therefore there is a negative relationship between time spent on knowledge production and respondents' perceptions of finding and utilizing knowledge and information.

Percentage Times	100%	70%	60%	<50%
Perceptions				
Very Easy	0.0%	15%	5%	3%
Easy	64.5%	22.2%	21.6%	33.9%
Hard	27.3%	62.2%	8.9%	56.4%
Very Hard	10.5%	7.2%	55.6%	6.7%

Table 4.2: Perceptions and time spent on knowledge production

Respondents who said that it was hard or very hard were then asked why they thought so. Responses given included, communication between all levels was poor, reference books are not kept up to date, AISA has a closed library system that does not constantly update users on new information materials, lack of user awareness initiatives, lack of knowledge and information processes and a stationed centralised loaning system at the library that does not allow lending out of books and other information sources.

4.4 Achievement

The achievement of an organization is as a result of the combined effort of each individual and is usually measured by the kind of output the organization makes. In this study the researcher used output measures such as collaborations, information and communication technologies (ICTs) and characteristics of a learning organization. In this section participants were asked about AISA's achievements in knowledge production.

4.4.1 Collaborations

Respondents were first asked whether AISA collaborates with other organizations in producing knowledge. All respondents (100%) indicated that AISA does collaborate with other organizations in producing knowledge. They were then given a number of possible collaborative means as joint research projects, joint training programmes, joint seminars/workshops, exchange of staff, exchange of information, exchange of research findings and any others. Respondents were asked to select what they considered to be the most common collaborative means of knowledge production used by AISA. Chart 4.7 below shows the results

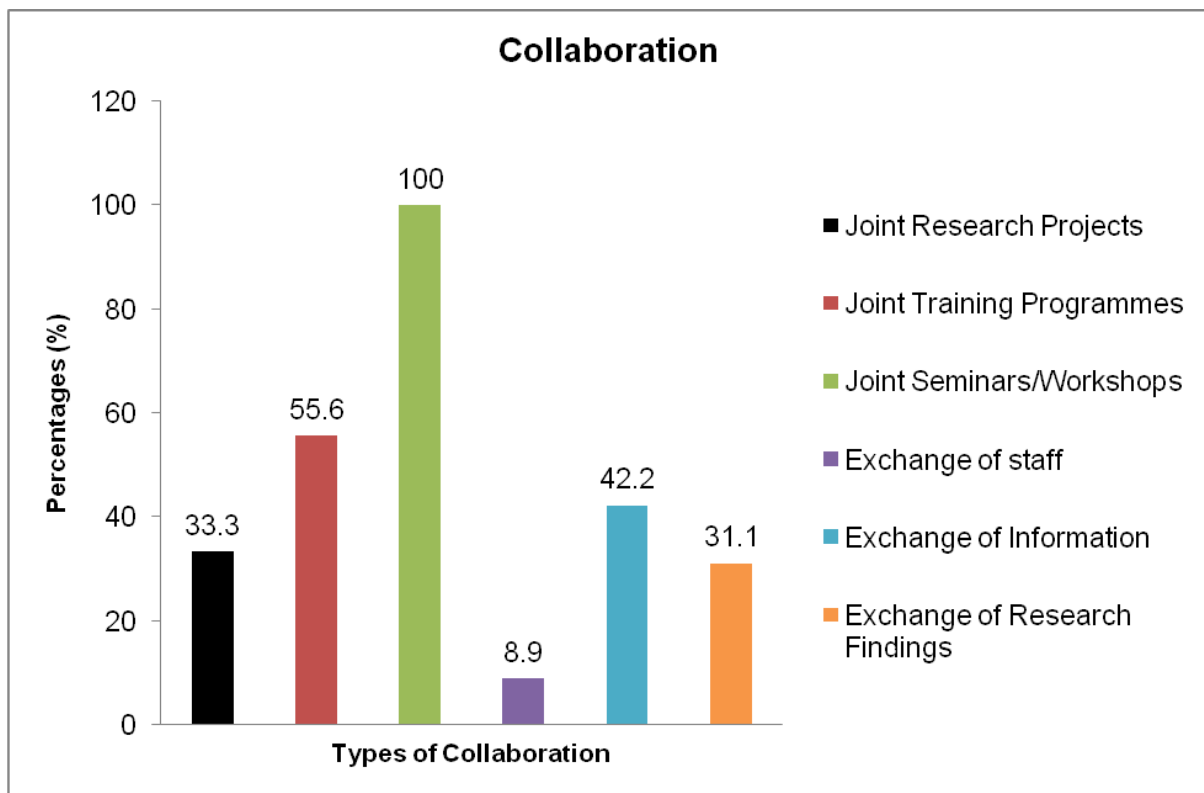


Chart 4.7: Collaboration in knowledge production (n=45)

4.4.2 Information and Communication Technologies (ICTs)

In this study information and communication technologies are defined as diverse set of technological tools and resources used to communicate, and to create, disseminate, store, and manage information. Examples include computers, the Internet, broadcasting technologies (radio and television) etc. Successful knowledge production involves the use of ICTs as an enabler and facilitator of the process. Because of the role ICTs can play in knowledge production and in turn knowledge management, it is important to invest in basic ICT structures. The researcher asked if employees thought that AISA had adequately invested in technologies for producing and managing knowledge. Eighteen (40%) of the respondents said that AISA had invested adequately in ICTs while 27 (60%) thought that AISA has not invested adequately in ICTs.

Those who thought that AISA had not adequately invested in ICTs acknowledged that the technologies are available but not adequate enough for knowledge production and knowledge management. The ICTs listed and are in use in AISA are computers, fax, internet, printers, telephone and scanners, except for the intranet. An intranet is a private network that is contained within an organization. Typically, an intranet includes connections through one or more gateway computers to the outside Internet. The main purpose of an intranet is to share company information and computing resources among employees. An intranet can also be used to facilitate working in groups and for teleconferences (TechTarget, 2008). All respondents (100%) indicated that they 'very frequently' use the above mentioned technologies to acquire, transfer or share knowledge.

4.4.3 Learning Organization

Respondents were asked whether or not AISA had policies that emphasized learning of staff and sharing of knowledge and information. Twenty-six (57.8%) respondents said that there are policies that exist while 19 (42.2%) respondents said that there are none. An organizational policy is a course or method of action selected usually by an institution to guide and determine present and future decisions and positions on public matters (Mondofacto, 1998). In this case the course of action for AISA would be concerned with how staff members learn and share knowledge and information.

A learning organization is one in which staff members collectively learn from their past and continuously acquire new knowledge, skills and capabilities. In learning organizations members of the organization are expected to collectively learn from their successes and failures. Furthermore, learning of organizational members is supported by the cognitive system, memories, networks and the learning culture created by the organization to enhance knowledge transfer (Popper and Lipshitz, 2000). The researcher started by providing the above definition of a learning organization and then asked whether or not the respondents considered AISA to be a learning organization. Thirty-three (73.3%) respondents said 'yes' and twelve (26.7%) said 'no'. Those who said yes were then asked to indicate how organizational learning was operationalized at AISA. There are many indicators of whether an organization is a learning organization but the researcher chose the following in Chart 4.8 as they basically covered all aspects of a learning organization:

- a) the organization encourages and supports employees to acquire new skills, new knowledge and capabilities;
- b) the organization encourages sharing of knowledge and information;

- c) the organization encourages employees to reflect into their past and capture what they have learnt;
- d) employees are encouraged to be creative;
- e) the organization facilitates further learning of all employees;
- f) creative employees are rewarded regardless of rank; and
- g) sharing of knowledge and information is rewarded.

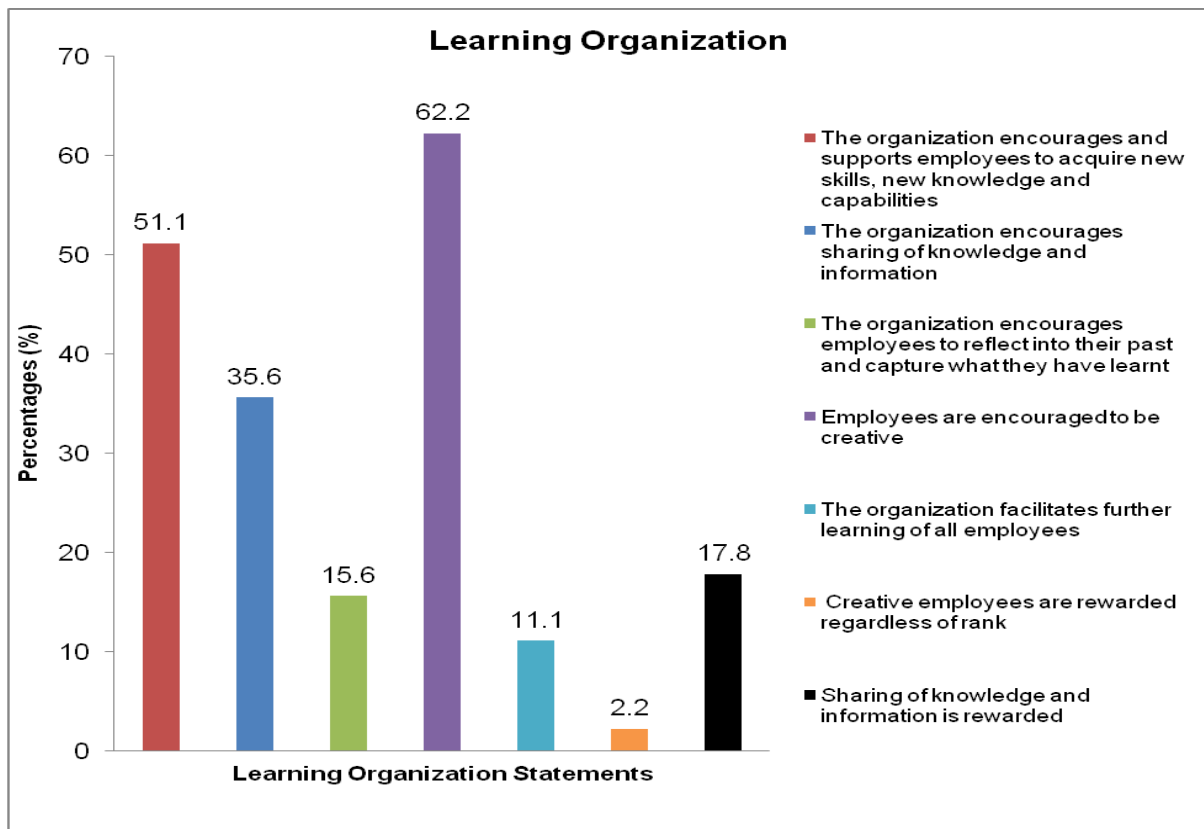


Chart 4.8: AISA as a learning organization (n=45)

Chart 4.8 above shows that 'employees are encouraged to be creative' was the most popular response chosen, while the statement 'creative employees are rewarded regardless of rank' was the least popular. One of the best indicators of whether an organization is continuously learning or not is through skills acquired by employees. The researcher asked what kind of knowledge, skills and capabilities they had acquired as a

result of working for AISA. These included skills acquired formally (through tertiary education etc) and informally (over team building sessions, observation, experience etc). As may be seen in Chart 4.9 the most acquired skill is the problem-solving skill with the least being publishing skills. This may be attributed to the fact that the publications division has got very few employees who cannot impart skills to those around them except the interns. Some respondents felt that the study should have included language skills as another option. These skills and capabilities are those which have been acquired as a result of having worked for AISA.

