THE FEDERAL UNIVERSITY OF TECHNOLOGY, AKURE, NIGERIA

INFORMATION PAST, INFORMATION PRESENT AND INFORMATION FOREVER: UNDERSTANDING THE QUESTIONS THAT REMAIN

INAUGURAL LECTURE SERIES 208



Delivered by

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Other Academic and Professional Colleagues,
My Lords (Spiritual and Temporal),
Distinguished Guests and Friends of the University,
Gentlemen of the Press,
Distinguished Ladies and Gentlemen,
Great FUARIANS.

1.0 PREAMBLE

Bless the LORD, O my soul: and all that is within me … and forget not … His benefits (Psalm 103 v.1). We are troubled on every side, yet not distressed; we are perplexed, but not in despair; persecuted, but not forsaken; cast down, but not destroyed (II Corinth. 4 vs.8-9). Therefore, seeing we have this ministry, as we have received mercy, we faint not (v.1). Great is Thy faithfulness, O LORD (Lamentations 3 v.23b).

With a heart of full of praise and gratitude to the good and merciful God, I stand here today Tuesday, 13th October 2026, before this esteemed audience to deliver the 208th inaugural lecture of the Federal University of Technology, Akure, (FUTA) Nigeria titled **Information Past, Information Present, and Information Forever: Understanding the Questions That Remain**. This inaugural lecture is the first from the School of Science and

Technology Education where it was recently relocated and first from the Department of Library and Information Science (LIS), by its first Head of Department (Acting) and the first Professor of the Department, and 10th from the School of Physical Sciences where the Department was first and primarily domiciled at its inception. It is FUTA that has produced the first professor and the first inaugural lecturer in LIS among Ondo State universities and in Nigerian Library Association, Ondo State Chapter. All glory to God.

Madam Vice Chancellor, the story of my life changed forever in 1972 during a transformative event organised by the Scripture Union (Nigeria) in a long vacation camp for Western State students, held in Baptist High School, Iwo, Nigeria. As a sinner without hope and alienated from the commonwealth of Israel, I personally committed and handed over my life to the Lord Jesus Christ. This transformation formed the turning point of the information of my life past, present and forever. Since then, my life has been defined by trials, challenges and miracles, but regardless of these, God has more chapters to write than I can ever imagine. The earliest encounter with the field of LIS was during my secondary school days when my role shifted from Food Prefect in Form Four in 1972/73 session to Library Prefect in Form Five in 1973/74. I waded and waited through lonely roads before I could find my feet in this profession. After my secondary education, I faced financial and social barriers as there was no means of going for higher education. But thanks to God and the Federal Government of Nigeria Education Development Programme of 1974 to 1984, which afforded me the opportunity of tertiary education, otherwise, I would have ended up not going beyond secondary school education. Dr DeHaan once said, "*To come to Christ costs you nothing, to follow Him costs you something, to serve Him will cost you everything*" I am still paying for this till today. My love for people and "books" later moved me into Library and Information Science and this has remained my passion ever since.

2.0 INTRODUCTION

Information is older than humanity (**Abiolu, 2013a**), we met it here and certainly, we will leave it here at the end of time. However, it could be placed side by side with the creation account as the Creator–God spoke information out in words … "Let there be …" and it responded with an unfathomable and unimaginable action whereby these words brought out great creations, both living and non-living. In a closer and clearer perspective, after the creation of all God's handiwork, He gave instruction to Adam and Eve as to what they should do and what they should not do. Strikingly, the story sheds some light on a particular creature – the "tree of knowledge" (Gen. 2 v. 9b). This is the first mention of knowledge in existence. As for information, it surrogates knowledge. However, we shall see the connection between the two in due course. God spoke out information, and it underwent some processing and produced outcomes in the form of knowledge.

Overview of Information: Different perspectives of information

Information has its roots in "informare" – a Latin word and a combination of two words "in" and "formare" (Rocha and Schnell, 2013) a far-reaching history. The present-day spelling of the word came as it is today but after it was introduced into English words from French; and before then, an integration of six spellings namely "informatiou", "informacioun", "informatyoun", "informacion", "informacyon", and "informatiod" had been witnessed at various periods, with the word attaining dominant stability as an English concept in the 1700s (Yan, 2011). Globally, information lacks accepted and agreed definitions across various climes probably, due to its multifaceted, muultidimensional, and context-dependent reality therefore, it is described as a semantic chameleon (Bateson, 1973).

Ubiquity of Information

Information is regarded as data processed and organised in a meaningful form or as any type of "communication or representation of knowledge such as facts, data, and opinions in any medium or form such as textual, numerical ... graphic, electronic, cartographic, narrative or audio-visual" (NIST Computer Resource Center, 2025). Information is a precursor of knowledge, occupying a space in the mind and may exist in an independent and external form (Narayana, 2010). Information

> "is the time of day, tomorrow's weather, a ship's course, and a baby's weight, the contents of a typed memo, the contents of every book written, … and every … 'thing in the museum'. Birds' sounds … presidential speeches, radio shows … all music ever played and to be played, all videos and movies; the process of designing a cruise or a car, most of the office work carried out by hundreds of millions of people; military orders … assembly instructions, business procedures and all computer software" (Dertouzous, 1997).

Information can be in simple forms like zebra-crossing, examination instructions, journal article submission instructions, tying a rope across an area in an emergency or during construction cases, the constituents of a poster, animal sounds, gathering of clouds, yellowing/ or wilting of leaves, rising/or setting of the sun, bumps on roads, road signs (which are disappearing on most Nigeria roads nowadays), traffic lights, arrival and departure boards in airports, notice, sign, bill or bulletin boards, vest inscription, assignments, tests, examination and their results, medical reports and tribal marks. Thus, the common invitation to an event is full of information as exemplified by the information about this inaugural lecture which emboldened our being here today.

All animals perceive information in one way or the other, and this perception is embedded in them. They need information for their survival no matter the environment they find themselves in. This is why each is endowed with features and divinely inborn mechanisms that can readily perceive processes within and without their body masses including homeostasis, physiological changes and imbalances.

Information is central to human disciplines with some intertwining. In biology, for example, the age of a tree can be determined by the rings in its xylem; flowers of plants and their subsequent visit by insects are information. In organisms, the deoxyribonucleic acid (DNA) is the carrier and identity of hereditary information. The information thus carried is the defining "prime characteristic" of the organism, and DNA has attained the status of "universal medium of living cells, it is the highest information density known to us" (Gitt, 1996). In physics, computer science, software engineering, and library and information science (LIS) for example, information is carried by physical and real structures that oversee, and allow for its processing, storage and disseminating processes, all governed by appropriate and applicable laws (Vones, 2015). Information supports understanding, survival, innovation, development and problem-solving processes (Harun, 2023). Information is ubiquitous, and found in a wide range of disciplines (Yan, 2011).

Relationship of Data, Information, Knowledge, Wisdom and Decision-making

The relationship of data, information, knowledge, and wisdom is displayed in Figure 1.

***Data*:** Data can be composed of raw scores, numbers, time of the day, measurements, words, images, pictures, or a collection of two or more of these, being the largest in the pyramid of relationship. What food is

to the body, data is to the computer with appropriate hardwareand software applications. Data, in relation to a website are the unseen forces behind online searches, marketing activities, and processes, and the light that illuminates the performing path of sites, and "basic raw facts, figures, and observations" about any particular website, the number of people who visit the site daily, their request data (notes), daily hits on the website, and the pages they search (Haim, 2025).

Information: Information is a part of the building blocks knowledge, wisdom and decision-making. Information relates to finding meaning. When information goes into the human brain, it metamorphoses into knowledge, and when knowledge is let out of the human brain, it becomes information, implying that knowledge is internalised, and information is externalised. Information is the building block and surrogate for knowledge. Without information, there can be no knowledge. In other words, information is a revelation of knowledge (Narayana, 2010) and vice versa, making Samuel Johnson's 1975 quote relevant: "*Knowledge is of two kinds: we know a subject ourselves, or we know where we can find information about it*".

Knowledge: In information philosophy, knowledge is the "sum total of the information created and preserved by humanity … human minds, and artifacts of every kind – from books and internetworked computers to our dwellings and managed environment" (The Information Philosopher, 2025). Knowledge is applied information, and it is limited to human beings due to their thinking faculty tendencies. It resides in human brain.

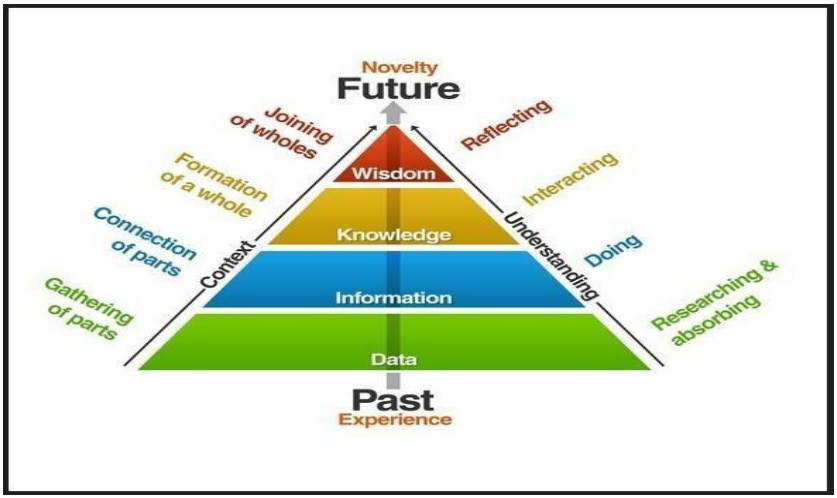


Figure 1: Pyramid of Relationship of Data, Information, Knowledge, Wisdom
Source: Vaes (2013). Understanding Data, Knowledge, Information and Wisdom

Wisdom: Wisdom as a term, is on a higher hierarchy than knowledge in a pyramidal relationship. It refers to the ability to find practical, creative, contextually appropriate and emotionally satisfying solutions to complicated human problems (Jeste and Lee, 2019). Wisdom comes to play in matters of context and judgement. But in its simplest form, it is applied knowledge.

Decision-making: In life wisdom is needed to be able to take the best-informed decision out of many choices including, the right career to pursue in life, what skills to acquire, one's purposes in life, who to marry, how many children to have, what profession to choose, and even whether to go to heaven or hell among others. Questions revolving around issues relating to "WHAT," "WHO", WHEN", or "WHERE" are best answered by information and, in the higher hierarchical order, those relating to "HOW" are better handled by knowledge. Wisdom comes to play when questions on "WHY" arise (Bellinger, Castro and Mills, 2004) and sometimes those of "HOW". Wisdom is an open display of knowledge when answering those questions that need a deeper understanding of any situations. In all,

information occupies an important niche in the ecosystem of the relationship of these concepts. Though there is an information explosion in the world context, information anaemia seems prevalent in many of Nigerian facets. Therefore, in Swan's (2003) words, "if we are to avoid becoming information automatons, we must be intellectually engaged" and be information literate.