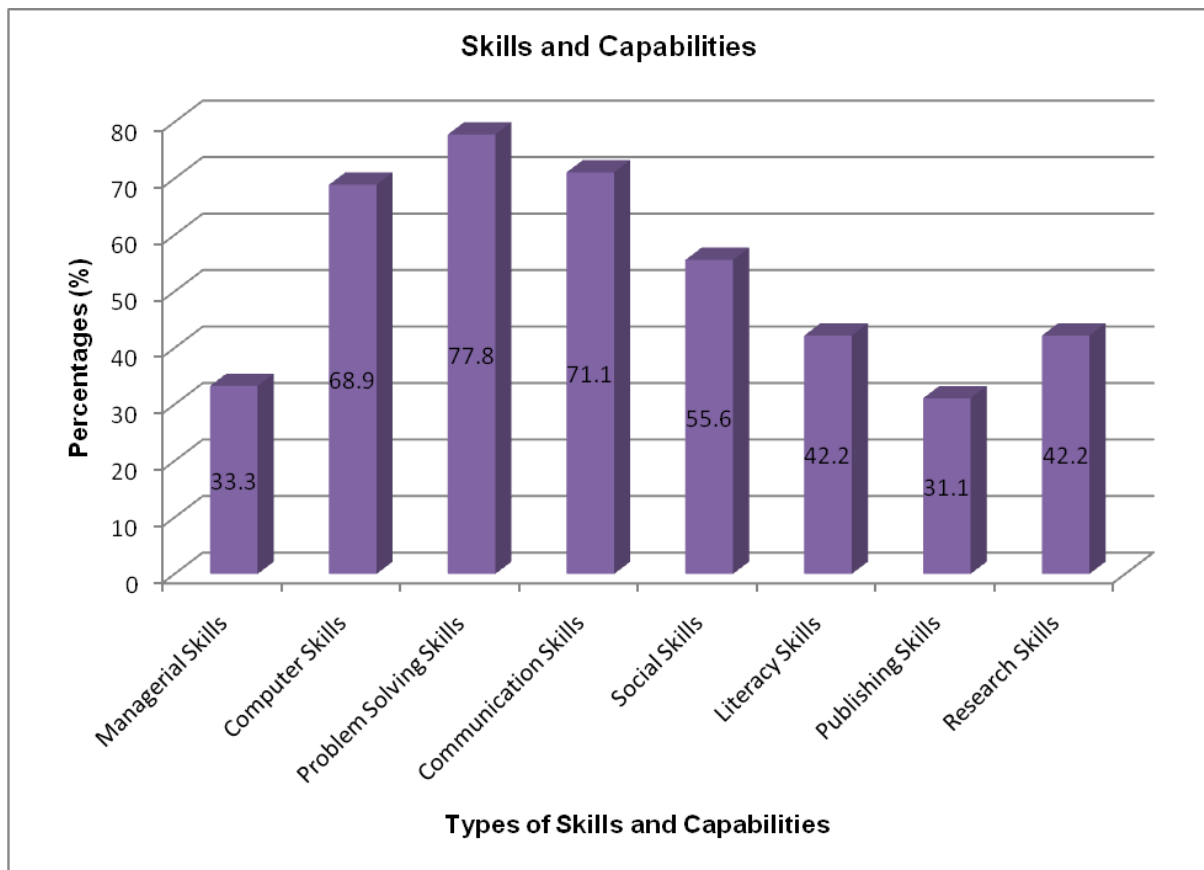


Chart 4.9: Skills and Capabilities acquired through working for AISA (n=45)

4.4.4 AISA Publications

This section dealt with AISA's publications. The researcher felt that having a look at AISA's publications would draw attention to some of the achievements of the Institute. The researcher asked the respondents how AISA evaluates the overall impact of its publications and knowledge production on society. A respondent said that currently there was no method for evaluating the overall impact of AISA on society but that the increased demand of AISA's products and information through book sale, the library and internet was a positive indication. The researcher then asked for some of AISA's main achievements in disseminating the knowledge it produces. Respondents considered the following as main achievements:

- high demand for information material produced by AISA;
- researchers presenting at seminars and conferences;
- hosting seminars and conferences;
- publishing journal articles and policy papers on current affairs;
- having young graduate programmes and lecture series;
- improving knowledge on African Affairs; and
- AISA ambassadorial forums (meetings that brings together members of the diplomatic community, academics, government, business and private sectors, and the general public to debate and share information on global and African affairs).

4.5 Challenges

AISA's daily activities, decision making and problem solving prove difficult when there are challenges. This section sought to find out AISA's challenges in producing

knowledge. In today's increasingly dynamic environment, challenges persist and the only way to face these challenges is to identify them and find lasting solutions.

4.5.1 Functions

Respondents were asked if they thought that functions of AISA overlap and are duplicated by other employees. Seventeen (35.6%) said 'yes' and twenty-eight (62.2%) said 'no'. The 28 (62.2%) respondents who said 'yes' were asked to explain briefly how they thought functions at AISA overlapped. Respondents said that AISA's employees do research on Africa like other institutes such as the Human Sciences Research Council (HSRC) so AISA needed to broaden its research to incorporate other research areas that are unique. Respondents also said that research methodology taught by the AISA team during campus series is also done by lecturers at those universities and hence duplication of work. Other responses were that in administrative work, three people sell books, conduct stock control and finance invoices but that work is normally passed to other divisions/units that do the same thing. Another problem was that marketing is not centralized and run by the marketing division but done by departments individually.

4.5.2 Knowledge Requirements

In order for AISA to produce knowledge effectively it has to identify its knowledge requirements. The researcher asked the respondents to briefly explain how AISA identifies organizational knowledge requirements and these were the answers given:

- AISA conducts research whenever it finds socio-economic challenges in Africa.
- When conducting research, AISA researchers conduct fieldwork. It is vital for every researcher to go into the field to carry out research which is then turned into information (journal articles) and then knowledge.
- User needs analysis (the study of AISA clients' information and knowledge requirements. Although a formal method has not been established).

- Policy analysis (determining which of various alternative policies will most achieve the organization's goals).
- Through annual research retreats during which research agendas are set.
- Adequate logistics and sufficient support in the form of travelling and organizing events and
- Performance assessments.

4.5.3 Documenting Knowledge

The researcher wanted to find out if AISA had any mechanism for documenting tacit knowledge. Twelve respondents (26.7%) said that AISA had mechanisms while 33 said that it does not. These results indicated that tacit knowledge is highly personal and hard to formalize, making it difficult to communicate or share with others. Subjective insights, intuitions and hunches fall into this category of knowledge. Furthermore, tacit knowledge is deeply rooted in an individual's action and experience, as well as in the ideals, values or emotions he or she embraces (Srinivas, 2009). The researcher wanted to know how AISA disseminates documented tacit knowledge. Most of the respondents (73.3%) did not know any mechanisms for disseminating tacit knowledge as reflected before so they could not answer this question. The few respondents (12) that could answer the question said that AISA had just started disseminating tacit knowledge through internal department workshops but there was no template or strategy on dissemination or processing of it. It was also said that an information audit process had begun so maybe other stages of it would come that would include dissemination of tacit knowledge. An information audit involves having records each of which contain data about when and by whom was a particular record changed. It can also include information about the actual changes that were made (SourceWatch, 2009).

The respondents were asked to indicate the criteria they would use to measure the value of knowledge produced at AISA. A number of criteria were given from which the respondents were asked to choose the criteria they would use in measuring the value of knowledge produced at AISA. The criteria given to the respondents included: positive knowledge sharing behaviour, new skills and capabilities that staff acquire, increased speed of solving problems, efficient use of resources, number of publications produced by AISA per year, number of new AISA ideas adopted by government, increased value of AISA as a think tank, number of internships going through AISA every year, not easy to measure, never attempted to measure, the value is obvious, and no known measurement criteria. Chart 4.10 shows that most people considered the statement 'an increased value of AISA as a think tank' as the best criteria for measuring the value of knowledge produced at AISA.

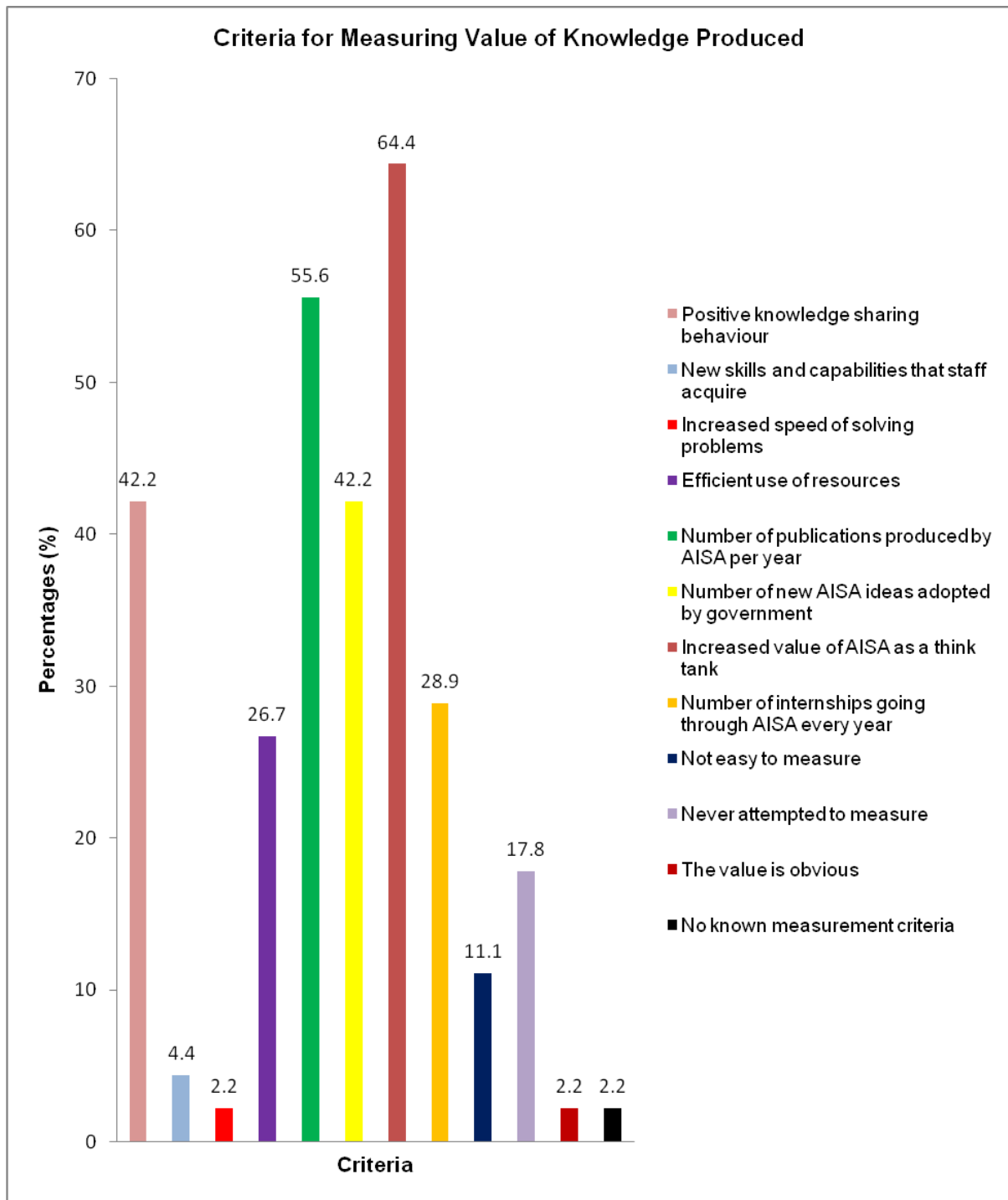


Chart 4.10: Criteria for measuring value of knowledge produced (n=45)

Respondents were then asked what they considered to be the greatest impediments to knowledge production at AISA. The researcher provided statements from which the respondents were asked to select what they considered the greatest impediments to producing knowledge at AISA. These were the impediments listed as follow; inadequate learning facilities, information illiteracy in the organization, absence of knowledge management policies, little support from top management, little understanding of the value of knowledge, lack of technology for knowledge management, lack of knowledge producing expertise, lack of commitment, limited knowledge processing capacity, an unfavourable environment for producing knowledge and bureaucracy/officialdom. Under the 'specify any other' section some respondents added as an impediment, limited capacity, pressure on researchers and bias of publication. Chart 4.11 shows the results

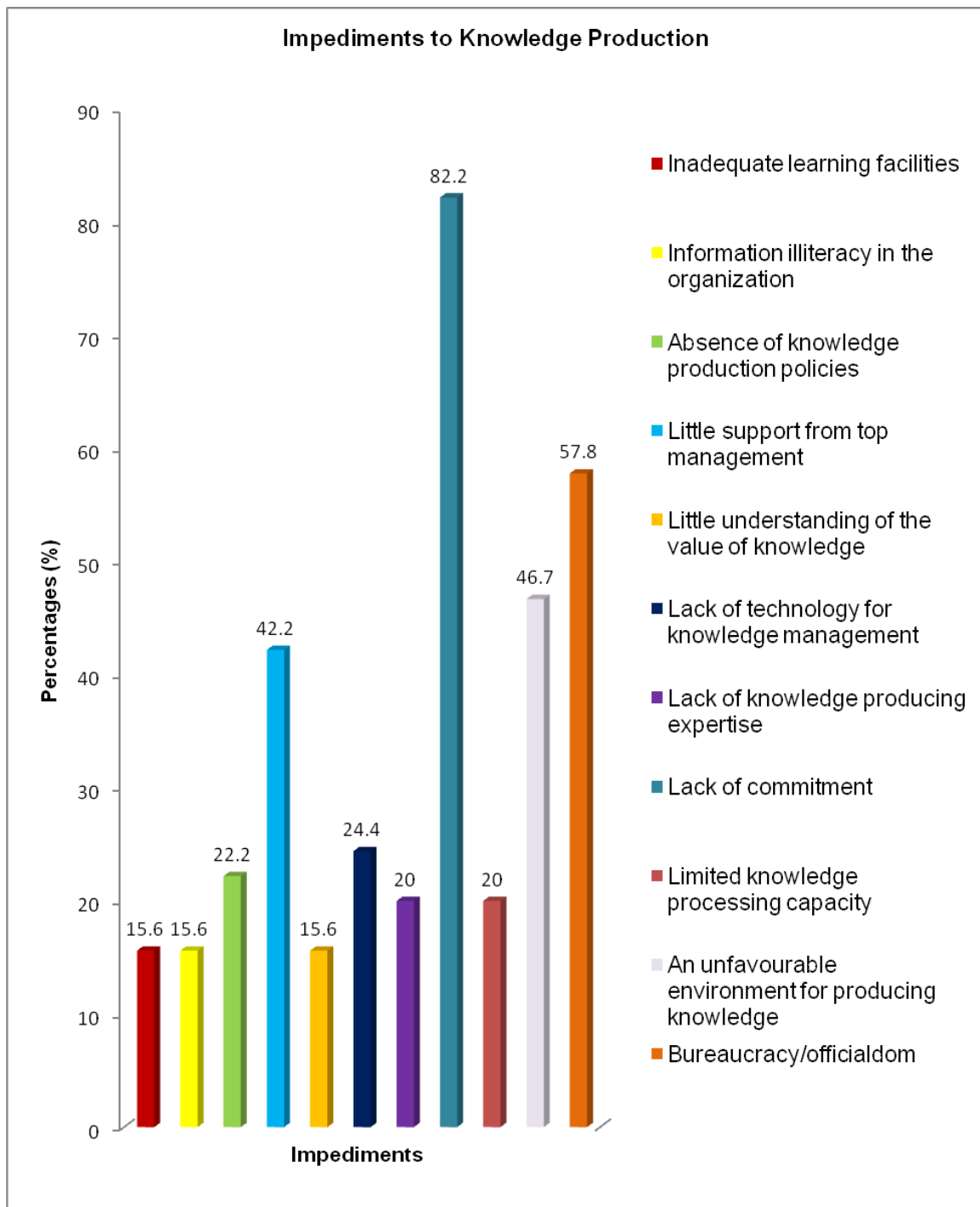


Chart 4.11: Impediments to Knowledge Production (n=45)

4.6 Organizational Culture

The study sought to find out how AISA's organizational culture (OC) impacts internal knowledge production. Organizational culture constitutes a pattern of basic assumptions

held by the people in the organization and that is used to address problems of adaptation and integration. The researcher believes that organizational culture may negatively shape how organization members feel, think and behave and could hinder production of knowledge. The study looked at how people communicate with each other within the organization, the tone of messages (formal, informal, pleasant, and hostile), attitudes and beliefs (for example their thoughts on promotions, dress code) and the extent to which they share knowledge.

4.6.1 Organizational Culture Promotes KP

An organizational culture that promotes knowledge production finds and shares a broad understanding of the ways to achieve goals and has a reduced divergence of interest because such divergence would likely work against the achievement of the organizational goals (Hashim and Othman, 2001). The study revealed that AISA's organizational culture to a significant extent negatively shapes how organization members feel, think and behave and in turn hinders maximum knowledge production. Respondents were asked if AISA's organizational culture promotes knowledge production. Fifteen (33.3%) said 'yes' while thirty (66.7%) said 'no'.

4.6.2 Channels of Communication

According to Hashim and Othman (2001) an organizational culture that promotes knowledge production also supports open relational channels of communication as a way of achieving its goals. Such a culture will support and nurture the human-to-human communications that comprise openness. The openness and communication is likely to foster the type of communication that leads to shared understanding and therefore shared goals. Respondents were asked what channels of communication are mostly used at AISA for communicating messages. They were given the options of email, fax,

memos; telephonic, short messages service (SMS), chatting (G-talk, yahoo messenger etc) and verbal communication. The most widely used form of communication at AISA according to the respondents is memos (84.4%).

A memo carries mostly formal communication and does not leave much room informal communication that involves socializing. Not having other forms of interactive communication indicates a culture of information silos with poor communication. A general lack of awareness on useful internal knowledge that people could benefit from is also very likely in such a context.

4.6.3 Attitudes and Beliefs

Organizational culture consists of attitudes and beliefs. Respondents were asked what they liked most about AISA. The researcher summarised their responses as; technology and the environment, the conferences and seminars, office space, research niche which included AISA's mandate, resources and working independently. They were then asked what they would like to change about AISA. The researcher summarized their responses as; salaries to be aligned with other government departments, working environment, increased capacity so that individuals are allocated more responsibilities, streamlining of departments according to expertise, greater accountability, recognition and making AISA more dynamic.

Respondents were asked what kind of people they thought got promoted at AISA. When promotion depends more on whom you know above you in the hierarchy rather than on your achievements, experience and competencies, this indicates a lack of trust and constant political games (Schein, 2004). They stated that there was currently no promotion policy at AISA so the concept of promotion was not yet there. They attributed

the lack of promotion to the fact that recruitment for a vacant post or any other post was for external candidates alone so no member of AISA could be promoted to the vacant position. When asked what kind of people fail at AISA, responses were corrupt people, lazy and unknowledgeable people, people who challenged shared opinions, those who are unable to publish articles and unfriendly people. Respondents were then asked about bad behaviour that is tolerated at AISA and the researcher summarized the responses as; laziness, coming late to work, not filling in leave forms, rudeness by certain staff members, lack of a disciplinary policy as a result of which people do as they like, silo mentality, disrespectful managers, bureaucratic attitudes, unfriendliness, closed door policies, unwillingness to help other employees in empowering themselves for example some employees are furthering their education and those who have done the subject/course are unwilling to help or guide them and unwillingness to share knowledge.

Respondents informed the researcher that there was no specific dress code at AISA, that people could wear anything as long as it was smart and that most people wear smart casual. The respondents were then asked in general if they felt that AISA staff member' beliefs, values and norms may impede knowledge production. Chart 4.12 shows that 29 (64.4%) said 'yes' while 16 (35.6%) said 'no'

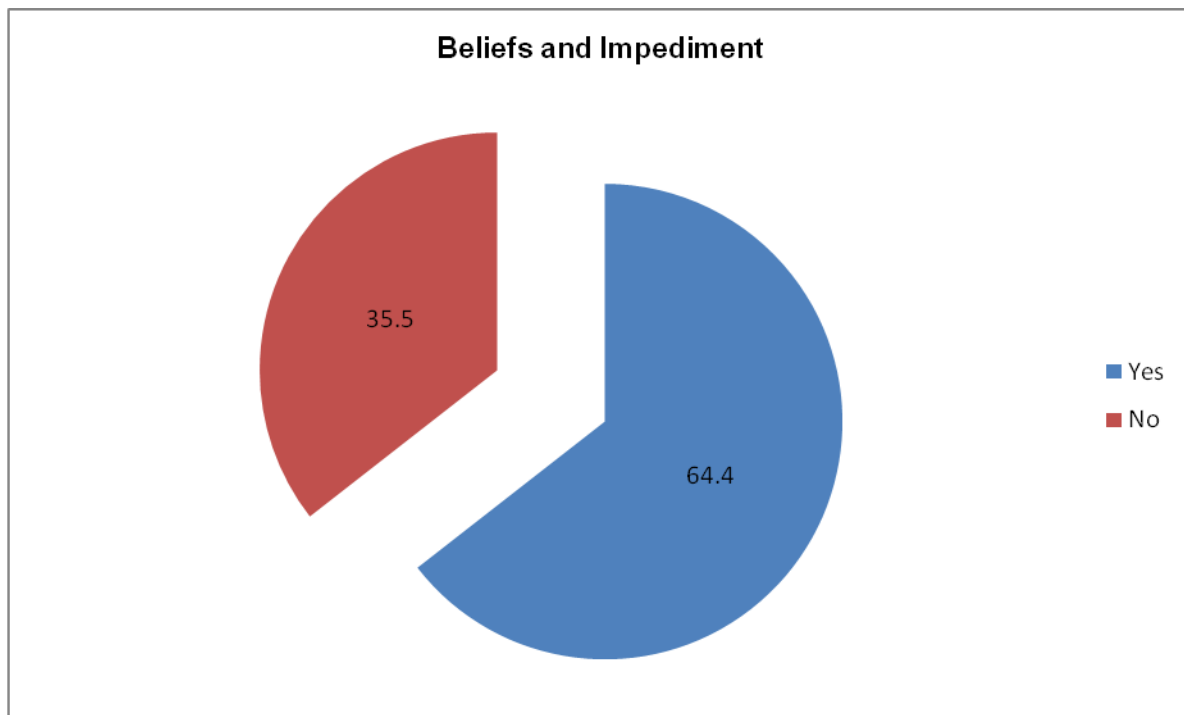


Chart 4.12: Beliefs and impediments to knowledge production at AISA (n=45)

Those who said 'yes' were asked how such beliefs, values and norms affect knowledge production at AISA. The researcher summarized the responses as follows:

- It makes them resist change and as a result knowledge production processes are hampered as we are living in an ever changing dynamic environment.
- Leads to failure of improving ICT infrastructure which then cripples conditions of service.
- Results in lack of recognition of achievement in other people irrespective of their status and they end up being demotivated to produce any information or knowledge.
- Ineffective time management because there is a norm of leaving the work for someone else to do or doing it last minute.
- Slows down knowledge production activities especially when the most of these beliefs, values and norms are in the research and publication division where most of the knowledge is produced and processed for dissemination. This has limited AISA's ability to produce knowledge more efficiently and effectively.