The beginning of time has not witnessed a backward move or lash. Therefore, the past, present and future are a one-direction motion. The Editors of Time-Life Books (1991), working on the riddle of times passage noted that:

> *One of the inescapable facts of life is that time flows in only one direction: from past to future. Even as today fades into yesterday, tomorrow is becoming today, and–except in movies–the reel can never run in the reverse. Scientists, especially physicists, have identified a few arrows of time, as they are known–processes and phenomena that appear to exemplify time's one-way passage. Scientists cannot reverse time … the laws of celestial mechanics fail to shed light on time's inexorable forward march.*

3.0 THE INTELLECTUAL JOURNEY OF THIS LECTURE: REMEMBERING HOW HUMANITY LEARNED TO RECORD, PRESERVE, ORGANISE AND TRANSMIT KNOWLEDGE

3.1 INFORMATION PAST

Madam Vice Chancellor, the history of information journeyed from marks on clay to the machinery and technology of modern civilisation; and present day's recording, access and storage of information is a departure from ancient times though with similar goals. This is why Nwosu (2017) stated that the "library is not a shrine for the worship of books; it is not the temple where literacy incense must be burned or where one's devotion to the bound book is expressed in rituals (but rather it) … should be the delivery room for the birth of ideas". The question that remains here is: why should we

remember the past? The information philosophers think that if we do not remember the past, we do not deserve to be remembered by the future. This is particularly true and relevant to LIS profession.

3.1.2 A Brief History of Information

A written account chronicled that the art of writing was the greatest invention man ever made (McGarry, 1993), with different human writings birthed in expansive areas ranging from Mesopotamia to the River Nile, that is, Egypt (Okiy, 2014). Writing is the foundation for recorded civilization.

Cuneiform and the Desire to make Information Endure

Cuneiform, (Figure 2) the oldest form of writing, was traced to the Sumerians (Strickland, 2024) in Mesopotamia, the birthplace of oldest writing and libraries around the world. Marks (Figure 2) pressed into soft clay (Mark, 2026) transformed transient communication into enduring records supporting the accumulation of history, administration, commerce, religion, (Spar, 2004) and collective memory in about 3000 BC among various cultural landscapes with impactful effects on ideas, civilization and religion (Beattie, 2022).



Figure 2: Cuneiform
Source: Matthews (2017).

Hieroglyphics*:* The use of hieroglyphics writing system with the aid of papyrus (papyri – plural) dominated the Mediterranean culture including Egyptian from 500 BC to about 300 AD and lasted till 900s serving for preserving government and religious activities, medical information, poetry, palace matters, laws and commerce (Okiy, 2014). One significant library in ancient Egypt–The Library of Alexandria–located at an Egyptian port, the capital headquarters of the great Empire of the Greeks, became a singular hub containing all known knowledge of the time, consisting of different manuscripts acquired through various sources such as buying, copying, and outright impoundment (Carvajal, 2019). It housed a medical school where scientific dissections of human beings were first embarked upon, making a landmark contribution to the medical discipline; it also seemingly began a branch library of today which was referred to as daughter library then with its leading librarian being credited as the first human being to use alphabetical order of arrangement, which he used for developing a glossary compilation (Claus, 2026). The growth of this first universal library was unhindered until it was burnt down in 48 B.C. (El-Abbadi, 1992). However, uncertainty trailed the circumstances of the burning and the personalities responsible for this (Chesser, 2025). Equivalent of modern-day information professionals the manning of the library and its resources before being burnt down included Eratosthenes of Cyrene, Aristophanes of Byzantine and Callimachus (Okiy, 2014).

Other Writing Surfaces for Storing Information: The use of leather and parchment was in place in areas around Egypt. Because parchment (animal skins) could not be rolled and joined into sheets like papyri, parchment was therefore folded, joined and sewn in the middle. This kind of improvement later paved the way for the forms in which sheets of books were folded and sewn in the middle, in the present dispensation. Credited to the age-long Chinese in 105 A.D.,

another remarkable writing surface that emerged in ancient times, was the use of paper to evolve writing styles which was timely for bookmaking as papyrus was going into extinction, and the supply of bones, animal shells and skin or parchment was running into significant shorter supply than was needed at the time (Okiy, 2014).

Contributions of Christian Monasteries to Information and Knowledge Development and Management: Christian monasteries were significant to the contribution and growth of knowledge by the Catholic monks and nuns living in monasteries and were responsible collecting and hand-copying, preserving and transmitting of manuscripts. Christian monasteries therefore became centres of education, erudition and forerunners of knowledge; the proliferation of monasteries in Europe, Africa, Asia and others, turned out to grow into collection centres, (Mendis, 2025) and with a "Librarian" being responsible for the management of information resources in the different monasteries for posterity thereby promoting information and knowledge management. Monasteries were also highly contributory to the establishment and growth of early universities in the world (Mendis, 2025).

Contributions of Islam to Information and Knowledge Development: The Muslim world in Damascus, Baghdad and other areas strengthened information and knowledge development, and learning through memorisation of the teachings of Prophet Mohammed, papermaking got from the Chinese (prisoner of war, which spread from the Islamic world to Europe, Africa and India), and scholarship in the earliest universities of learning (Andrews, 2017).

Information and Printing: The printing revolution, credited to Gutenberg in 1450 AD formed the defining moments of human history and that of information and knowledge, thus becoming an impetus to the world economy. This innovative stance became a

fulcrum for learning due to the creation of a drastically novel and better improved way of modernisation, enlightenment in educational and scholastic spaces, bringing a well-fit market for teachers and for learners (McGarry, 1993).

Printing technology and a few salient drop-offs: The printing revolution brought a new era when knowledge stopped to reside with a select few, with books having no constituency anymore (Mensah, 2010). Notably, books attained a new scale by becoming more widely reproducible, affordable and hand-copying of books was brought to a halt in perpetuity, thereby promoting knowledge with more people having increased access to knowledge even in local languages. With theses in place, literacy rates also soared due to lower cost and wider availability of books which supported reading and learning. This in turn had a positive effect on libraries whereby collections and open access to resources galvanized. The overall effect of printing revolution resulted in rapid communication, accelerated scholarship and number of scholars in all areas, increased birth of ideas and social change. Notably, the Renaissance had gone half a century before Gutenberg's invention, the latter served to fuel the former expanding classical literature and learning, and contributing to information and knowledge growth.

3.1.3 The Industrial Revolution

The Industrial Revolution is a major impactful landmark in modern history (National Geographic Society, 2025), with notable scientific and technological advancements propelling society (Editors, 2025). Though the revolution started in England in the 1700s, its intensity grew very high in the mid-eighteenth century (Britannica Editors, 2026) and spread to Europe, the United States of America, Japan and other places (Editors, 2026). Before the Industrial Revolution began, societal goods and services were characterised by agrarian and

handicraft activities including agriculture, transportation and textiles and these gave way to machine-driven types and innovations at the inception of industrial revolution (Editors, 2025). A new era in history was born! With increase in technological progress, new harms and inequalities attached with social and environmental costs (Kiger, 2025) included environmental and human health, poor conditions of work for workers, poor nutrition, child labour and discrimination against women. A question that remains here is "when will these downsides end, as they are still prevalent today in Nigerian societies?"

3.2 INFORMATION PRESENT

3.2.1 The Information Age

The Information Age which began in the 20th century has its defining feature on "access to and control of information" and contributed to the current human era of personal computers (Tucci, 2023) and the use of social media. This age and its profound technological advances have produced paradigm shifts in how users relate to and utilise information from what it used to be (Yevelson-Shorsher and Bronstein, 2018). Other contributors to the Information Age are the Renaissance and Industrial Revolution (Britannica Editors, 2026). The Renaissance produced intellectuals who radically changed thinking into applied logical teaching and learning with expansion in the frontiers of education. With Gutenberg's invention as previously explored in this lecture, scholarship was taken to a higher level with vivid escalation of human knowledge as books became affordable. Thanks for the contributions of ARPANET, ENIAC, the Internet, World Wide Web, and numerous scholars, organisations and others, to present-day computer modernisation. All these contributions have embedded computers into the fabrics of human life and development. The information world today, has expanded past the printing invention as evidenced by various electronic formats of information sources in different types, shapes, sizes, and platforms, attributing the

birth certificate of information to Claude C. Shannon due his information theory (Tucci, 2023). The features of the Information Age, including the way and manner information is acquired, shared and disseminated with incredible speed through many devices, platforms, and the use of application software with unimaginable improvement in the development and delivery of goods and services, are a departure from those of the Industrial Revolution. Information today, with its inseparable marriage with computers and communication advances brought societies from an industrial economy to an information and knowledge economy. Information Age has also greatly impacted information work in ways far above what it used to be–in terms of acquisition of resources, processing, and service delivery to users whose orientation and information needs are shifting in tandem with technological dynamics. This age has mitigated the problems of information resources storage using digital, blockchain and cloud processes, to accelerate information and knowledge sharing, bring resources to users in a better and faster way, and enable critical thinking and better collaboration and interaction.

Permit me to digress to a special library that houses unique information about financial mistakes. The library is known as the Library of Mistakes founded by Professor Russell Napier in 2008 with a vision of becoming the "biggest financial and business reference library" in the world and guaranteeing that financial communities and organisations in the world master from the failures of the past by acquiring wisdom from financial errors and inaccuracies of previous years to improve the present day financial and business processes (Wolf, 2024). The enablement of this library is due to Information Age advances. The question to understand here is: Can we reflect on our various disciplines and compile the mistakes of the past and its successes and develop the lens through which improvements can be captured and made available for use, thereby experts can help change the "world one mistake (or success) at a time"?

I came across what was termed as “Call to the computer at MIT labs” where Professor Dertouzous made a call to his computer over many issues, with the last one question on “what is the meaning of life?” The computer responded to this by saying, “I am sorry, we don’t have knowledge about life”. Esteemed audience, do we really have knowledge about our present life, not to talk about the future and forever one? Are we furnished with enough information to cope?

3.3 INFORMATION FOREVER

Madam Vice Chancellor, information is not waiting for the future to arrive, it is the future and the designer of the future. Information under this guise does possibly indicate the start of another age in history but what, when and how? While speculations have trailed the possible answers to these, a suggestion is experience age, which refers “not to the information we’re so proudly consuming but how we choose to consume this information (Schaap, 2026). Other suggestions are Ages of Artificial Intelligence, Automation and Robotics, Sustainability, Biotechnology and Genetic Engineering, Virtual and Augmented Reality, Quantum Computing, Connectivity and Interplanetary Exploration, and Ethical and Philosophical Reflection (TeachThought Staff, 2025), and “2030 Bioplus Neuro Era (when biology and cognition become programmable) and 2040s Ambient Plus Quantum Era (when technology becomes everywhere and inclusive)” (Mason, 2025). Today, there is no universal consensus among scholars on the era after Information Age and when precisely this is coming up and how it is going to emerge, but suggestions and speculations pervade the information and technology arenas. But is Nigeria preparing for its arrival at any time from now?

Madam Vice Chancellor, in addition to the above, I stand here to look at information forever from the lens of Christian belief and I see this as a state of “beingness” when the division of time by ticks of clocks,

latitudes, sunrise, sunset, and seasons will be of no relevance and time itself will be timed out of existence. I read from the Christian's Book and Charter that there is a place where and when time is foreign. From this Book, in Revelation chapter 20 vs. 12-15, there are two sets of 'Books'; one set has just one volume and the other set consists of unspecified number of volumes. These books have different contents and titles. One bears the title "Book of Life" with the contents as "Being found in the Book of Life"; the second set is the "Books" which could be titled the "Book of Judgement" with the content reflecting the title – "and the dead were judged out of those things which were written in the 'Books' according to their works". The databases of these two sets of books contain names and works of individual human beings respectively. The contents of these two sets of books were used for appropriate informed decisions as to each person's final timeless destination. Some questions that remain are "in which of these two sets of books will our life information be found? Today, we have physical books and electronic types. But in what format will these books exist in timelessness? Additionally, the Head of all Librarians would open the two sets of books to check which of them every individual of humanity is registered in. Some questions relating to these books, such as methods of their acquisition, their format, their cataloguing and classification processes, what classification schemes and headings lists are used, what library systems are used for their processing, RDA concerns, shelves and shelving processes, authority files and many other professional duties are beyond the scope of this lecture. As of now, the information revolves around "work in progress"; they are still in the writing stage. None of these books is published yet, but before they are finally published, let us ensure that the right information that supports our desired final and "forever" destination in timelessness is sent there. Editing is still possible now, but after the final editions are produced and published, it will be fatal to wish for a new or a favourable edition. Finally, let us apply the motto of the Library of Mistakes in

Edinburgh: "Mundum mutatu errore singillatim" ("Changing the world, one mistake at a time") by changing our personal world and lifestyle one mistake at a time. Therefore, in which of these books will we be or are we being registered? Let's pause a little and ask a question: why should we concern ourselves with information in the future and specifically forever? Knowing fully that we are ever looking for information and information is also looking for us, the possible answer to the question is embedded in the following quotation by Charles Kettering: "*We should be concerned about the future, because we will have to spend the rest of our lives there*".