The researcher wanted to know if AISA encourages listening and questioning habits of organizational members as part of its culture. Twenty respondents (44.4%) said 'yes' and twenty-five (55.6%) said 'no'. An organization that is open to change, innovation, and excellence leads to reduced friction in the sharing and transferring of knowledge. It will also support the seeking out and identification of those with knowledge to share (Hashim and Othman, 2001). Respondents were then asked if AISA's organizational culture emphasizes excellence and innovation. Thirty (66.7%) of the respondents said 'yes' and fifteen (33.3%) said 'no'. From this the researcher wanted to find out why AISA staff members maybe unwilling to share knowledge and information. The respondents were asked to select as many reasons as they thought applicable to AISA. The options were; limited sharing of knowledge for fear of losing privileges and superiority, lack of trust among organizational members, those in privileged positions hoard knowledge, culture of secrecy within AISA and people's negative attitudes towards knowledge sharing. In the 'any other' section of this question a respondent added fear of scrutiny in the way that they write, produce knowledge and present. Chart 4.13 shows results from the responses given

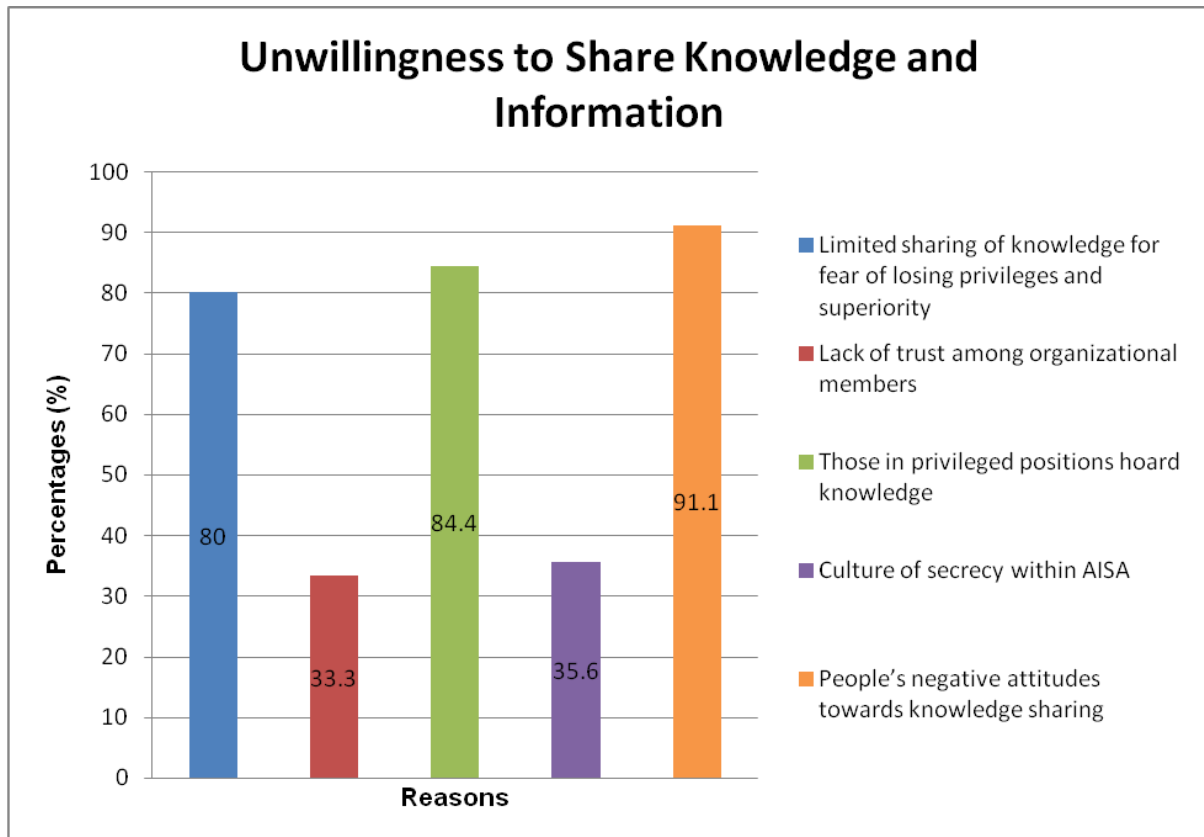


Chart 4.13: Unwillingness to share knowledge and information (n=45)

The researcher then asked in general how the respondent would describe the organizational culture of AISA. The researcher summarized the responses to this question as; performance led, silo mentality, secretive, full of uncertainty, does not address the needs of junior staff, entrenched in its past failures and shouldered by extreme bureaucracy, filled with paranoid beliefs and welcoming to visitors alone.

4.7 Summary

Collected data was analysed in this chapter and presented in the form of pie charts, graphs and tables. Variables investigated related to the general practices of AISA and AISA's achievements in relation to collaborations, ICTs and publications and as a learning organization. Other variables included challenges of knowledge produced, criteria for measuring value of knowledge produced and impediments to knowledge

production. The data analysis ended with organizational culture and how it promotes knowledge production and how attitudes, beliefs, values and norms may impede knowledge production at AISA.

CHAPTER FIVE

RECOMMENDATIONS AND CONCLUSIONS

5.1 Introduction

The aim of this study was to assess the system of knowledge production at AISA and further assess the challenges of producing knowledge embedded in AISA's organizational culture or environment and recommend ways of producing and sharing knowledge. Based on this aim, chapter five contains the conclusions drawn from the study and also provides recommendations. The themes and issues in this chapter come from the objectives of the study which were to identify AISA's main achievements in knowledge production; determine AISA's challenges in producing knowledge; find out how AISA's organizational culture impacts on internal knowledge production; and suggest ways in which knowledge production at AISA may be improved.

5.2 Summary of Findings of the Study

Below are a summary of findings based on the aim and objectives of the study:

5.2.1 System of Knowledge Production at AISA

AISA has a well defined system of knowledge production that has enabled it to achieve its goals and objectives over the years. The system consists of knowledge producers, knowledge managers, knowledge users, knowledge disseminators and supervisors of knowledge workers. Chapter 4.3.3 shows that the majority of AISA employees (73.3%) are involved in knowledge production. This is because research is the core function and major practice at AISA and as a result AISA has specific practices and procedures of producing knowledge. AISA has a significant amount of knowledge and information that flows through it on a daily basis as a result of which knowledge and information

acquisition is a priority. It produces both explicit and tacit knowledge with explicit knowledge being the most dominant in the organization. What has been researched is expressed in words and numbers and shared in the form of data, journals, book chapters, articles etc. This knowledge is readily transmitted across individuals, companies, organizations and institutes formally and systematically using the AISA library system, AISA website and publications. The study found out that AISA has a working environment that promotes knowledge production and motivates professionals to spend most of their time on finding and utilizing knowledge. Employees (64.5%) who find it easy to retrieve and utilize the acquired knowledge and information spend all (100%) of their time producing knowledge (cf. table 4.2). In contrast, employees who spend less time producing knowledge find it hard to retrieve and utilize knowledge and information

5.2.2 AISA's main Achievements in Knowledge Production

Over the years, AISA has had many achievements that have contributed to its existence today. These achievements have resulted in a strong demand for material produced by AISA, hosting of quality seminars and conferences locally and internationally, facilitation of young graduates, collaborations and increased knowledge on African Affairs. It collaborates through joint research projects, joint training programmes, joint seminars/workshops, exchange of staff, exchange of information and exchange of research findings. The most frequent collaboration is through joint seminars and workshops. AISA is able to identify their knowledge requirement which is a challenge for most research institutions as they try to adapt to the ever changing knowledge and information environment. Among others they identify their knowledge requirements whenever socio-economic challenges in Africa crop up, through fieldwork, user needs

analysis (though a formal method has not been established), policy analysis and through annual research retreats.

5.2.3 AISA's Challenges in Producing Knowledge

Like any other organizations in today's knowledge and information era, AISA has faced and will continue facing different challenges in producing knowledge. Challenges include inadequate facilities, absence of knowledge production policies, overlapping functions, little understanding of the value of knowledge, lack of commitment, limited knowledge processing capacity, an unfavorable environment for producing knowledge and bureaucracy/officialdom. If these challenges could be clearly confined, it is argued that AISA would be in a better position to effectively produce and utilize knowledge, making it able to better serve the needs of its clients.

One of the major challenges is lack of knowledge management. Although knowledge is valued at AISA, this study established that knowledge management has not yet been embedded in the day-to-day activities of AISA and therefore there are no formal knowledge management programmes or knowledge management policies at AISA. AISA has no formal knowledge management programmes or policies. Knowledge Management through knowledge sharing is vital for sustainable knowledge production. AISA has no knowledge managers specifically responsible for coordinating knowledge management activities even though there are employees who hold knowledge management-related positions (such as librarians). Employees are left to manage tacit knowledge on their own and are not accountable to anyone for its sharing for continued knowledge production.

To a very limited extent, knowledge management is narrowly applied at the Library and Documentation Services (LDS) section. There are efforts to treat knowledge as an important organizational resource, for example the newspaper clippings section in the library has knowledge management through five people who get together and share knowledge on the Advanced Document Management, version 5 (ADM5) initiatives. In this way if one person leaves this section temporarily or permanently he/she does not leave with all tacit knowledge of how to run the section but as it is shared it also remains behind. This is unlike other sections of the LDS like the Cartography Section where there is only one employee and there has not yet been any initiative to impart that person's knowledge to others.

5.2.4 Impact of Organizational Culture on Knowledge Production

The study revealed that AISA's organizational culture to a significant extent negatively shapes how organization members feel, think and behave and in turn hinders maximum knowledge production. Sixty-six (66.7%) of the respondents said that AISA does not have an organizational culture that promotes knowledge production. In general respondents summarized AISA's organizational culture as performance led, silo mentality, secretive, full of uncertainty, do not address the needs of junior staff, entrenched in its past failures and shouldered by extreme bureaucracy, filled with paranoid beliefs and welcoming to visitors alone.

More than half the respondents (64.4%) felt that AISA staff members' beliefs, values and norms are an impediment to knowledge production. They said that such beliefs, values and norms affect knowledge production through; making employees resist change, leads to failure of improving ICT infrastructure which then cripples conditions of service,

through lack of recognition of achievement in other people irrespective of their status, through ineffective time management which slows down knowledge production activities. This has limited AISA's ability to produce knowledge up to its maximum capacity. AISA employees believe that certain areas of AISA need to be improved and as a result employees feel discouraged in producing knowledge. Such areas include salaries so that they are aligned with other government departments, working environment, increased capacity so that individuals are allocated more responsibilities, streamlining of departments according to expertise, accountability and recognition of work and make to make AISA more dynamic. In addition, employees also feel that the following people fail at AISA; corrupt, unknowledgeable people, people who challenged shared opinions, those who are unable to publish articles and unfriendly people.

Respondents were also of the belief that bad behaviors such as laziness, coming late to work, not filling in leave forms, rudeness by certain staff members, lack of a disciplinary policy as a result people do as they like, silo mentality, disrespectful managers, bureaucratic attitudes, unfriendliness, closed door policies and unwillingness to help other employees or share knowledge, are tolerated at AISA (cf. 4.6.3). With such beliefs and attitudes it is hard to produce knowledge efficiently and effectively and to the full potential of the organization. The study also revealed that Memos are the most widely used form of communication at AISA. Not having other forms of interactive communication indicates a culture of information silos with poor communication. A general lack of awareness on useful internal knowledge that people could benefit from is also very likely in such a context.

5.3 Conclusions

The following conclusions were drawn from the findings:

5.3.1 Practices and Procedures of Knowledge Production

Some of the respondents (62.2%) said that AISA's practices and procedures were not effective (cf. 4.3.1). This might be because respondents are not seeing enough results from these practices and procedures or they might not fully understand these practices or they might also not be aware of intangible effects such as increased value of knowledge. An example of a procedure in AISA is that on return from field research, researchers have to present at a seminar and produce a policy paper, journal article or a book chapter. The journal article should have been internally and externally peer-reviewed before publication. The practices and procedures of knowledge production at AISA are those popular to research institutions (such as identifying and finding sustainable solutions to the problems researched on). Chapter 1 of this study gives an overview of AISA's practices and procedures. They facilitate knowledge generation, knowledge sharing and increased learning capabilities.

Employees are aware of the benefits of good knowledge production practices which are fast decision-making, job satisfaction, high staff motivation, faster acquisition of useful information, faster acquisition of useful knowledge, collaboration problem solving, and faster production of publications, increased areas of research and special research collaboration amongst research staff on areas that are relevant and topical across areas of research areas.

5.3.2 Types of Knowledge Produced

Since AISA produces both explicit and tacit knowledge, the researcher concluded that there are two dimensions of tacit knowledge found at AISA, the technical dimension and the cognitive dimension. The technical dimension encompasses the kind of informal and hard-to-pin-down skills or crafts often captured in the term "know-how" which develops after years of experience. Highly subjective and personal insights, intuitions, hunches and inspirations derived from bodily experience fall into this dimension (Srinivas, 2009). The cognitive dimension consists of beliefs, perceptions, ideals, values, emotions and mental models so ingrained in us that we take them for granted. Though they cannot be articulated very easily, this dimension of tacit knowledge shapes the way we perceive the world around us (Srinivas, 2009). Thirty-three (73.3%) of the respondents said that AISA does not have mechanisms of capturing tacit knowledge indicating how highly personal and hard it is to formalize, communicate or share tacit knowledge with others. The study revealed that AISA's employees (64.4%) measure the value of knowledge produced by looking at whether AISA has increased in value as a think tank (cf. 4.5.3).

5.3.3 Acquisition of Knowledge and Information

Although acquisition of knowledge and information is a priority employees who spend less time producing knowledge find it hard to retrieve and utilize knowledge and information. Reasons may be that communication among all levels is poor, reference books are not kept up to date, AISA has a closed library system that does not have constant communication, lack of user awareness initiatives, lack of knowledge and information processes and a stationed centralized loaning system at the library that does not allow lending out books and other information materials.

5.3.4 Information and Communication Technologies (ICTs)

Information and communication Technologies (ICTs) play a key role in effective knowledge production. Although knowledge production is not entirely dependent on ICTs there is a need for at least the basic technologies for better knowledge production such as computers, fax, internet, printers, telephone and scanners. AISA has to some extent adequately invested in the above mentioned technologies for producing knowledge. However, employees reported that these technologies were not provided in adequate quantity and quality. AISA also does not have an intranet.

5.3.5 Learning Organization

Wiig (1993) is of the opinion that organizations have to learn so as to ensure they are successful and able to attain their objectives. AISA has become an organization that collectively learns from continuously acquiring new knowledge, skills and capabilities. This was taken from respondents (62.2%) who indicated that employees are encouraged to be creative (c.f. 4.4.3). In being creative, others learn and acquire new knowledge, skills and capabilities. It also has a policy that emphasizes learning of staff and sharing of knowledge and information (cf. appendix 10) for the Training and Development Policy. An indicator of whether an organization is continuously learning or not is through skills acquired by employees. Employees of AISA have acquired and are still acquiring different skills formally and informally as a result of working for AISA. The skills range includes managerial, computer, problem-solving, communication, social, literacy, publishing, research and language skills.

5.3.6 Challenges in Knowledge Production

Based on the findings, below are the major challenges faced by AISA.

Overlapping Functions

Some functions of AISA overlap and are duplicated and this tends to waste time and resources that could otherwise be directed to knowledge production. For example, respondents pointed to administrative work and how three people sell books, conduct stock control and finance invoices. The same work is normally passed to other divisions/units that do the same thing. Another example was that marketing is not centralized and run by the marketing division. Marketing is done by any division even if the same thing is being done in the next office (cf. 4.5.1).

Lack of Knowledge Management Policy

AISA does not have a policy on knowledge management. Practices and procedures of knowledge management focus on collecting and sharing of knowledge and expertise in the organization. According to Ondari-Okemwa (2007) it is apparent and has been noted that nearly all the challenges and problems associated with knowledge production and in turn knowledge management revolve around lack of knowledge policies and lack of knowledge culture. The lack of a knowledge management policy means there are no guidelines as to how knowledge should be processed, stored, accessed, retrieved and shared among employees of an organization. In turn employees do not have suggestions on the type of knowledge they should access to enhance their performance and the quality of their service and/or products. In this case AISA employees are being left to access the knowledge they need on their own and using their own discretion of the type of knowledge they need.

Bureaucracy/Officialdom

The study found out that AISA operates in a bureaucratic environment which negatively affects access to knowledge and information, knowledge production and sharing of

knowledge. This was supported by respondents who described the organizational culture of AISA as shouldered in extreme bureaucracy (cf. 4.6.3). The bureaucratic environment emphasizes hierarchy and a specialized division of labour. There are rules which describe the duties of members, a set of standard operating procedures, and unfriendly relations between members. Instructions come from top management to the bottom of the organization and as a result knowledge is supposed to flow in that direction too. In cases like this Ondari-Okemwa (2007) says that top management tends to willingly share knowledge and information only with those in the same level of management. Those in the lower ranks of the organization have to wait to be directed on where to find knowledge and whom to share it with. Ondari-Okemwa (2007) is of the view that in bureaucratic organizations there are several procedures to follow and such procedures are bound to impede knowledge sharing between lower levels and those in the higher levels. By implication, employees for example, managers in the lower levels are not allowed to initiate anything before seeking authority from the top level management.

Lack of Commitment

Lack of commitment to producing knowledge was found to be a challenge as indicated by most respondents (cf. chart 4.11). The lack of commitment might come from employees who are not motivated enough and find it hard to get the necessary knowledge because of a culture of secrecy that promotes the hoarding of knowledge and prohibits sharing it freely. The bureaucratic environment might also be causing a lack of commitment as employees feel alienated. Employees are also not accountable to anybody regarding the sharing of knowledge with others and other departments so in the end no new knowledge is generated through the combining of ideas. The researcher established that there are very little incentives for sharing knowledge, thereby underestimating the importance of incentives for individuals to share knowledge.

Organizational Culture

AISA's organizational culture to a significant extent negatively shapes how organization members feel, think and behave and in turn hinders maximum knowledge production. However, the fact that AISA has no specific dress code indicates that the culture is slightly open and perhaps not as heavily saddled with deep bureaucratic ways. Culture defines not only what knowledge is valued, but also what knowledge must be kept inside the organization for sustained innovative advantage (Long, 1997). Creating a knowledge friendly culture is one of the most critical factors of success for a knowledge producing organization (Davenport and Prusak, 2000). Organizational culture affects how the organization accepts and fosters knowledge production and knowledge management initiatives.

Communication Channels

A good organizational culture should support open relational channels of communication as a way of helping an organization achieve its goals. The most widely used form of communication at AISA according to the respondents is memos (84.4%). Memos are formal letters sent to co-workers and colleagues and can be used to present a report even though one does not have to include a formal salutation or closing remark. This is indicative of the bureaucratic environment in which communication is limited and has a centralized control. Respondents (55.6%) stated that AISA does not encourage listening and questioning habits of organizational members as part of its culture (cf. 4.6.3).

Attitudes and Beliefs

More than half the respondents (64.4%) felt that AISA staff members' beliefs, values and norms are an impediment to knowledge production. For example, AISA employees believe that salaries need to be improved and as a result employees feel discouraged in producing knowledge. Employees are also of the belief that bad behaviours such as

laziness, coming late to work, not filling in leave forms, rudeness by certain staff members, lack of a disciplinary policy as a result people do as they like, silo mentality, disrespectful managers, bureaucratic attitudes, unfriendliness, closed door policies and unwillingness to help other employees or share knowledge, are tolerated at AISA (cf. 4.6.3). The researcher concluded that employees would not be able to produce knowledge efficiently and effectively under these beliefs.

Knowledge Sharing

According to Bock and Kim (2002), knowledge sharing is the most important part of knowledge production. One of the bad behaviours tolerated at AISA is unwillingness to help other employees and to share knowledge (cf. 4.6.3). For example, when other employees want to empower themselves by furthering their education and those who have done the subject/course are unwilling to help or guide them. Reasons for unwillingness to share knowledge and information ranged from fear of losing privileges and superiority, lack of trust among organizational members, those in privileged positions hoarding knowledge, culture of secrecy within AISA, people's negative attitudes towards knowledge sharing and fear of scrutiny in the way that they write, produce and present knowledge (cf. chart 4.13). Respondents cited 'people's negative attitude towards knowledge sharing' as the most significant reason. After probing respondents further, it seems that individuals who are unwilling to share possess personal insecurity, such as a fear of being seen as ignorant or fear of losing superiority and knowledge ownership after sharing their own personal knowledge. This is attributed to lack of information on the benefits of sharing knowledge to both the employee and the organization. It is also attributed to tradition which has taught us to hoard knowledge to achieve power.

5.4 Recommendations

Below are recommendations that come from the findings of the study.

5.4.1 Knowledge Management Practices

As a research institution, it is recommended that AISA be knowledge-orientated with knowledge management initiatives and knowledge management policies. The knowledge management policies will provide guidelines as to how to access, generate, process, store and retrieve knowledge to AISA's advantage. The knowledge management initiatives should involve knowledge production, knowledge use, knowledge acquisition, knowledge sharing and transfer. Knowledge management practices should be embedded in the day-to-day activities of employees. Positions should be created such as knowledge managers and officers that seek accountability for managing tacit knowledge and manage it. These managers will be there to make sure that there is internal training and education that serves the purpose of sustainable knowledge production and converts tacit knowledge into explicit knowledge. Knowledge management practices should involve having a criterion to measure the value of knowledge even though it is not an easy task. Employees lack proper understanding of knowledge as being of strategic importance and as a result knowledge is not treated as an important organizational resource. By having a criterion employees will be able to understand the value of knowledge and the benefits of sharing it. This knowledge management strategy may start to popularize after AISA's management starts to appreciate the strategic importance of managing knowledge-based assets.

5.4.2 Organizational Culture

Just as knowledge production is critical to an organization's survival, organizational culture is critical to an organization's definition and execution of its goals. Though

organizational culture is complex, creating a knowledge friendly culture is the best framework for addressing the issue of organizational culture. This can be done by making knowledge production an integrated aspect of how work is done in an organization, thereby making it an integrated aspect of the culture. The knowledge friendly culture will encourage people to create and share knowledge within. Employees will end up learning that the most valuable employee is the one who becomes a source of knowledge and actively shares that knowledge with other organizational members. It also prompts employees into getting out of the habit of asking for instructions especially in cases where a bureaucratic environment is evident. The organization will also need to reward knowledge entrepreneurship, inquiry and innovations.

The researcher recommends that AISA discourages beliefs, attitudes and assumptions about what knowledge is, which knowledge is worth managing, who is expected to control specific knowledge, who must share it, who can hoard it and how knowledge can be used by educating and informing employees about what this asset is about. This will change people's behaviour to make their experience and expertise available to others.

5.4.3 Information and Communication Technologies (ICTs)

Over the years the definition of ICTs has broadened to include not only technology but activities such as knowledge mapping, people and processes. It combines the attributes of culture, history, business processes and human memory. As a result it is recommended that AISA's ICTs be provided in adequate quantity and quality. They should be flexible and tailored to the type of knowledge being captured, shared, or produced in order to be effective and efficient, for example, providing an intranet which allows people to share information voluntarily with the rest of the organization. The intranet can highlight individual's recognized skills so that employees know who knows

what, and where the best expertise could be drawn upon to solve problems quickly and effectively.