4.0 MY CONTRIBUTIONS TO KNOWLEDGE

Madam Vice Chancellor, I hereby present some of my research output and consequently part of my contributions to knowledge in my area of research interest–information and women studies and indigenous knowledge all relating to information present falling between information past and information forever.

4.1 INFORMATION NEEDS, SOURCES USED AND INFORMATION-SEEKING BEHAVIOUR

4.1.1 Researching the Human Side of Information: Who needs it, Why they need it and How they seek it.

Information Needs: Information needs are the impetus that makes an information user get involved in information-seeking activity (Naumer and Fisher, 2017) and service-oriented disciplines must embark on identifying and meeting the needs of their users, they risk professional suicide (Nicholas and Herman, 2009) or extinction (Afzal, 2025).

The history of engineering is dated, with one of the earliest being the days of the Israelites when Uzzah made "in Jerusalem engines,

invented by cunning men …" (II Chronicles 26 v.15, The Holy Bible). **Abiolu (2019)** investigated the information needs and information sources used by engineers, spanning across various sectors in Nigeria during the second annual conference organised by the old School of Engineering and Engineering Technology, Federal University of Technology, Akure, Nigeria in 2016 using purposive sampling technique. Findings revealed that the information needs of engineers were primarily in the areas of research, current development and new designs using formal information sources such as books and journals (print and electronic formats), and informal sources including interpersonal communications such as face-to-face interactions with colleagues, emails, discussions, conferences, seminars and workshop attendance. Professional bodies, organisational libraries and electronic databases ranked low as popular methods. Organisational factors were their major constraints based on power outage, high cost of information materials, inadequate funding, poorly equipped laboratory/workshop and library. The study suggested that the government and engineering organisations, and their libraries, should provide Nigerian engineers with an enabling, contextual and facilitative working information environment.

Abiolu and Efosa (2012) surveyed the information needs of National Youth Service Corps (NYSC) members posted to Ondo State, Nigeria during the year 2008/2009. Five hundred members participated in the study before going for their primary postings. Results identified the leading areas of their information needs as health, current affairs, NYSC programmes and activities, recreation and leisure, politics, and environmental issues. The popular sources used to access information are radio, TV, friends and colleagues, neighbours, with NYSC officials being the least used. The greatest challenges to meeting their information needs are lack of an information facilities in the camp, and State Office, insufficient time due to very tight schedule and activities. The study recommended the rejuvenation of the public

library, with modern technologies, and mobile library services, and equipping the state headquarters of NYSC with information infrastructural environment.

Obinyan and **Ijatuyi (2003)** presented a collaborative approach inclined to meeting the information needs of the visually-impaired. Visual impairment encompasses both blindness and any level of vision loss that affects an individual's ability to complete everyday tasks (IrisCenter, n. d.). The authors discussed the emerging paradigm which should be seen and operationalised against the backdrop of systemic thinking prevalent in the past times. They expatiated that equity and justice would be a travesty of what libraries and librarians stand for if the visually-impaired within Nigerian society are not empowered in their choice of reading materials and career by forging a collaborative network among various interest groups in their information environment as shown in Figure 3.

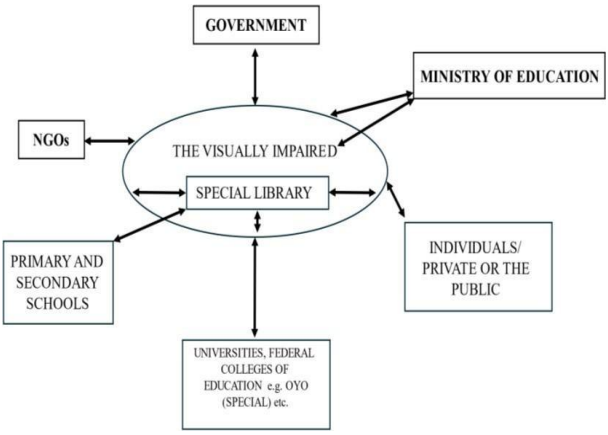


Figure 3: Conceptual Information Environment of the Visually impaired
Source: Obinyan and Ijatuyi (2003): A Collective approach

Obinyan and **Ijatuyi (2003)** identified factors militating against meaningful information provision and service delivery, to include

lack of sustained commitment, weak funding, inadequate translation services and generally paucity of Braille materials across the country. This calls for a sense of encouragement and provision from the Special Education Departments across the 36 states of Nigeria and the national Ministry taking the position of 'commanding height' in the establishment of viable availing network of collaborative networks among the willing nodes in the provision of reading materials for these special information users. Other suggestions are efficient capacity building of instructors, special librarians, technicians and provision of assistive technologies. The study concluded that meeting the information needs of the visually impaired in this Information Age era should be a collaboration among all the stakeholders.

Fish farming is one of the oldest industries in human history and one basic pivot for human health **(**Ijatuyi *et. al.*, 2016**)** needing information support (Richard *et. al.*, (2014). The significance of fish to human lies in being rich in animal protein, good for diabetes, obesity, and hypertension patients, rich in Omega-3 fatty acids, calcium and other minerals and ease of digestibility, a recommendation from American Heart Association of eating fish twice a week, source of income to over 10million fish farmers, and having 20,000 species which are more than any subphylum *Vertebrata* (Cho, 2016, Torrens, 2016, World Fish Center, 2005, and FAO, 1997). Ijatuyi *et. al.*, (2016) investigated the information needs of various fish farmers, that is, information for what purposes, obtained through what channels and possible constraints encountered in fish farming activities**.** This research was administered on respondents in Ife-Central Local Government area in Osun State using a survey research design with a multistage sampling technique. Simple random sampling technique was employed to select a sample size of 80 out of 160 fish farmers registered by the zonal office of Osun State Agriculture Development Project with the aid of a questionnaire. The greatest farmed fish was catfish (60%); monoculture (43%) was the predominant practice using locally formulated feed. The topmost information need of the fish farmers were the construction of modern pond (73.8%) and feed formulation (71.3%). Critical information sources to the farmers, were radio (91.3%), mobile phones (86.3%), friends and relatives (77.5%), professional colleagues (76.3%),

cooperative society (75%), commercial dealers (74%) and feed millers (74%) with, extension agents, the supposed link between governments and the local farmers ranking least used source creating an information gap between the two groups. The study recommended active information dissemination through appropriate means by the extension agents including provision of the necessary infrastructure that can boost fish farming in Osun State and, in other states of Nigeria in order to close the information gap. Public libraries must be involved in active provision of agricultural information as well.

Abiolu (2015) examined the information needs of retirees who often are not given much attention. Recently, the Pension Office of this University called for some information and processes from, and for prospective retirees covering 2027 to 2029, buttressing the relevance of this type of research. Retirement is a known establishment of the 19th century European world and a follow-up of industrialisation (Omoyeni, 1996). It is a period of time when one gives up one's work, position or business either the private or public sector of the economy as contained in the employment regulation of any country (Omoyeni, 1996), an official and formal ending of a work life (Oniye, 2001), cessation of a full-time employment **(Abiolu, 2015)**, and transition from work to out of the labour force at the end of the working career (Ours, 2001). The literature identified three types of retirement namely, statutory retirement at the retirement age of organisational policies; early retirement referring to retiring earlier than the statutory age; and indirect retirement meaning retiring through an intermediate stage of one's employment due to sickness or disability or some forced condition, although some people may still engage in some form of gainful employment or another thereafter (Ours, 2001). At the extreme cases retirement can simply mean leaving the labour market to never return to work. Survey design was used to carry out the research through random sampling, involving 150 retirees from Ekiti and Ondo States during their respective monthly meetings. Research findings revealed that majority (78%) were male, 65% had attended pre-retirement seminars while 55.1% of the participants retired between 56 and 60 years of age, only 25% of them had first degree and higher. Results showed further that the study participants needed information mainly on their physical environment, investment and finance, and

volunteer service (which is an uncommon phenomenon in Nigeria), but leisure and education (12.0%) is least needed area. Their preferred information channels though informal include TV (98.2%), radio (93.7%), face-to-face contact (82.1%), and family (81.5%), but the library is the least used (12.5%). Major constraints to participants in meeting their information needs include little attention given to retirees (70%), and inadequate financial income (63.8%). **Abiolu's (2015)** conclusion showed the need for an overhaul of retirement policies in Nigeria to give better treatment to retirees' financial and social statuses. The study suggested that public libraries must be active in the provision of information resources and service delivery to make retirees keep active lives, and advocated for more research on retirees and retirement, especially in areas relating to ICT and government policies.

Abiolu (2022) studied the information needs and information-seeking behaviour (ISB) of widows. A widow is a woman whose husband is lost to the hands of death. Widowhood is a major hard stressor in life-course (Moss and Moss, 2015), "for-ever-changed-life event" (Couto *et. al.,* 2025), ranking first in the Geriatric Social Readjustment Rating Scale (GSRRS) (Zhang and Yan, 2024), tragedy (Feintuch, 2017). While widowhood can occur due to accidents, sickness or illness, and old age among many factors, its negative effects include lack of financial resources or extreme poverty, increased depression, anxiety, decreased psychological well-being (Zhang and Yan, 2024), health risks or problems, social challenges, discrimination, lack of support from in-laws, conflicts, social rejection, intrusions by relatives (Kathenya, 2022), and harmful traditional practices commonly experienced by many Nigerian widows (Lehmann, 2026). According to a Yoruba proverb, *iku oko ni osi obinrin* (spousal death is the poverty of a widow). Widowhood is altogether unavoidable because the moment one says "I do" or becomes married, one signs onto becoming a widow someday. Therefore, widowhood is a life event waiting to happen. **Abiolu (2022)** studied the information needs, sources used and ISB of 109 widows from Ekiti and Ondo States, Nigeria using purposive and snowball sampling techniques, Nigeria, with questionnaire as instrument. Findings showed that study participants were economically and educationally weak with their

information needs hinging mainly on finance, children's education and training, counselling, family and personal health (Table 1).

Table 1: Widows' information needs

Information needs	Percentage (%)	Rank
Income maintenance	62.0	1
Children education and training	55.0	2
Health	48.5	3
Counselling	44.3	4
Widows' support	34.9	5
Religion	28.0	6
Legal issues relating to widows' rights	27.6	7
General information (safety, crime, news and current affairs)	23.3	8

While these widows access information through radio (88%), children (78%), phone (77%), and television (65%), certain factors that motivate their use of these sources are displayed in Table 2.