5.4.4 Management Style

The traditional structure of organizations, whether organized by function, region, or business unit, tends to prevent the free flow of knowledge throughout organizations because of the focus on silos. AISA should find a management style best suited for it and that permits flow of knowledge regardless of employee role, job function, or other traditional boundaries. It also allows for leadership that applies rewards and sanctions to overcome resistance. Its organizational structure should encourage learning through knowledge production and sharing. This involves teams, work groups and communities of practice. Communities of practice (COP) create even more knowledge. According to Lave & Wenger (1991) COP is a term that describes a group of people who share an interest, a craft, and/or a profession. The group can evolve naturally because of the member's common interest in a particular domain or area, or it can be created specifically with the goal of gaining knowledge related to their field. It is through the process of sharing information and experiences with the group that the members learn from each other, and have an opportunity to develop themselves personally and professionally. COPs can exist online, such as within discussion boards and newsgroups, or in real life, such as in a lunchroom at work, in a field setting, on a factory floor, or elsewhere in the environment.

5.4.5 Communication

AISA should emphasize the importance of conversation because the best medium for knowledge is the human brain. It can be recommended that AISA finds ways to generate conversation build relationships and develop trust among employees. This should not be

done within departments but across various departments. For example you cannot empower someone that you do not trust and who does not trust you. AISA can build formal and informal skills networks in order to map activities and provide supporting tools through virtual teams and face-to-face meetings. An organization's ability to harness its intellectual capacity of its rapidly evolving workforce is its key competitive advantage.

5.5 Research Questions

The study has answered the research questions as follows:

What are AISA's major achievements in knowledge production?

Strong demand for material produced by AISA, hosting of quality seminars and conferences locally and internationally, facilitation of young graduates, collaborations and increased knowledge on African Affairs and dissemination of this knowledge.

What are AISA's main challenges in producing knowledge?

Challenges found in producing knowledge include inadequate facilities, absence of knowledge production policies, overlapping functions, little understanding of the value of knowledge, lack of commitment, limited knowledge processing capacity, an unfavorable environment for producing knowledge and bureaucracy/officialdom.

To what extent does AISA's organizational culture promote knowledge production?

AISA's organizational culture does not fully promote knowledge production. To a significant extent it negatively shapes how organization members feel, think and behave and in turn hinders maximum knowledge production.

In what ways may knowledge production be enhanced at AISA?

As a research institution, it is recommended that AISA be knowledge-orientated with knowledge management initiatives and knowledge management policies. Creating a knowledge friendly culture is the best framework for addressing the issue of organizational culture. It is also recommended that AISA's ICTs be provided in adequate quantity and quality and that they should be flexible and tailored to the type of knowledge being captured, shared, or produced in order to be effective and efficient. AISA should find a management style best suited for it and that permits flow of knowledge regardless of employee role, job function, or other traditional boundaries. It can be recommended that AISA finds ways to generate conversation build relationships and develop trust among employees.

5.6 Future Research Direction

This study took an in-depth look at knowledge production in think tanks. Ongoing studies of change in knowledge production versus organizational culture are of lasting importance, as they set a baseline for future studies. The lack of research is particularly pronounced when looking at factors affecting knowledge production in think tanks in developing countries of Africa. More research needs to be done in this area. A similar study could be done at the Council for Scientific and Industrial Research (CSIR) so as to provide more knowledge and also serve as a comparison of think tanks. Further studies also need to be done on knowledge management in organizations that do not consider knowledge management to be their core business. It is of the researcher's view that further study in these areas would contribute to better professionalism in the knowledge management industry of Africa.

5.7 Summary

This chapter concluded the study by giving a brief summary of findings and recommendations. These conclusions and recommendations came from the research questions asked; what are AISA's major achievements in knowledge production, what are AISA's main challenges in producing knowledge, to what extent does AISA's organizational culture promote knowledge production and in what ways may knowledge production be enhanced at AISA. Further fields of study were mentioned with a view that other researchers will continue from where this researcher left.

5.8 Final Summary

The study investigated knowledge production in a think tank at the Africa Institute of South Africa (AISA). A case study was used as a research method. Questionnaires were distributed to AISA employees and interviews conducted. The data collected was analyzed using SPSS. The study revealed that AISA has a well defined system of knowledge production but faces different challenges with the main challenge being organizational culture. From the findings, the researcher made some conclusions and recommendations.

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APPENDIX 2

Record Keeping Policy



Africa Institute of
South Africa

RECORDKEEPING POLICY (within HR)

Version No:	1
Custodian:	Human Resources Manager
Compiled:	30 August 2008
Approved by:	Prof Nthabiseng Ogude
Date:	
Review Date:	

APPROVAL PAGE

Compiled by	Ms Ingrid Canham HR Manager	Date	
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Authorised and Approved by	 Council	Date	

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1. Purpose & Scope

- 1.1 The aims and objectives of this policy include the following:
 - 1.1.1 to communicate, record and administer approved human resources policies and procedures within AISA;
 - 1.1.2 to ensure the consistent application of discipline;
 - 1.1.3 to assist with the effective management of human resources and grievances;
 - 1.1.4 to ensure that all employees are aware of their rights and obligations;
 - 1.1.5 to create an environment of non-discrimination;
 - 1.1.6 to establish a motivated workforce;
 - 1.1.7 to ensure compliance with relevant legislation; and
 - 1.1.8 to redress disparities in the workplace, caused by past legislation.
- 1.2 The policy is confidential and shall at all times remain the property of AISA.
- 1.3 The human resources policies and procedures shall be applicable to all employees of AISA and it is expected that all employees should keep themselves fully acquainted with the contents hereof.
- 1.4 The various procedures, rules and regulations remain flexible and may be amended from time to time by AISA. Any amendments will be communicated to employees.
- 1.5 Although the policies and procedures create rules which must be complied with, in certain instances they serve only as a guideline for effective human resources management. The policies and procedures therefore need at all times to be applied fairly and flexibly.
- 1.6 The responsibility to recommend to Council for approval and implement Human Resources policies and procedures lie with the CEO and thereafter with the senior management of AISA. The CEO shall ultimately be responsible for the execution of these policies.

2. Terms, definitions, acronyms and abbreviations

2.1 Acronyms & abbreviations

AISA	Africa Institute of South Africa
AISA Act	Africa Institute of South Africa Act, 68 of 2001
BCEA	Basic Conditions of Employment Act, 75 of 1997 (as amended)
Council	The Council Members of AISA
EEA	Employment Equity Act, 55 of 1998 (as amended)
LRA	Labour Relations Act, 66 of 1995 (as amended)
SAQA	South African Qualifications Authority
PFMA	Public Finance Management Act, 1999 (Act no. 1 of 1999) as amended, including National Treasury Regulations issued in terms thereof

2.2 Terms & definitions

Accounting Authority	AISA Council, which shall be accountable in terms of section 49 (2) of the PFMA.
Accounting Officer	The Chief Executive Officer, designated to act as accounting officer within the framework of formal delegations by the accounting authority, in terms of section 56 of the PFMA.
AISA	Africa Institute of South Africa, constituted in terms of the Africa AISA of SA Act, Act 68 of 2001, clause 2 of the Act and, in terms of clauses 4, 12 and 14 constitutionalised as Council, a Chief Executive Officer, a management core and administrative staff and functioning as a public entity in terms of Schedule 3A of the PFMA.
CEO	Is the Chief Executive Officer of AISA, appointed in an interim or permanent capacity and includes any person who is appointed by the Council to officiate in the capacity of Chief Executive Officer and who is designated by the accounting authority to function as the accounting officer.
CFO	Is the Chief Financial Officer, appointed in an interim or permanent capacity and includes any person who is appointed by the Council in terms of the approved staff establishment of AISA to officiate in the capacity of the Chief Financial Officer and is charged with duties and responsibilities in terms of Treasury Regulations and as prescribed in Chapter 6, Part 2 of the PFMA.
Divisional Manager	An official who occupies a post in terms of the approved staff establishment of AISA, and who forms part of the Management team of AISA, who is responsible for the development of policies, objectives, performance strategies and goals.
Employee	A person holding a fixed post and who receives remuneration from AISA; or employed temporarily or under a special contract, whether in a full-time or part-time capacity, additional to the fixed establishment or in a vacant post on the fixed establishment, assisting in carrying on or conducting the business of AISA.
Gender	The use of any one gender in this Policy signifies the other genders as well.
Historically Disadvantaged Individual	A South African Citizen who- <ul style="list-style-type: none"> › due to apartheid policy that had been in place, had no franchise in National Elections prior to the introduction of the Constitution of the Republic of South Africa; › is female; and / or › has a disability.
Indirect Interest	Refers to interest held by a spouse, dependants or immediate family members.
AISA Management Committee (IMM)	Is a Committee constituted in the terms of the Management Governance Charter of the AISA, which directs the activities, strategy, and operations of AISA.
Induction	Is a process of integrating the new employee into the AISA and acquainting him/her with the details and requirements of the job.
Internal control	Is a system of policies, measures and procedures that exists within AISA to promote the efficiency of operations and achievement of management objectives. The system also ensures that the assets of the organization are adequately safeguarded and that fraud is prevented as far as possible. It is not only applicable to the Finance Division but to all operational Divisions within the organization and to all parties that deal with the AISA.
Manager	An employee of AISA who is so designated and is directly responsible for the management of a

	division, office or service of AISA, or the Manager's lawfully appointed nominee acting in that capacity.
Normal Retirement Age	The first day of the month following the month in which the normal retirement age is reached as determined by AISA from time to time.
Operations	Any activity or business operated, controlled or managed by AISA and on behalf of itself or any other entity, person or persons.
Overtime	That portion of any approved period of time which an employee who is entitled to overtime works at the workplace for AISA during any week or on any day, as the case may be, which is in excess of the respective ordinary hours of work prescribed for such employee.
Permanent Employee	Employee appointed on a permanent basis.
Policies	<p>Policies for AISA can be categorized as :</p> <p>(a) policies directed at governing the corporate focus of AISA and</p> <p>(b) policies with a specific functional connection, describing related administrative, technical and operating aspects.</p> <p>Policies should as an outcome minimize the deviation between the planned objectives and procedures of the strategic plan and the actual accomplishment thereof, indicating the "rules of the game" that are either binding or guiding.</p> <p>Policies will usually spell out the "do's & donts" of how the operations of a specific functional unit should be effected.</p>
Procedures & Templates	<p>Procedures will form a separate set of documents that supports the policy documents. It will prescribe how the business process should be followed, which documents are applicable, who is responsible for specific functions, who is responsible for the review of work/transactions, etc. It will have all the necessary detail to enable an employee to perform his/her daily duty.</p> <p>Templates will be a set of pre-designed documents that are used to streamline the daily operations of the business and to capture all required information on source documents, i.e. Purchase request, Petty cash forms, etc.</p>
Quality management	Is a comprehensive and structured approach to organizational management that seeks to improve the quality of products and services through ongoing refinements in response to continuous feedback.
Quality (Management) System	Is the set of interrelated policies & procedures that describe the organization's core business and supporting processes and through a continuous process of improvement seeks to enhance the affectivity and the quality of an organization's operations.
Segregation of duties	This refers to the segregation of certain areas of responsibility in the task description of personnel to ensure that unauthorized/improper transactions are prevented.
Service Provider (independent contractor)	A business enterprise, institution or person contracted formally and in writing by AISA for the provision of an agreed deliverable, or level of service over a specified period of time at a predetermined fee.
Services	Are all non-material commodities produced by human labour, obtained and rendered in any manner to AISA or via AISA to an AISA CLIENT, from and by external enterprises, against payment of a sum certain in money.
Sub-Contracting	The Primary Contactor's assigning or leasing or making out work to, or employing, another person to support such primary contractor in the execution of part of a project in terms of the contract.
Superior	Is a manager who exercises direct managerial control over specific human resources utilized in a Unit in the achievement of that Division's objectives.
Temporary Employee	Employees who are appointed on a temporary basis - either for limited duration of time or for a specific project or job.
Unit	Is a sub-unit within a Division, tasked with specific functions which are related to the achievement of that Division's objectives.