Table 2: Factors motivating use of information sources

Factors	Responses (%) *	Rank
Ease of finding information	80	1
Convenience	55	2
Relevance	53	3
Familiarity	53	4
Nearness	52	5
Inexpensiveness/cheapness	46	6
Availability	41	7
Right format	37	8
Reliability	33	9
Detailed	26	10
Friendliness	23	11
Brevity	17	12
Least time spent in finding needed Information	17	12

*****Multiple responses were allowed

Zipf's Law–a behavioural theory of the Principle of Least Effort applies here and, in many disciplines, with impactful applications and implications in the LIS discipline where users prioritise accessible sources that give them low resistance less difficult searches that make the searcher settle for "good-enough results to sidetrack cognitive or physical strain" (Grokipedia, 2026) and still help meet their own needs and achieve certain objectives in a fulfilling manner. Though challenges such as finance, weak education, and unemployment impede their information seeking behaviour, the study suggested that information workers should design relevant information systems for widows with government organs and widows' support groups giving economic empowerment for widows, and making education of girl child a priority.

4.2 INFORMATION: RESOURCES AND SERVICES

4.2.1 Libraries as an Infrstructure for Development, Information Access and Informed-Citizenship

Libraries are constituents of "epochal structures" in human societies, and they occupy significant nuclear spaces in academic endeavours across all disciplines (**Ijatuyi** and Adebayo, 2006). Fola-Adebayo *et. al.* (2006), explored the organisation of knowledge and the various types of information resources and services available in the Federal University of Technology, Akure (FUTA) Library, (now Albert Ilemobade Library) for research, teaching and learning purposes for the academic community. Users' easy navigation and unfettered access to information and motivation of maximum use of all information resources formed the thrust of this work. The enhancement of research, teaching, and learning is made more intelligible by the book.

Olofinsawe and **Ijatuyi (2005)** developed a ready reference tool that

enables users to locate the particular information source being sought for, or drop it if found not useful, such that they can focus on other productive library activities. These detailed bibliographic abstracts of postgraduate theses from 1991 to 2000 (excluding postgraduate diploma dissertations) span a decade of academic output. This literature search tool serves to save users' time and help implement one of Ranganathan's five Laws of Librarianship, that is, "Save the Time of the Reader."

Information is a fundamental driver of national development, influencing economic growth, human capital development, entrepreneurship, trade and national security. **Abiolu (2013a)** explored the role of information in national development and noted that access to information, supported by effective policies, technological advances, and collaboration between governments and their citizens, is a requirement for national progress. Mensah (2010) quoting John Samuel, wrote that:

> "In itself, the issue of access to information does not have a national constituency. What is required is to connect the issue with people's daily pressing concerns and ensure that people see their right to information in the broadest context of development."

Information therefore becomes meaningful when linked to people's everyday needs. A high literacy rate reflects an informed population, while knowledge and information are crucial for developing human capital. Libraries play an important role in this process by providing access to knowledge and supporting self-education as exemplified by Thomas Edison who was greatly influenced by good books from his father's library as he gave himself to self-education and later became an inventor and businessman, patenting inventions to the tune of millions of dollars, Information is also vital for national security,

enabling timely responses to threats, through effective intelligence and information systems. Also, governments can promote development by ensuring citizens have access to current information through digital technologies and ICT infrastructure. The study concludes that a nation's strength is closely tied to its information strength. Therefore, sustained investment in information infrastructure, libraries, education and informed decision-making is crucial for national development and global competitiveness.

Abiolu (2013b) carried out a quantitative, bibliometric analysis of the journal, *Studies in Family Planning (2003 to 2009),* focusing on the "science of science," measuring the patterns of scholarly communication within medical field. The study found that researchers predominantly focused on family planning and sexual/reproductive health, with survey designs as the most commonly used methodological approach. Collaboration among the authors was prevalent with majority being affiliated to universities suggesting a multidisciplinary or team-based approach to reproductive health issues, with the most cited sources as journals reinforcing journals' role in a self-referential academic ecosystem. It is paradoxical to note that developed countries particularly USA was predominantly the domiciled country of authors in the field and most of the articles focused developing countries. This bibliometric analysis is significant for identifying research gaps as "leaning" toward specific topics, imbalance in the geopolitical critique, and underrepresented aspects of family planning. **Abiolu (2013b)** recommended welcoming comparative medical research in relation to authors, articles and research. For librarians and researchers, this study identified, as its resource mapping, the most influential communication channels and citation patterns, helping institutions prioritise which resources to fund and archive in the field of medical information.

Abiolu and Ayo-Olafare (2016) studied social networking platforms as important tools for information services, highlighting their role in transforming information-sharing from a one-way process into an interactive, multi-directional exchange. The study identified Twitter (X), LinkedIn, YouTube, and Google, as valuable resources for information professionals. Facebook was described as highly effective due to its large user base and ability to support professional library services, while Twitter's (X), speed and brevity make it suitable for the rapid dissemination of information. The authors emphasised that social media can help libraries bridge the gap between information providers and users by increasing visibility, offering reference support, encouraging interaction, and strengthening community engagement. These platforms enable libraries to connect with users in digital spaces, facilitate meaningful interactions, and foster collaboration among individuals of common interests. The study argued that integrating of social media into professional workflows is essential for maintaining relevance in digital spaces. The study concluded that information services must actively engage on social media platforms, as these are where most users seek and consume information, in other words, information services must go where the "users' eyes" are, to remain relevant. In this way, libraries can transform from physical institutions into dynamic information networks.

AI is reshaping intellectual, social and professional landscapes — including university libraries. **Abiolu** and Akinyemi (2025) explored staff training and the use of AI in university libraries using a census survey design, with a study population of 91 librarians working in nine selected university libraries in Ondo, Osun, and Ekiti States, southwestern Nigeria using online Google Forms questionnaire for data collection. Descriptive statistics and Pearson Product-Moment Correlation Analysis were used for data analysis. Findings revealed that AI training on fundamentals, Programming and Coding,

evaluation of AI, Conferences and Workshops on AI, and ethical considerations of AI were required for artificial intelligence in university libraries. The study also found a significant relationship between staff training and AI use (Pearson Product-Moment Correlation Coefficient $r = 0.887$, $p<0.05$) in university libraries in southwestern Nigeria. The study concluded that training on AI is vital for librarians to effectively and efficiently deploy the technology in university library resources and service delivery, thereby placing the library on the digital map, enhancing visibility, meeting users' information needs, and sustaining their interest amid technological dynamics. **Abiolu** and Akinyemi (2025) recommended that technological transformation requires sustained human capacity development by the university library management by organising training for staff, and collaboration with AI experts to foster staff's expertise.

In a political establishment where the electoral public appears to have been sold down the river, better education for them is one of the suggested panaceas to pursue (Mauk, 2021). Where education exists, a library exists hand in hand. The words of Franklin D. Roosevelt that, "Libraries are … essential to the functioning of a democratic society … libraries are the great symbols of the freedom of the mind," support the fact that libraries are imperative for democratic governance. **Ijatuyi** and Adebayo (2008) examined the roles of public libraries in harnessing information resources and services in a democratic culture, emphasising that public libraries could engage in civic information dissemination, library outreach and talks, and the creation of posters of local relevance and participatory activities in political processes. These authors argued for the need for formal civic information and education, involving teachers and education controllers, to gear up the programme from the lower levels of educational ladder to the highest, and suggested the inclusion of civic education in the school curriculum. Education could enhance Nigeria's political

landscape, in the spirit of the 19th-century German Social Democrats' motto, “buidung macht frei” (*Education sets you free*). One question arising from this is: Does Nigeria possess the education that can set her free? Why and why not? If not, when will education set both the legislators and the electorates free? Understanding these questions will remain with us for some time, and the insights gathered from them will be valuable.

In today’s topsy-turvy economy and war-torn world, “Rethinking information services in the 21st century: A Nigerian perspective” positions national security and socio-economic stability as the primary drivers for modernising information and its services (**Abiolu** and Okere, 2009). These authors critically looked at the need to rethink information services in response to economic instability, conflict, and security challenges in Nigeria. The study looked at libraries as strategic institutions that can contribute to peace-building, national integration, and conflict resolution through the effective management and dissemination of information processes. Going beyond the traditional understanding of libraries as mere repositories of books, the authors argued that libraries should serve as active centres for civic engagement, security awareness, and social cohesion. The research adopted an interdisciplinary approach by linking LIS with Peace and Conflict Studies, highlighting the role of information in promoting stability and development. The study further emphasised that economic growth and investment are difficult to achieve in environments prone to violence, making information-driven peace a prerequisite for national development. By providing accurate and unbiased information, libraries can help reduce misinformation, address social divisions, and enhance mutual understanding among citizens. The authors concluded that investment in libraries should be seen as a security and development strategy, as a well-informed society is generally more stable, peaceful, and prosperous aligning with Sustainable Development Goal 16, which focuses on promotion

of peace, justice and strong institutions.

Abiolu (2017) surveyed mentoring among Nigerian information professionals from 80 libraries across Nigeria's geopolitical zones during the 35th annual Cataloguing, Classification and Indexing Section of the Nigerian Library Association Conference held in 2015 in Owerri. Mentoring "involves a number of communication interactions over a period of time entailing the interchanging and sharing of knowledge between individuals in an association with a view of fostering growth and development, and more often than not, this association exists in dyads" (Riforgiate *et. al.*, 2025) in relation to professional growth and psychosocial balance. Study findings indicated that mentoring was more common among information professionals in academic libraries than in other categories, focusing on orientation programmes for newly employed staff, sharing professional experiences, and providing support for mentees' career needs. Findings also revealed that most libraries lacked evaluation measures for mentoring programmes with beneficial returns among those involved. Challenges to effective monitoring include mismatch mentee-mentor relationship, lack of mentoring expertise, and inadequate time and resources. Riforgiate *et. al.* (2025) quoted Clutterbuchin's acronym for the word 'mentor' as: **M**anage the Relationship, **E**ncourage the Protégé, **N**urture the Protégé, **T**each the Protégé, **O**ffer mutual Respect, and **R**espond to the Protégé's Needs. In the light of all the above, **Abiolu (2017)** suggested that mentoring should be accorded with adequate and relevant human expertise, finance, formal activities, provision of alternative mentors in case an already-existing mentoring relationship breaks down, and issues relating to mentoring should enjoy an incorporation into library policy to give it the weight it demands with meaningful goals that are **s**pecific, **m**easurable, **a**chievable, **r**elevant and **t**ime-bound or **t**ime-based **(SMART)**. Question? How have we been handling our mentees, is it in a negative or positive manner?

Information literacy (IL) is the ability to "recognise when information is needed, and having the ability to locate, evaluate and use effectively the needed information", (Academic and Research Libraries (ARL)" is beneficial to people and organisations and all users in accessing information (University Library, 2025), (Figure 4).



Figure 4: Importance of Information Literacy
Source: University Library (2025). Getting started: Information Literacy

Because evaluation of academic programmes is an integral aspect of pedagogical designs, **Abiolu** and Okere (2016) assessed information literacy among 600 first-year undergraduates at the Federal University of Technology, Akure (FUTA), Nigeria, during the 2012/2013 academic session. The study participants were drawn from ten departments of six schools (faculties) that offered undergraduate programmes, using a stratified random sampling technique and a structured questionnaire. Until the 2007/2008 session, the course was a second-semester course, coded GNS 104 and titled Information Retrieval. Following deliberations, reflections, and academic planning regarding timing and relevance to students' needs, changes to its title and timing, a major revision of the course content incorporating new ICT components were clearly needed. The reasons for measuring IL competencies include establishing a baseline of skill around which an IL programme might be built, that is, benchmarking, assessing the

effectiveness of particular library instruction and determining the impact of library instruction programmes on students' information skills and academic success and generating data with which to communicate with faculty (Maughan, 2001). Findings from the study revealed that the students generally approved the course timing, content, and delivery, although concerns were raised about tutorial sessions and insufficient ICT coverage. Some respondents suggested extending the course into a later stage of the academic pursuit in the university. Major challenges affecting learning included public address system (82%), good writing boards (62%) and overcrowded lecture facilities (62%), (though the past and present University Management have improved on many of these concerns, this gesture should be maintained as students' population growth and academic programmes are not static). The study concluded that IL programmes should be regularly evaluated and updated to reflect changing information practices and technological advances. Continuous investment in learning infrastructure was also a recommendation to support effective teaching and students' success.