3. Control and Amendment of Policies

3.1 Control

- 3.1.1 Control of and final responsibility to implement human resource policies and procedures rests with the CEO and Senior Management. The CEO shall have ultimate responsibility for the execution of human resource policies and procedures and has the authority to delegate such functions to the employees.
- 3.1.2 The CEO, or any person to whom the CEO has delegated such function, shall be responsible to ensure that these policies and procedures are continually updated and that all updates are communicated to employees.

3.2 Amendments

- 3.2.1 Any amendments to the human resource policies and procedures set out hereunder shall be approved by the CEO.
- 3.2.2 Any employee may from time to time suggest amendments to the policies. Such suggestions will be considered by the CEO and senior management.
- 3.2.3 All old and amended human resource policies and procedures should be withdrawn from the current policies, but must be safeguarded separately for future reference and audit purposes.
- 3.2.4 The CEO or any person, to whom the CEO has delegated such function, shall be responsible for updating these Policies and for circulating all new policies and procedures.

3.3 Interpretation

- 3.3.1 Reference to any male employee also includes female employees unless otherwise indicated.
- 3.3.2 Any reference to the singular also includes the plural unless otherwise indicated.
- 3.3.3 All definitions set out in the LRA, the BCEA and the EEA will also apply to this policy.

3.4 Legislation

The exercise of the rights and performance at AISA are subject to the provisions of the following legislation, of which certain stipulations are contained in this policy and is hereby accordingly acknowledged –

- 3.4.1 Constitution of the Republic of South Africa, 1996;
- 3.4.2 Africa Institute of South Africa Act, 2001;
- 3.4.3 Basic Conditions of Employment Act, 1997;
- 3.4.4 Labour Relations Act, 1995;
- 3.4.5 Unemployment Insurance Act, 2002;
- 3.4.6 Compensation for Occupational Injuries and Diseases Act, 1993;
- 3.4.7 Occupational Health and Safety Act, 1993;
- 3.4.8 Employment Equity Act, 1998;
- 3.4.9 Public Finance Management Act, 1999;
- 3.4.10 SARS :Guide for employees in respect of Employees' tax and
- 3.4.11 Other applicable by-law, ordinance or legislation.

4. Record Keeping Policy

4.1 Purpose

The purpose of record keeping is to ensure that

- files should contain all human resources information about each employee (except medical and health insurance files) including: applications or resumes, performance reviews, employee comments or responses if appropriate, disciplinary actions, salary history, deductions, bonuses, special pay (tuition reimbursement for example), promotions, demotions, apprenticeships, job training, courses or degrees taken during the job period, and attendance (vacation days, sick days, personal days, family leave days, days absent without permission).
- Files are kept in a secure environment

5. Objectives

The Employee Personnel Folder should be used to record personal, emergency information and to document significant events and discussions supervisors have with their employees regarding performance, recognition, training and conduct.

Personnel Folders must be maintained in a secure area that guards against unauthorized access yet is readily accessible for supervisors to enter notes and other documentation.

6. Responsibility and Authority

The Human Resources Administrators will be responsible for the obtaining, filing and updating of information in the filing system.

Documenting is a supervisor's responsibility and should not be assigned to clerical personnel.

Employees have a right to review the contents of their files in the presence of Human Resources personnel and initial notes concerning performance or conduct, however are not allowed to remove the files from the HR Division.

7. Procedure

Upon acceptance of the job the HR personnel will compile only job-related information in the personnel files. Items to include:

- Appointment letter including salary acceptance offer
- Resume (CV) /job application & Identity Document
- Job description
- Disciplinary & Grievance Actions
- Transfers
- Reference checks / Pre-employment evaluations (subjective items)
- Medical records (Dr. releases, health insurance information, physicals, injury reports, WCI claims)
- Employee profiles
-

A separate confidential folder is maintained for the following information:

- Vacation, leave Requests
- Immigration documents necessary for all applicants offered a position whenever required.
- Performance and Job evaluations
- Injury on duty
- Training file
- Confirmation of probation

7.1 Access to Employee Files by Labour Inspectors

In order to monitor and enforce compliance with an employment law, a Labour Inspector may, without warrant or notice, at any reasonable time, enter:

- 7.1.1 Any workplace or any other place where an employer carries on business or keeps employment records, that is not a home;
- 7.1.2 any premises used for training in terms of the Manpower Training Act, 1981 (Act No. 56 of 1981); or
- 7.1.3 Any private employment office registered under unit 15 of the Guidance and Placement Act, 1981 (Act No. 62 of 1981).
- 7.1.4 A Labour Inspector may enter a home or any place other than a place referred to above only with the consent of the owner or occupier; or in terms of a court order.
- 7.1.5 If it is practical to do so, the employer and a trade union representative must be notified that the Labour Inspector is present at a workplace and of the reason for the inspection.

7.2 Powers to question and inspect

In order to monitor or enforce compliance with an employment law, a Labour Inspector may-

- 7.2.1 Require a person to disclose information, either orally or in writing, and either alone or in the presence of witnesses, on any matter to which an employment law relates, and require that the disclosure be made under oath or affirmation;
- 7.2.2 Inspect, and question a person about, any record or document to which an employment law relates;
- 7.2.3 Copy any record or document referred to in paragraph (b), or remove these to make copies or extracts;
- 7.2.4 Require a person to produce or deliver to a place specified by the Labour Inspector any record or document referred to in paragraph (b) for inspection;

Following is a list of records which should be maintained in an employee personnel folder.

7.3 Personnel File Contents	Document on file?
Section 1 Application Details	Yes <input type="checkbox"/> No <input type="checkbox"/>
<ul style="list-style-type: none"> ▪ Application for employment ▪ Employee CV ▪ Employee Identity Document or residency permit (Certified Photostat) ▪ Employee driver's license (Certified Photostat) ▪ Interview correspondence ▪ Offer of employment ▪ Employee acceptance ▪ Employee orientation checklist ▪ Employee contact numbers, address and next of kin 	
Section 2 Leave Record	Yes <input type="checkbox"/> No <input type="checkbox"/>
<ul style="list-style-type: none"> ▪ Leave schedules ▪ Annual ▪ Compassionate ▪ Sick ▪ Study ▪ Family responsibility ▪ Shop steward leave ▪ Other 	
Section 3 Performance and Development	Yes <input type="checkbox"/> No <input type="checkbox"/>
<ul style="list-style-type: none"> ▪ Position descriptions ▪ Training records, including Formal training plans ▪ Performance plans ▪ Performance ratings 	
Section 4 Disciplinary Procedures	Yes <input type="checkbox"/> No <input type="checkbox"/>
<ul style="list-style-type: none"> ▪ Pending personnel actions, awards recommendations, etc. ▪ Disciplinary/adverse action backup materials <p>Disciplinary File Documentation Checklist</p> <p><u>Objective:</u></p> <ul style="list-style-type: none"> ▪ To provide a clear audit trail of all actions taken and leading up to a formal disciplinary action. 	

Procedure

- Copies of notice of proposed action
- Employee response (or notation that no written response made)
- Summary of response when made orally (including employee's or representative's signature as to accuracy of memorandum)
- Notice of decision and reasoning behind decision

Supporting documentation such as:

- Witness statements
- Affidavits
- Investigative reports or extracts of them
- Pertinent regulations
- Personnel actions
- Reports on personal interviews/group meetings
- Evidence of delivery of notice letters

Completed case sheets, with all items filled in (noting "N/A" if necessary)

Section 5 Grievance Procedures

Yes ☐ No ☐

Objective:

- To provide a clear audit trail on all actions taken and leading up to a final decision on each grievance.

Procedure

- This checklist applies to both negotiated and administrative grievances.

1. Written grievance.
2. Designation of representative.
3. Witness statements.
4. Memos on discussions with grievant/supervisor/rep/witnesses.
5. All grievance forms and notices.
6. Chairperson (all levels) report of findings and recommendations.
7. Union letter invoking dispute to CCMA or Council.
8. Request for arbitration or application to Labour Court (Memos regarding meetings with union to select arbitrator/schedule arbitration, etc.)
9. Brief.
10. Arbitration notes.
11. Post-hearing brief.
12. Arbitrator's or Labour Court decision.
13. Record of implementation of arbitrator's decision.
14. Other supporting documentation such as:
- 15.

<ul style="list-style-type: none">• Applicable regulations• Official documents (e.g., performance plans, performance ratings) <p>Documentation regarding requests for and approval of extensions/waivers of any steps in the process.</p>	
Personal Medical Information	Yes <input type="checkbox"/> No <input type="checkbox"/>
NOTE: Medical documentation, including injury compensation forms, suitability and/or security information should not be maintained in this folder. Other official folders must be established for this purpose.	

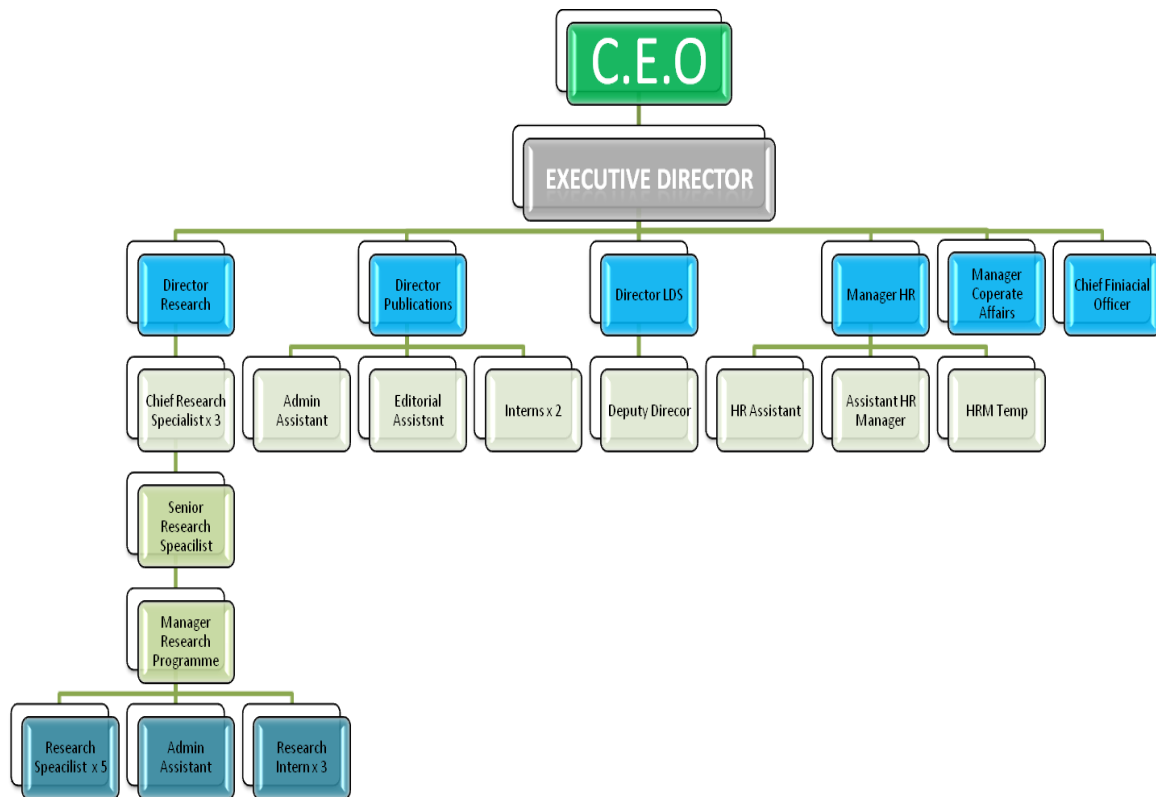
8. Record keeping

The files will be maintained,

- for as long as the person is employed within the Institute and
- then will be placed in the archive for 5 years and
- then digitalised and kept for further 5 years before they will be destroyed.