Abiolu (2014) surveyed the "Trends in the reading habits among secondary schools in southwestern Nigerian states" according to the different types of schools, covering 300 students each, from Ondo and Osun States. Using co-educational, boys-only and girls-only schools comprising 100 participants from each school. Study findings showed that though reading habits followed a falling trend, constant readers based on ALA categorisation of readers were from co-educational schools. Top reasons for reading include examination and studying; reading sources were mostly from personal collection; and reading constraints were power outages and greater time spent on social media. The study suggested that supportive personalities parents, school management, the teachers and their libraries should play active roles in students' reading programmes by reintroducing these into the school curriculum; equipping libraries with physical and electronic

books and better time-space than before. One person once quipped that reading is about inquisitiveness, mental vision, quietness and leisure. Should we read at all in this digital age? When last did we encourage our children/wards to read a book? Have read any recently whether–physical or electronic? *Reading boosts memory–the more we use our memory, the more we preserve it. To improve your memory, you need to keep reading. Reading will keep stimulating your brain. As food is to the body, so is learning to the soul – Wager Gattaz.*

4.3 ENVIRONMENTAL INFORMATION, INFORMATION PROFESSIONALS, WOMEN, YOUTH AND SUSTAINABLE DEVELOPMENT

4.3.1 Exploring the Relationship between Information, Environmental Action, Gender, Entrepreneurship, Peace-Culture, and Sustainable Development

In nature, there are neither rewards nor punishments–there are consequences – Robert G. Ingersoll

From local to national and global news lines, the information filtering down to world populations consists of grim stories of environmental challenges, evidencing that all is not well with the planet Earth. In line with the SDGs global vision of "leaving no one behind", **Abiolu** and Okere (2011 and 2012) examined environmental literacy and the emerging roles of information professionals in developing economies and in threatened environments. They emphasised that environmental literacy involves understanding environmental issues, awareness of the impacts of human activities on the environment, and possessing the skills to seek, evaluate, and use environmental information to inform decision-making. Information professionals (such as librarians and information scientists) are positioned as crucial facilitators and key change agents in promoting environmental information literacy. Thus, their roles include advocating, curating, organising, providing access to and disseminating environmental information services to the public, serving as intermediaries between scientific knowledge and

public understanding, collaborating with environmental organisations, researchers, and policymakers, and being an education and curriculum integrator. Other roles are organising environmental awareness campaigns, developing specialised collections on environmental topics, and partnering with local NGOs to disseminate critical information during environmental crises. The study pinpointed some challenges as limited access to information resources, inadequate infrastructure, and a lack of trained personnel as hinderances to the promotion of environmental information literacy in developing economies and threatened environments. This research proposed that information professionals can support environmental information literacy in developing economies and recommended capacity building, resource development, and community engagement as ways to bridge the gap between theory and practice.

What we do to nature, we do to ourselves. There is no insular divide between the environment and our bodies. Environmental hazards are also health hazards – Vandana Shiva.

Ijatuyi (2005a) studied a critical intersection among gender, information, and environmental sustainability focusing on the female inhabitants in Ondo State, Nigeria, a demographic (Figure 5), that

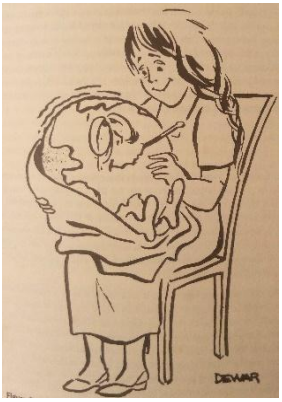


Figure 5: Woman nurturing the environment
Source: Buckingham-Hatfield, (2000).

often plays a primary role in household resource and environmental management, and waste disposal, yet frequently facing barriers in accessing formal environmental information and education. The significance of the research is in identifying the specific socio-economic determinants that dictate how women perceive and interact with their physical environment. The researcher employed a quantitative approach, with a sample comprising 1,130 women from eight selected Local Government Areas (LGAs) out of the eighteen in Ondo State, through multistage sampling, using a questionnaire as the instrument featuring both closed- and open-ended questions with the instrument having a high internal consistency of Cronbach's alpha of 0.78. The study utilised both descriptive and inferential statistics to interpret the data with three primary independent variables: location, education, and income, which demonstrate a joint prediction. The regression analysis revealed that the trio jointly and significantly predicted environmental information awareness ($P<.05$), suggesting that environmental consciousness is the result of a combination of where a woman lives, her level of formal schooling, and her economic status. Regarding individual impact, the study highlighted that these factors are "significant predictors" ($F(3, 1126)$) implying that education can enhance the ability to decode and utilise environmental information; income may provide the means to adopt better environmental management practices (such as paying for private waste collection), and location determines the availability of information infrastructure and the specific environmental challenges (urban versus rural) the women face. To improve the management of the physical environment in Nigeria, interventions must be tailored to women's socio-economic realities. Promoting environmental information awareness cannot be a "one-size-fits-all" approach but rather strategies that account for educational gaps and economic constraints in specific geographical locations, and provision of sustainable environmental information infrastructure.

Ijatuyi's (2004) study is situated within the broader discourse of gender and environmental sustainability, emphasising the historically limited attention given to gender issues in development policy in Nigeria. The study assessed the level of interaction between grassroots women and environmental organisations, their communication

channels, and the institutional and structural challenges affecting these interactions. Study findings indicated that, respondents primarily accessed environmental information through radio and television; however, environmental organisations relied more on formal educational and academic channels for information dissemination, creating a disconnect in communication strategies. Also, interaction between women and environmental organisations existed but was limited and not optimally effective, clearly pointing to a gap between organisational outreach strategies and the realities of grassroots communication preferences. These findings highlighted a mismatch between institutional communication frameworks and grassroots realities, reinforcing the need for participatory and inclusive approaches in environmental governance and showed respondents' potential was underutilised due to systemic inefficiencies. The study concluded that sustainable environmental management in Ondo State (and possibly in similar contexts) depends significantly on improving the quality of interactions between grassroots women and environmental organisations. Bridging communication gaps and addressing institutional weaknesses are essential for achieving meaningful participation and long-term sustainability outcomes by adopting context-appropriate communication strategies and information dissemination infrastructure (for example, leveraging relevant mass media effectively), improving collaboration between organisations and communities, strengthening institutional capacity through funding, research, and data systems, and enhancing grassroots inclusion in environmental decision-making processes.

Environmental Knowledge and Youth engagement

Over the years, events and activities have evolved to align with the SDGs, therefore, in the bid to involve everyone as a collective responsibility in environmental health and information, **Abiolu (2018a)** conducted a test to 350 gainfully employed Nigerian youth during a Baptist Convention held in Akure, Nigeria in 2015, to explore their environmental knowledge and behaviour, using a convenience sampling technique. Questions on different areas of the environment were asked and marked. SPSS was used for the analysis

as appropriate. Results revealed that respondents had a general environmental knowledge (68%), which they accessed mainly from electronic media sources with the most serious environmental problems as noise pollution and population growth, displaying resulting means of 2.58 and 2.57 respectively. Significant differences in their environmental knowledge were related to subject background ($t=7.976$; $p<0.05$) and gender ($t=5.612$; $p<0.05$), but not to the type of school attended ($F=1.365$; $p>0.05$). Generally, respondents showed low participation in environmental programmes, while their environmental behaviour was fair, but it did not reflect their level of environmental knowledge. The study suggested increasing environmental information/knowledge and positive behaviour of Nigerian youth through the activation of environmental education in schools with active library participation taking cognisance of the sources by which, they obtain information. By so doing, libraries can support SDG 4, strengthen the Green Information Initiative of IFLA, and make the environment healthier even Federal University of Technology, Akure, Nigeria, (FUTA) environment. Can FUTA students join in this?

Ijatuyi's (2009) research investigated the nexus between environmental information literacy and active environmental management among women in Ondo State, Nigeria. Utilising a quantitative methodology, the author administered questionnaires to a substantial sample size of 1,130 women across both rural and urban settings, all of whom were over the age of 19. The study explored three primary dimensions: the level of environmental awareness, the practical application (use) of environmental information, and the specific constraints hindering effective environmental management. The key findings indicated a high awareness versus low implementation, a critical paradox: while women possessed a "high level of environmental awareness," there was a significant gap in translating this knowledge into practice. Their actual use of environmental information did not match the depth of their awareness. Also, the research found that women were active in engagement roles, revealing that despite the implementation gap, women were heavily involved in various environmental capacities: civic (82.4%), physical (76.9%), and social (75.27%). However, some

systemic barriers were observed during the research, relating to "detrimental problems" that impeded these women's environmental capacities, suggesting that structural or resource-based constraints outweigh intellectual awareness. **Ijatuyi (2009)** shows four domains of significance: firstly, the gendered perspective on environmental stewardship, which highlights women as central stakeholders in environmental sustainability within the Nigerian context, moving beyond viewing women as passive victims of environmental degradation instead seeing them as active managers whose potential is currently underutilised. Secondly, its most scholarly contribution is the identification of the "Information-Action Gap". In environmental psychology and information science, it is often assumed that increased awareness leads directly to better practices. **Ijatuyi's (2009)** findings challenged this by showing that awareness is a necessary but insufficient condition for environmental management. This suggests that policy interventions must focus on removing socioeconomic and physical barriers rather than just increasing "awareness campaigns." Thirdly, by quantifying participation in civic, physical, and social environmental roles, the study provides a roadmap for where government and NGOs can best support women, and, suggesting that women were already organised in community structures that could be leveraged for larger-scale environmental projects, such as waste management or reforestation. Lastly, geographical and demographic relevance show that by focusing on both rural and urban women in Ondo State, the research provided a localised yet comprehensive snapshot of the Nigerian environmental landscape, underscoring the importance of tailored information dissemination that accounts for the different constraints faced by urban dwellers versus rural inhabitants. Conclusively, the research serves as a critical call to action for policymakers to bridge the gap between "knowing" and "doing," suggesting that for Nigeria to achieve sustainable environmental management, it must empower women with information, its tools, resources, and social support required to apply that information effectively.

Ijatuyi *et. al.*, (2022) conducted a study on the factors that influenced female entrepreneurship and development among rural women farmers in South Africa's North West Province. They grounded the

study in the broader discourse of gender inequality, rural development, and agricultural entrepreneurship, emphasising the critical role of women in poverty alleviation, food security, and economic growth. The research aimed to identify key socioeconomic determinants of female entrepreneurial development, evaluate the impact of the Awards Incentives and Competition (AIC) programme on women farmers, and examine constraints that limit women's participation in development initiatives. A quantitative research design was employed, using a structured questionnaire administered to 156 randomly selected female farmers participating in the AIC programme. Data were analysed using descriptive statistics (to profile respondents and participation levels) and Probit regression analysis (to identify the determinants of entrepreneurial development). Study findings revealed that education, access to extension services, and job creation were significant positive determinants of female entrepreneurial development and participation in the AIC programme, enhancing women's economic capacity through improved farming practices, income generation, and employment creation. The major constraints identified in the study include limited land ownership, low-income levels, inadequate access to credit, inadequate infrastructure, gender-based inequalities, and socio-cultural barriers, small-scale farm ownership, low levels of education, and rely heavily on extension agents for agricultural information. The findings underscore that female empowerment in agriculture is both an economic and social imperative. Women entrepreneurs contribute significantly to household welfare, community development, and food security. However, structural inequalities—particularly in access to resources like capital, land, and institutional support continue to hinder their full participation in economic activities. The study concluded that enhancing female development requires increased investment in education and training; improved access to land, credit, and infrastructure; strengthening extension services and institutional support systems; and continued promotion of programmes such as AIC to incentivize participation.

Akanbi and **Abiolu (2017)** studied education and women's power in maintaining peace culture in Nigeria; the central argument of their work is that while women have historically held the role of "peace

makers" in traditional African societies, the complexity of modern conflict necessitates sound and formal education to empower them effectively. The study's significance lies in its departure from seeing women merely as victims of war and positioning them as essential pedagogical and social agents for national stability. The authors' key points hammered on some pillars namely: women's historical and cultural roles at home and in the society; the inadequacy of traditional methods of dispute resolution in the face of modern-day scope of conflicts and wars at all levels of landscapes; the potential of educated and well-informed women in peace-making at formal strata beginning from them as primary "peace educators", and going further to instill this capacity in future generations from the point of view of their role as teachers, trainers, legal advocates of policy and social justice at the different arms of government. Formal education allows women to professionalise their influence, taking them to public education systems. Akanbi, Jekayinfa and **Abiolu (2017)** concluded that Nigeria needs deliberate institutional shift to foster a sustainable "culture of peace," and recommended government intervention to strengthen mechanisms that broaden the understanding of women's roles in peace-building, access to quality and sound education, as strategies for equity and national security, and increased public awareness on positioning education acts as a "power multiplier" for women; by combining traditional peace-making instincts with modern intellectual tools, women could become the most viable catalysts for ending the cycle of conflicts in Nigeria and thereby contributing to SDG 16.

4.4 INDIGENOUS KNOWLEDGE (IK) THEMES

4.4.1 IK as a Living Information System: The Need for Salvaging it

Ijatuyi (2005b) examined the potentials and challenges of indigenous knowledge (IK), which refers to context-specific systems, practices, and beliefs transmitted from generation to generation within local communities, (Ijatuyi**, 2005b**; Yip and Chakma, 2024). It is culturally embedded, adaptive, and collectively owned, encompassing agriculture, medicine, communication, and environmental management, social organisation (Mundy and Crompton, 1995). IK

relies on informal, oral, and social processes to transmit practical, cultural and spiritual wisdom of its people. In Africa and Nigeria, indigenous communication channels offer important problem-solving strategies and facilitate knowledge exchange across genders (Mabawonku, 2005). Failing to recognise IK often leads to sub-optimal outcomes in rural innovation diffusion projects. On the other hand, integrating IK promotes participatory decision-making among researchers, extension workers, and community members. It guarantees development projects align with end-user needs using cost-effective, locally rooted practices. In agriculture, IK guides shifting cultivation and soil assessment based on colour, texture and water retention, and also extends to pastoral knowledge regarding livestock management and breeding characteristics (Atte, 1989). IK supports traditional food preservation (Chambers, 1983) and seasonal weather prediction for farming. Cultural beliefs, including sacred or forbidden forests, serve to protect biodiversity. Indigenous construction relies on specialised local knowledge of soil types for brickmaking, plastering, and concreting. Traditional medicine utilises plant components, a practice now gaining global attention. Elders also use IK to teach moral precepts, hygiene, and structured conflict-resolution mechanisms. These governance structures resolve disputes through leaders before escalating to overall monarchs. Economically, IK derives local crafts and tools, including pottery, carvings, cutlasses, and hunting equipment. Despite its value, IK is challenged by oral reliance, knowledge erosion, policy neglect, and marginalisation (**Ijatuyi, 2005b**). Pressures from global quarters, modern technology, and the lack of organised national programmes further threaten its survival. To salvage IK, systematic documentation and preservation strategies are urgently needed. IK must be integrated into formal education and scientific research frameworks. Government policy, support and dedicated funding are essential for validating its contemporary relevance. Also, collaborations among researchers and local communities can foster preservation and application of the knowledge. Sustaining IK requires institutional recognition cum strategic modern integration. Ignoring IK risks irreversible cultural loss and undermines long-term sustainable development efforts. Ultimately, framing IK as both a knowledge

system and a development tool advocates for knowledge pluralism a feature which can advance SDGs 1,2, and 12 balancing traditions with modernity to enhance resilient, self-sustaining local communities. Respecting indigenous systems ensures that valuable practical wisdom enriches future generations.

Worldwide, music and language are components of any given society and are strong vehicles for the passing or exchange of information in society, including the Yoruba people (Adedeji, 2017) spread in many parts of the world, including the Republic of Benin, Togo, Cuba, Brazil and some Caribbean countries (Abimbola 2006, and Oyeniyi 2015) with migratory and cosmogonical narratives being the most popular explanations for their migration. Abiolu *et. al.*, (2022) in *"Exploring the value systems embedded in indigenous Yoruba music genres and Yoruba nursery rhymes,"* examined the sociocultural significance of traditional Yoruba music as a vehicle for transmitting values, identity, and cultural knowledge. They situated music and language as universal elements of human societies, emphasising their dual roles in communication and entertainment, particularly within the Yoruba context of Nigeria being deeply integrated into everyday life and ceremonial practices, including religious festivals, royal events, marriages, and naming ceremonies. Beyond entertainment, Yoruba music functions as an educational and moral framework through which societal norms, ethics, and collective identity are reinforced. Indigenous genres—such as apala, juju, fuji, and others—were highlighted as expressions of the Yoruba worldview, reflecting philosophical beliefs, historical narratives, and communal values. A central focus of this work is the analysis of selected songs and nursery rhymes, which are treated as cultural texts embedded with moral instruction and social commentary. These musical forms are shown to play a critical role in early childhood socialisation, teaching values such as respect, discipline, cooperation, and communal responsibility. Nursery rhymes, in particular, are portrayed as foundational tools for cognitive and moral development, encoding cultural knowledge in accessible and memorable formats. The authors further argued that indigenous Yoruba music serves as a mechanism for cultural preservation amid globalisation and modernisation. By maintaining linguistic elements, oral traditions, and indigenous knowledge

systems, these musical practices contribute to sustaining cultural continuity and identity. Gwantu (2026) reiterated that Nigeria risks "raising a fractured identity" for upcoming youths if policies eroding indigenous languages continue to be sustained. At the same time, the adaptability of Yoruba music across evolving genres demonstrates its resilience and relevance in contemporary society. Concluding their work, Abiolu *et. al.*, (2022) positioned Yoruba indigenous music and nursery rhymes as vital cultural resources that encapsulate and transmit value systems, foster social cohesion, and preserve cultural heritage.

In another dimension, Abiolu *et. al.*, (2023) studied the place of indigenous protest songs as a conduit for social mobilisation in South Africa, using triangulation of inferential experiences, reflections, and a literature scoping review. They opined that music carries with it education, resistance, and activism, apart from entertainment. This work showed the uniqueness of protest songs in diverse milieus in African countries, including the 2011 Egyptian revolution (Valassoupoulos and Mostafa, 2014), the struggle for Biafra emancipation (in Nigeria) (Atata and Omobowale, 2018), and as a medium against apartheid and, at present, a means of expression for the oppressed and marginalised in South Africa. Though protest songs have metamorphosed into music for awareness and indigenous conscientisation in South Africa, Abiolu *et. al.*, (2023) noted that employing protest songs in social movement formations and mass mobilisation can be effective in tackling social injustices in the country, and useful to exert pressure as a less-violent tool as opposed to violent protests capable of destruction and vandalism. Protest songs can also influence the wielding of power and social and political discourses, promoting social awareness and the entrenchment of human rights in a democratic society and still achieve the desired goal.

Abiolu (2018b) investigated the ethnobotanical knowledge of traditional healers in southwestern Nigeria, with a dual focus on

identifying medicinal plant species and their therapeutic uses, and traditional healers' perceptions of documenting and digitising their indigenous medical knowledge. This research addressed the critical issue of knowledge loss from oral transmission, emphasising the urgency of preservation through modern information technologies. The study adopted a mixed-methods approach using a multistage sampling technique involving 18 traditional healers from Ondo State, Nigeria, selected from two Local Government Areas of Akure South and Ifedore. Data collection was through structured interviews conducted in Yoruba; although the instrument was originally in English, a native-language version was developed to facilitate data collection. The interview elicited information on the demographics of respondents, plant names and disease treatment, how the traditional healers acquired the knowledge of their profession, their perceived computer knowledge, perceptions of the digitisation of indigenous healing procedures and processes, issues of biopiracy, and constraints interviewees faced in their profession. Since most of the plants cited by study interviewees were in indigenous names, botanical sources (Odugbemi and Akinsulire 2006a; Odugbemi and Akinsulire, 2006b; and Aigbokan, 2014) were used to identify the cited plants. Data were analysed using the SPSS package, where appropriate, for frequencies, percentages, and fidelity levels (FL) to assess the significance of plant usage. Ninety-six plant species across 44 families and 82 genera were identified, with the most represented families being Asteraceae, Malvaceae, Euphorbiaceae, Poaceae, and Fabaceae. The traditional healers used plants to treat a wide range of ailments, including malaria, hypertension, diabetes, gastrointestinal disorders, reproductive and skin conditions (Table 4).

Table 4: Common names and species of medicinal plants and the diseases treatment cited by at least two interviewees

Common names	Species	Disease treatment
Mistletoe	*Phragmathera capitata*	Heart problems, Insomnia, Diabetes, Cancer, Anaemia
Bitter leaf	*Vernonia amygdalina*	Diabetes, High blood pressure, Stomach disorder, Skin blemishes, Rashes, Nervous system problem, Typhoid fever, Malaria fever, Sleeplessness
Scent leaf (Tea bush)	*Ocimum gratissimum*	Diarrhoea, Dysentery, Gynaecological problem, Pile, Stomach disorder, Backache, Haemorrhoids
Pawpaw	*Carica papaya*	Pile, Infection, Yellow fever, Typhoid fever
Coconut	*Cocos nucifera*	Internal heat, Pile, Typhoid fever, Skin rashes, Diabetes, Detoxification of poison, Solvent for medicines
Yellow Mombim	*Spondias mombin*	Gonorrhoea, Fibroids, Cataract, Typhoid fever, Stomach disorder, Back ache
Plantain	*Musa paradisiaca*	Nervous system problem, Ringworm, Kidney problem
Sand Paper Tree	*Ficus exasperate*	Sleeplessness, Hypertension
Guava	*Psidium guajava*	Malaria fever, Rheumatism
Ginger	*Zingiber officinale*	Malaria fever, High blood pressure, Arthritis, Cancer
Sobo (Red Millet)	*Hibiscus sabdariffa*	Anaemia, Cough
Water leaf	*Talinum triangulare*	Anaemia, Ulcer
Tobacco	*Nicotiana tabacum*	Convulsion, Eczema
Hornbean-leaf sida	*Sida acuta*	Infertility, Arthritis, Malaria fever, Body weakness, Kidney problem, Rheumatism, Gonorrhoea, Blood vomiting
Sausage tree	*Kigelia africana*	Fibroid, Malaria fever, Stomach disorder, Infertility
Siam weed	*Chromolaena odorata*	Body fat reduction, Malaria fever, Headache, Tooth problem, Skin problem, Typhoid fever
Wild lettuce	*Launaea taraxacifolia*	Skin problem, Eye problem
Stool wood	*Alstonia congensis*	Growth of premature baby, Typhoid fever
Lemon	*Citrus limon*	Malaria fever, Cancer, Sore Throat