APPENDIX 3

AISA Organizational Structure



APPENDIX 5

AISA Questionnaire

UNIVERSITY OF FORT HARE

DEPARTMENT OF LIBRARY AND INFORMATION SCIENCE

Knowledge production in a think tank – a case study of the Africa Institute of South Africa (AISA)

Questionnaire

Dear participant

My name is Shingirirai Muzondo, a Master's student in the Department of Library and Information Science, University of Fort Hare, Alice, Eastern Cape. My research topic is on "Knowledge production in a think tank – a case study of the Africa Institute of South Africa." In a knowledge society, it is said that knowledge is a strategic resource that makes a difference between success and failure for organizations and countries. Knowledge management is a process which starts with the production and gathering of knowledge. I consider AISA to be a knowledge organization whose employees are knowledge workers. The nature of AISA's work requires knowledge which should either be produced within the organization or acquired from outside the organization.

The main objective of this study is to find out how knowledge is produced at AISA, identify some of the major hurdles to producing knowledge at AISA and suggest ways of improving production of knowledge. The study will be confined to AISA and hopefully, the findings will be applicable to other think tanks in Southern Africa and across sub-Saharan Africa.

Your contribution to understanding how knowledge is produced at AISA will be very important. Participation is voluntary and you are assured that the information you give will be treated confidentially and will be used solely for the purpose of the study. You do not have to identify yourself by name. There is no right or wrong answer for any question, but please give honest answers. Thank you for your time and participation in the survey.

Very Sincerely,

Shingirirai Muzondo

SECTION A

Background and Biographical Data

1. a) Your gender

Male	1
Female	2

- b) Please indicate your age bracket

25-35	1
36-46	2
47-57	3
58-65	4
Other (please specify)	5

- c) Your highest level of formal education

Matric	1
Diploma	2
Bachelors/BTech/Honors	3
Master's	4
PhD	5
Postdoctoral	6

SECTION B

Practices and Procedures of Knowledge Production

2. Are there specific practices and procedures of knowledge production at AISA?

Yes	1
No	2

If yes, please explain briefly how the practices and procedures of knowledge production are put into practice at AISA

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.....

.....

3. In your opinion, are the practices and procedures of knowledge production at AISA effective?

Yes	1
No	2

4. As an employee of AISA, which of the following do you consider to be your primary roles?
(Please tick as many as may apply)

Knowledge producer	1
Knowledge manager	2

Knowledge user	3
Knowledge disseminator	4
Supervisor of knowledge workers	5

5. In your opinion, does AISA provide a working environment that encourages knowledge production and knowledge sharing?

Yes	1
No	2

6. Approximately, what percentage of your working time do you spend on knowledge production?

100%	1
75%	2
60%	3
50%	4
40%	5
Less than 20%	6
None	7
Other (please specify)	8

7. Do you think acquisition of knowledge and information is looked upon as a top priority at AISA?

Yes	1
No	2
Always	3
Sometimes	4
Never	5

8. In your opinion, how easy is it to find and utilize information in AISA?

Very easy	1
Easy	2
Hard	3
Very hard	4

If hard or very hard, what do you think makes it so?

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

9. Is it easy to access and consult AISA's knowledge experts?

Yes	1
No	2

10. Do you consider AISA to operate primarily as a knowledge service organization?

Yes	1
No	2

11. Are there organizational policies at AISA which emphasize on learning of staff, sharing of knowledge and information?

Yes	1
No	2

12. What in your opinion would be the most important benefits of good knowledge production practices? Please select as many answers as may apply from below

Fast decision-making	1
Job satisfaction	2
High staff motivation	3
Faster acquisition of useful information	4
Faster acquisition of useful knowledge	5
Collaboration problem solving	6
Faster production of publications	7
Increased areas of research	8
Any other (please specify)	

SECTION C

Achievements

13. In as far as you know, does your organization collaborate with other organizations in knowledge production?

Yes	1
No	2

If yes, please indicate by ticking the relevant answers on how collaboration in knowledge production between AISA and other organizations happens

Joint research projects	1
Joint training programmes	2
Joint seminars/workshops	3
Exchange of staff	4
Exchange of Information	5
Exchange of research findings	6
Any other (please specify)	

Information and Communication Technologies

14. a) Do you think your organization has adequately invested in technologies and tools for producing and managing knowledge?

Yes	1
No	2

If yes, please indicate some of the technologies and tools for managing knowledge available in your organization

Computers	1
Fax	2
Internet	3
Intranet	4
Printers	5
Scanners	6
Any other (please specify)	7

b) How frequently do you use the technologies and tools to acquire, transfer and share knowledge?

Very frequently	1
Frequently	2
Very rarely	3
Never	4

Learning Organization

15. a) Do you consider AISA to be a learning organization? A learning organization is one in which staff members collectively learn from their past and continuously acquire new knowledge, skills and capabilities

Yes	1
No	2

If yes, which of the following statements apply to AISA as a learning organization?

The organization encourages and supports employees to acquire new skills, new knowledge and capabilities	1
The organization encourages sharing of knowledge and information	2
The organization encourages employees to reflect into their past and capture what they have learnt	3
Employees are encouraged to be creative	4
The organization facilitates further learning of all employees	5
Creative employees are rewarded regardless of rank	6
Sharing of knowledge and information is rewarded	7

b) What kind of knowledge, skills and capabilities have you acquired as a result of working for AISA over the years? Please tick

Managerial Skills	1
Computer Skills	2
Problem-solving Skills	3

Communication Skills	4
Social Skills	5
Literacy Skills	6
Publishing Skills	7
Research Skills	8

AISA Publications

16. a) How does AISA disseminate the knowledge it generates?
.....
.....
.....
- b) Who are the recipients of the knowledge that AISA generates?
.....
.....
.....
- c) How does AISA evaluate the impact of its publications and knowledge production on society?
.....
.....
.....
17. In your opinion, what do you think are some of AISA's main achievements in disseminating the knowledge it produces?
.....
.....
.....
.....
.....
.....

SECTION D

Challenges

18. Are there times you think the functions of AISA overlap and are duplicated by other employees?

Yes	1
No	2

If yes, please explain briefly

-
.....
.....
.....
.....
19. How does AISA identify its knowledge requirements? Please explain briefly.
.....
.....
.....
.....

Knowledge Produced

20. a) In your opinion, do you think that the knowledge produced within AISA is well utilized?

Yes	1
No	2

If your answer to the above question is no, please explain briefly

.....

.....

.....

.....

- b) Does AISA have any mechanism for capturing tacit knowledge?

Yes	1
No	2
Do Not Know	3

- c) In your opinion, do you think tacit knowledge is well utilized at AISA?

Yes	1
No	2

- d) How does AISA disseminate captured tacit knowledge?

.....

.....

.....

.....

21. What criteria would you use for measuring the value of knowledge produced at AISA? Please as many answers as may apply

Positive knowledge sharing behavior	1
New skills and capabilities that staff acquire	2
Increased speed of solving problems	3
Efficient use of resources	4
Number of publications produced by AISA per year	5
Number of new AISA ideas adopted by government	6
Increased value of AISA as a think tank	7
Number of internships going through AISA every year	8
Not easy to measure	9
Never attempted to measure	10
The value is obvious	11
No known measurement criteria	12

22. What do you consider to be the greatest impediments to knowledge production at AISA? Please select as many answers as may apply

Inadequate learning facilities	1
Information illiteracy in the organization	2
Absence of knowledge production policies	3

Little support from top management	4
Little understanding of the value of knowledge	5
Lack of technology for knowledge production	6
Lack of knowledge producing expertise	7
Lack of commitment	8
Limited knowledge processing capacity	9
An unfavorable environment for producing knowledge	10
Bureaucracy/officialdom	11
Any other (please specify)	

SECTION E

Organizational Culture

23. Do you think the AISA organizational culture promotes knowledge production?

Yes	1
No	2
Don't know	3

24. What channels of communication are mostly used at AISA for communicating messages?

Email	1
Fax	2
Memos	3
Telephonic	4
Short message service (SMS)	5
Chatting (G-talk)	6
Verbally	7

Attitudes and Beliefs

25. a) What do you like most about AISA?

.....

b) What is the one thing that you would like to change about AISA?

.....

c) What kind of people do you think get promoted at AISA?

.....

d) What kind of people do you think fail at AISA?

.....

e) What bad behaviors are tolerated at AISA?

.....

26. Is there a dress code at AISA? If yes, what is it?

.....

.....

27. Do you feel that AISA staff member's beliefs, values and norms are an impediment to knowledge production?

Yes	1
No	2

If yes, please state briefly how such beliefs, values and norms affect knowledge production at AISA

.....

.....

.....

.....

28. Does AISA encourage listening and questioning habits of organizational members as part of its culture?

Yes	1
No	2

29. Does the organizational culture emphasize excellence and innovation?

Yes	1
No	2

30. In your opinion why do you think AISA staff members may be unwilling to share knowledge and information? (Please select as many answers as may apply)

Limited sharing of knowledge for fear of losing privileges and superiority	1
Lack of trust among organizational members	2
Those in privileged positions hoard knowledge	3
Culture of secrecy within AISA	4
People's negative attitudes towards knowledge sharing	5
Any other (please specify)	

31. In general how would you describe the AISA organizational culture?

.....

.....

.....

Recommendations

32. What do you propose should be done to improve knowledge production at AISA?

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

33. Please suggest any other topics on knowledge production at AISA that you consider important and which should be included in this study or similar studies in the future

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

Your help in completing this survey is greatly appreciated, thank you!

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APPENDIX 7

Seminar Abstract

20 August 2009

09:30 for 10:00 – 13:00

Africa Institute of South Africa

One 20 August 2009

The Africa Institute of South Africa (AISA) cordially invites you to a seminar on:

Knowledge Production in a Think Tank: a case study of the Africa Institute of South Africa

By Ms Shingirirai Muzondo

Abstract

The creation of new knowledge is the key for almost every domain in a society, business or think tank, more so, if the main product or service is focused on knowledge. Changes like information and communication technologies (ICTs) have brought about consequential increase in production and processing of information, thereby increasing people's knowledge and demand for it. However, organizational culture remains an impediment to knowledge production among think tanks. Innumerable challenges persist in knowledge production with the biggest challenge being organizational culture. Organizational culture may negatively shape how organization members feel, think and behave and could hinder continuous learning, transfer and production of knowledge in organizations. Challenges may arise such as attitudes and stereotypes of employees that govern behavior and which make them avoid sharing ideas. If these challenges could be identified and clearly confined, it is argued that the organization would be in a better position to effectively produce and utilize knowledge, making it able to better serve the needs of its clients. Organizational culture and its impact on knowledge production in a think tank is the subject of interest in this study. This study proposes to investigate the system of knowledge production at AISA and further assess the challenges of producing knowledge embedded in AISA's organizational culture or environment. A case study will be used as a research method and both quantitative and qualitative methods will be used to analyze the data. The researcher will then suggest ways in which knowledge production at AISA may be improved.

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Profile

Shingirirai Muzondo, a female Master's student in the Department of Library and Information Science, University of Fort Hare, Alice, Eastern Cape, holds a Bachelor in Library and Information Science, Cum Laude (B.Bibl) and Bachelor in Library and Information Science (Honors), all from the University of Fort Hare. Currently an Information Science Tutor at Fort Hare University, a Health Student Facilitator for the Health Promotion Project for South African University students and a Research and Administration Assistant for the Centre for Leadership Ethics in Africa (CLEA). She is also an executive member in the UFH Postgraduate Student Association (PGSA) and residence coordinator in the same committee. She is a beneficiary of the Goven Mbeki Research Foundation Bursary (2007, 2009).