Bell bean tree	*Markhamia tomentosa*	Anaemia, Infertility
Pigeon pea	*Cajanus cajan*	Boil, Measles, Anaemia
Lemon grass	*Cymbopogon citrates*	Malaria fever, Jaundice, Obesity, Sleeplessness
Corn	*Zea mays*	Oedema, Weak erection
Morinda	*Morindamo morindioides*	Malaria, Cough
Red oil palm	*Elaesis guineensis*	Weak erection, Haemorrhoids
Mango	*Mangifera indica*	Malaria fever
Stinging bean	*Mucuna sloanei*	Malaria fever, Pregnancy sustenance, Haemorrhoids
African parguetina	*Parquetina nigrescens*	Pile, Anaemia, Backache
Pineapple	*Ananas comosus*	Yellow fever, Hepatitis
Christmas bush	*Alchornea cordifolia*	Malaria fever, Anaemia, Sore throat, Cough, Bleeding, Bronchitis
Candle bush	*Senna alata*	Back ache, Skin problem
Alligator pepper	*Alframomum melegueta*	Malaria fever, Fungal finger infection
Neverdie	*Kalanchoe crenata*	Body pain, High blood pressure, Malaria fever, High body temperature
Black night Shade	*Solanum nigrum*	Eye problem, Snoring, Headache, Hiccups
Hog weed	*Boerhavia diffusa*	Malaria fever, Heart problem, Kidney stone, (Hepatitis), Jaundice, Pile, Rheumatism
Mexican sunflower	*Tithonia diversifolia*	Malaria fever, Typhoid fever, Tumour, Jaundice
Bitter kola	*Garcinia kola*	Cough
African mahogany	*Khaya ivorensis*	Arthritis
Soya-bean	*Glycine max*	Anaemia
Common wild Sorghum	*Sorghum bicolour*	Blood purification
Avocado pear	*Persea americana*	High blood pressure

The study reported some plants useful in treating multiple diseases, indicating broad therapeutic applications and the plants' Fidelity Level (FL) and medicinal significance using the following formula (Cheikhyoussef *et. al.*, 2011). FL= Np/N x 100,

Where Np is the number of interviewees cited the particular species,

and, N is the number of interviewees that cited the particular species in relation to the disease under consideration (Table 5).

Table 5: Fidelity Level (FL) of highly cited plant species

Species	Basic Disease Treatment	N	Np	FL (%)
Occimum gratissimum	Malaria fever	5	5	100
Phragmanthera capitata	High blood pressure	4	4	100
Hibiscus asper	Blood purification	3	3	100
Gossypium hirsutum	Malaria fever	5	4	80.0
Argeratum conyzoides	Malaria fever, Fresh wound/cut	6	4	66.67
Hibiscus asper	Anaemia	3	2	66.67
Launaea traxacifolia	Skin diseases	3	2	66.67
Carica papaya	Malaria fever	6	3	50.0
Occimum gratissimum	Pile and stomach disorder	7	3	42.86
Spendias mombin	Gonorrhea	5	2	40.0
Vernonia amygdalina	High blood pressure	8	3	37.5

Where, high FL values indicate strong consensus among healers regarding efficacy. The study found *Phragmanthera capitata, Anacardium occidentale,* and *Sorghum bicolor species* with 100% FL. High FL plants are more frequently used and with high pharmaceutical potential, but are also at risk of overexploitation. The study findings further revealed that knowledge is primarily inherited through family lineage and oral transmission (for example, from parents and grandparents), with minimal formal documentation. Most (78%) healers were over 40 years old, raising concerns about knowledge erosion over time and still pointing to the challenge of (IK), as earlier discussed. The majority of healers had basic awareness of computers

and strongly supported the documentation (100%) digitisation (72.2%) of their knowledge and library involvement (72.2%) as means of preservation, tools for wider dissemination, and a safeguard against knowledge loss. Awareness of biopiracy and intellectual property rights were limited among the study participants; however, they expressed concerns about unauthorised use of their knowledge and indicated a willingness to challenge offenders through legal action. The study identified key constraints, including the scarcity of medicinal plants (due to urbanisation and deforestation), the use of herbicides that affect plant quality, the overexploitation of high-demand species, and the lack of standardised dosages and side-effect information, and the absence of strong legal frameworks in Nigeria to protect IK. The study concluded that urgent documentation and digitisation of medicinal knowledge; establishment of indigenous knowledge libraries, databases, and centres; inclusion of ethnobotany in higher education curricula; and development of legal frameworks to combat biopiracy are a necessity for indigenous medical heritage preservation in order to contribute to achieving SDGs 1, 2, 3, and 12.

Information does not necessarily eliminate questions; it often makes deeper questions possible, leading to solution-finding processes. Finally, out of the many questions that remain arising from this lecture, the following should be noted:

Why should we remember the past?

What age comes after the Information Age?

What do we truly know about our present life?

Is Nigeria preparing for the future age after this Information Age?

What information should guide our final and lasting destination?

5.0 CONCLUSION

Madam Vice Chancellor, this inaugural lecture brought into focus the centrality and ubiquity of information in life, professions, disciplines, and the different sectors of nationhood. It also brought out the many phases the word "information" has undergone. The lecture presented a historical overview that traced the evolution of information, its storage, retrieval, and dissemination technologies, from ancient traditions and early clay-based writing systems to the advent of the printing press and the digital evolution spanning different ages, demonstrating a paradigm shift for information professionals. This progression highlighted humanity's continuous quest for more efficient and reliable methods to manage information and knowledge, laying the groundwork for contemporary information challenges and possible solutions, revealing the ever-evolving ICTs, how the narrowing of gap and flattening of the curve between people and information can be further witnessed in an incredible way in the different sectors of life. Information has become an increasingly copious and ubiquitous commodity! While evolution in the way information is created, stored, and disseminated is ever-changing, it is, however, unproven and speculative to state what age comes after the present Information Age. This lecture, also, looked at information through the lens of the "Christian Book" or "Charter," which clearly states what the age of information in timelessness will be. The lecture, however, threw some light on what information and decisions should guide our final and lasting destinations to ensure registration in the "Book of Life" rather than the "Book of Judgement" for a desired "forever". In essence, this lecture dealt with information before our time, information in our time and information beyond our time. Someday, information and its world will reach a definitive conclusion.

The cornucopia of modern times' resources available in the form of data and information requires that information workers, all agents and agencies responsible for information generation, storage, and

dissemination, should dispel all shades of information gaps between users and information sources and accessibility. They should avoid building strong information systems, and should not leave their users behind. In other words, they should avoid creating areas where users' eyes are and not taking users' eyes there. In all these, they must ensure congruity to foster sustainable development in all sectors of life and nationhood. Users' information needs must be part of information professionals' interests to ensure service relevance. It must be remembered that the lecture demonstrated some measure of its contributions to the Sustainable Development Goals (SDGs) under the umbrella of leaving "no one behind". As part of attaining the SDGs, the lecture revealed the ways in which information professionals and women have been and could be part of anchoring natural environmental management, food security, emergencies and societal peace especially in the face of the present silent war-torn Nigeria, utilizing information. This lecture also showed the significance of Indigenous Knowledge (IK) to communities and the daunting challenges it faces, stressing the need for proper integration of this divine endowment into governance and the governmental framework, with adequate national provisions to prevent being eroded. Since information is indispensable in all areas of our life and all sectors of national development, the central government and all its arms must invest in information infrastructure, libraries, human capacity development, the media and others, while ensuring transparency and the effective use of information for sound decision making and its processes. The lecture's central challenge is enduring, we must keep asking the right questions while using information to live, decide and build better life.

6.0 RECOMMENDATIONS

Concerted efforts across multiple domains, agencies, ministries, and governments should be reawakened to advance technological innovation, policy formulation, and societal engagement, to steer the development and application of relevant technologies and associated devices for information use towards a sustainable future. A robust information architecture and framework should be strengthened with critical openness in governance and national provisions. This is because every area of life requires that the Nigerian citizenry be provided with the necessary enabling environment to make them information literate.

Appropriate and adequate provisions must be made and geared towards an unforeseeable, speculative future beyond the present Information Age. In line with this, such preparations must include provisions to face headlong any emergency situations at national and global levels, especially in relation to the education and information sectors.

Information is ubiquitous; library and information scientists must identify the information needs and information-seeking behaviour of the users they serve through appropriate research and periodic evaluation, and provide relevant and current information for them in modern formats that satisfy their information needs, and reflect the study of these needs in LIS curriculum.

Information workers, including library scientists, information scientists, and archivists must review their responsibilities, mission, and tasks in relation to "our common societies and common future" in promoting information availability, accessibility, dissemination and actual exploitation of information in an age underscored by ever-changing information and communication technologies and who

knows when and what the next age will be after the present information age? There is a need to be technologically prepared and to get their patrons likewise prepared for the age after the present. Therefore, Nigerian universities must be better equipped with relevant, up-to-date information resources in diverse formats that resonate with present-day modernity, a speculative information future, and changing times.

The Federal Government and all arms of the Nigerian government need to improve human capacity in Nigeria, especially that of youth and women in general, and the girl child in particular, to enable them to contribute meaningfully to environmental sustainability and the corporate peace of Nigeria.

The development of indigenous knowledge (IK) in Nigeria with the establishment of special indigenous centres and special libraries across the six geopolitical zones must be met with workable but relevant policy and establishment of IK centres across the country by the Federal government, to arrest its spiral downward trend and loss due to many glitches competing with its survival among the indigenous communities. The critical issue of knowledge loss due to oral transmission must be tackled headlong through urgent documentation processes and modern information technologies.

Undoubtedly, I have broached into some topics/disciplines for which there are renowned experts here. Please permit me, for I am only a library and information scientist pitching my tent with information – its studies, its relation to women and environmental sustainability, and IK.

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8.0 REFERENCES

Abimbola, A. (2006). Yoruba culture: A philosophical account. Birmingham: Iroko Academic Publishers.

Abiolu, O.A. and Okere, O.O. (2009). Rethinking information services in the 21st century: A Nigerian perspective. *Libraries create futures: Building on cultural heritage. Proceedings of papers presented at the 47th National Conference and Annual General Meeting of the Nigerian Library Association, 2009 held at Jogor Centre, Ibadan from26th and 31st July.* Abuja: Nigerian Library Association, 44-51

Abiolu, O.A. (2010). Perceptions of environmental information among women in selected communities in Ondo State, Nigeria. *Owena Journal of Library and Information Science* 3(2) June 108-123.

Abiolu, O.A. and Okere, O.O. (2011). Environmental information literacy in a threatened environment: The role of information professional in developing economies. *International Journal of Sustainable Development* 4(2) 70-74.

Abiolu, O.A. and Efosa, F.E. (2012) National Youth Service Corps members and their information needs *The Information Technologist (ICT)* 9(2)113-123.

Abiolu, O.A. and Okere, O.O. (2012). Environmental information literacy and the emerging roles of information professional in developing economies. *IFLA Journal* 38(1) 53-57.

Abiolu, O.A. (2013a). Information and its role in national development.*Journal of Library and Information Science* 10(1&2) 60-70.

Abiolu, O.A. (2013b). *Studies in Family Planning:* A bibliometric study. *Library Philosophy and Practice (E-Journal)* Available at http://digitalcommons.unl.edu/libphilprac/977

Abiolu, O.A. (2014). Trends in the reading habits among secondary schools in Southwestern Nigerian states. *Benue Journal of Library, Management and Information Science (BJLMIS*) 4(1) 85-98.

Abiolu, O.A. (2015). Retirees and their information needs: A survey. *Information Impact: Journal of Information and Knowledge*

Management 16(2) 169-180

Abiolu, O.A. and Okere, O.O. (2016). Information literacy programme in the Federal University of Technology Akure: An evaluation. *Middle Belt Journal of Library and Information Science* 14, 235-246.

Abiolu, O.A. and Ayo-Olafare, F.R. (2016). Social networking as tools for information service. In Gbadamosi, B.O. (Ed.) *Information literacy for undergraduate students* Akure: Albert Ilemobade Library, Federal University of Technology 86-95.

Abiolu, O.A. (2017). Mentoring among information professionals in Nigeria. *Fountain of Knowledge Journal of Library and Information Science* 6(1) 31-37.

Abiolu, O.A. (2018a). Environmental knowledge and behavior of Nigerian youth An Assessment. *Applied Environmental Education & Communication (Online Journal) 1-15 Available at* https://doi.org/10.1080/1533015X.2018.1432431

Abiolu, O.A. (2018b). Ethnobotanical study of medicinal plants in southwestern Nigeria and traditional healers' perception of indigenous knowledge digitisation. *Inkanyiso Journal of Humanities and Social Sciences* 10(1) 93-102.

Abiolu, O.A. (2019). Engineers, their information needs and information sources used: A Nigerian perspective. *Library Philosophy and Practice* 1-17. Available at https://digitalcommons.unl.edu/liphilprac/2570

Abiolu, O.A. (2022). Widows and their information-seeking behavior in southwestern Nigeria. *Library Philosophy and Practice* 1-19. Available at https://digitalcommons.unl.edu/liphilprac/7309

Abiolu, R.T.I, Alabi, O.J., Patrick, H.O. and **Abiolu, O.A. (2022).** Exploring the value systems embedded in indigenous Yoruba music genres and Yoruba nursery rhymes in Salawu, A. & Fadipe, I.A. (Eds.) *Indigenous African Popular Music, vol1: Prophets and Philosophers.* Switzerland: Macmillan Palmgrave, 1-17. Available at https://researchgate.net

Abiolu, R.T.I, Patrick, H.O. and **Abiolu, O.A. (2023).** A systematic review of indigenous protest songs as a conduit for social mobilization in South Africa. In Molade, T.B., Salawu, A. and

Uribe-Jongbloed E. (Eds.) *Indigenous Language for Development and Social Change in the Global South.* London: Rowman & Littlefield 243-260. Available at https://researchgate.net

Abiolu, O.A. and Akinyemi, O.E., (2025). Staff training and the use of Artificial Intelligence (AI) in university libraries. *International Journal for Knowledge Content Development and Technology* 15(4) 77-92. Available at https://journals.sfu.ca and https://ijkcdt.org

Adedeji, W. (2017). Africanity and new wave of popular music style in Nigeria. "Afro" hip hop revisited. *Scholars Bulletin,* 3(3) 75-82.

Afzal, W. (2025). The specification of the conceptual domain of information needs. *Journal of Librarianship and Information Science* 58(1). Available at https://journals.sagepub.com/doi/101177/09610006251320121

Aigbokan, E.I. 2014. *Annotated checklist of vascular plants of Southern Nigeria: A quick reference guide to vascular plants of southern Nigeria: A systemic approach.* Benin City: Uniben Press.

Akanbi, G.O., Jekayinfa, A.A. and **Abiolu, O.A (2017).** Education and women's power in maintaining peace culture in Nigeria. *Niger Delta Journal of Education* 9(1&2) 8-18.

Andrews, S. (2017). The art of papermaking was first invented by the Chinese Han Dynasty two thousand years ago. Available at https://www.thevintagenews.com

Atata, S.N. and Omobowale, A.O. (2018). The social symbolism of Biafra protest: songs in southeastern Nigeria. *The Nigerian Journal of Sociology and Anthropology* 16(1) 1-11.

Atte, O.D. (1989). Indigenous local knowledge as key to local level development: possibilities, constraints and planning issues in the context of Africa. Being paper presented at the Seminar on "Reviving local self-reliance: Challenges for rural/regional development in Eastern and Southern Africa organised by the United Nations Regional Development Centre on Integrated Rural Development for Africa (CIRD AFRICA) held in Arustic Tanzania, 21st -24th Feb, 1989. 1-18.

Bateson, G. (1973). The Information philosopher: Solving philosophical roblems with the new philosophy. Available at www.informationphilosopher.com

Beattie, B.C. (2022). Sumerians invent writing. Available at https://ebsco.com

Bellinger, G., Castro, D. and Mills, A. (2004). Data, information, knowledge, and wisdom. Available at Saylor University https://resources.saylor.org

Britannica Editors, (2026). Industrial revolution https://www.britannica.com/event/Industrial-Revolution

Buckingham-Hatfield, S. (2000). *Gender and environment*. London: Routledge.

Carvajal, G. (2019). Where did the books from the Great Library of Alexandria come from? Available at https://www.labrujulaverde.com Chambers, R.L. (1983). *Rural development: putting the last first.* NY: Longman.

Chesser, P. (2025). The burning of the Library of Alexandria. Availabe at https://ehistory.osu.edu

Cho, R. (2016). Making fish farming more sustainable. *Sustainability.* Available at https://blo.ei.columbia.edu/2016/04/13/

Claus, P. (2026). Ancient Library of Alexandria: One of the greatest treasures of mankind. Available at https://greekreporter.com

Couto, M.C., Kim-Knauss, Y., C.D., Rothermund, K., Fung, H.H., Hess, T.M. and Lang, F.R. (2025). "Time without you": Transition to widowhood and its impact on time perspective and attitudes towards the future. *European Journal of Aging* 22(2) Available at https://link.springer.com/article/10.1007/S10433-025-00842-4

Dertouzous, M.L. (1997). What will be will be: How the new world of information will change our lives. USA: Harper Collins Editors, (2025). Industrial revolution. Available at https://www.history.com

El-Abbadi, M. (1992). The life and fate of the ancient Library of Alexandria. Available at https://unesdoc.unesco.org/ark

FAO, (1997). *Nigerian Integrated Rural Fisheries Development*

Project: Findings and recommendations. UNDAP, IFAO, FIDP/NIR/87/010.Terminal Report. Rome: FAO

Feintuch, S. (2017). 10 things I wish someone had told me about becoming a widow today. Availabe at https://www.today.com/series/today/things-i-wish-i-know/10-things-i-wish-i-knew-becoming-widow-t111974

Fola-Adebayo, T., Olabode-Sawe, P.O., Tunde-Arayela,C.O., Oguntuase, F.Z. and **Ijatuyi, O.A. (2006)**. *General English*. Akure: Federal University of Technology.

Gitt, W. (1996). Information, science and biology. Journal of Creation 10(2) 181-187 Available at https://creation.com

Grokipedia (2026). Principle of least effort. Available at https://grokipedia.com/page/Principle_of_least_effort

Gwantu, W.I.S. (2026). NAL to Tinubu, governors: Stop destroying children's identity, fund indigenous languages. Available at https://www.internationalnewsmonitor.com.ng

Haim, I. (2025). What is data? Definition and examples. Available at *Resources* https://elementor.com

Harun, A.R. (2023). Information need| Types of information need| Levels of information need| Components of information need. Available at https:|limbd.org|information-need-types-of-information-need-levels-of-information-need-components-of-information-need

Ijatuyi, O.A. (2004). Environmental management for sustainable development: The interactions between the grassroot women and environmental organisations in Ondo State, Nigeria. *International Journal of Gender and Health Studies* 2(1&2*)* 134-143.

Ijatuyi, O.A. (2005a). Factors affecting the awareness and use of environmental information. *West African Journal of Education University of Ibadan* XXV 138-148.

Ijatuyi, O.A. (2005b). Indigenous knowledge: potentials and challenges in Nigeria. *International Journal of Social Policy Issues* 3(1) 196-208.

Ijatuyi, O.A. and Adebayo, E.L. (2008). Harnessing the information services in libraries for the development of a democratic culture. *Nigerbiblios* 17(1&2) 60-69.

Ijatuyi, O.A. (2009). Women's management of the environment in Nigeria: The Perspective of information awareness and use in Adegbola, H.E. and Oguzor, N.S. (Eds.) *Gender, development and the society.* La Zubia (Grenada): Afro-Euro Centre for Development Studies 363-377.

Ijatui, E.J., **Abiolu, O.A.** and Olaniyi, O.A. (2016). Information needs of fish farmers in Osun State, Nigeria. *Journal of Human Ecology*, 56(3) 309-317.

Ijatuyi, E.J. Oladele, O.I. **Abiolu, O.A.** and Omotayo, O.A. (2022). Socioeconomic determinants of female development in rural North West Province of South Africa. *Sustainability* 14(1) 1-17. Available at https://www.mdpi.com

IrisCenter, (n. d.). What does Ms. Milton need to know about students with visual impairments? Available at https://iris.peabody.vanderbitt.edu/module/v03.focusplay/cresour ce/q1/p03/#

Jeste, D.P. and Lee, E. (2019). Emerging empirical science of wisdom: Definition, measurement, neurobiology, longevity and interventions. *Harv. Rev. Psychiatry* 27(3) 127-140 Available at https://pmc.ncbi.nlm.nih.gov

Kathenya, L.K. (2022). Resilience in widowhood: The coping mechanisms against the social odds occasioned by the death of a loved one in Kenya. *Journal of Social Science Studies* 9(2). Available at https://doi.org/10.5296/jssv9n2.20549

Kiger, P.J. (2025). Industrial revolution: Seven negative effects of the Industrial revolution. Available at https://www.history.com

Lehmann, F. (2026). Widowhood statistics edited by H. Prescott and fact-checked by A. Sulivan.Available at https://wifitalents.com/widowhood-statistics

Mabawonku, I. (2005). Promoting indigenous knowledge publishing in Nigerian languages: The role of library and information professionals. Paper presented at Nigerian International BookFair, 1-16.

Mark, J.J. (2026). Cuneiform: The writing system that made history. World History Encyclopedia. Available at

https://www.worldhistory.org
Matthews, R. (2017). The materiality of writing in the world of cuneiform culture. Available at https://brewminate.com
Maughan, P.D. (2001). Assessing IL among undergraduates: A discussion of the literature and the University of California-Berkeley assessment experience. *College and Research Libraries* 62(1) 71-86.
Mauk, M. (2021). Quality of democracy makes a difference but not for everyone: How political interest, education and conceptions of democracy condition the relationship between democratic quality and political trust. *Frontiers in Political Science* 3. Available at https://www.frontiersinscience.org/journals/political-science/articles/10.3389/fpos.2021.6337344/full
McGarry, K. (1993). *The changing context of information: An Introductory analysis.* 2nd ed. London: Library Association Publishing.
Mendis, B.S.M. (2025). From silence to scholarship: How monastic schools shaped medieval universities and subsequently, western education. *International Journal of Social Science Exceptional Research* 4(3)198-201.
Available at https://www.allsocialsciencejournal.com
Mensah, E.K. (2010). Right to information: Relevance to national development. Retrieved from http://www.modernghana.com/news/270392/1/right-t-oinformation-relevance-to-national-development
Moss, M.S. and Moss, S.Z. (2015). Widowhood in old age: Viewed in a family context. *Journal of Aging Studies* 4(29). 98-106. Available at https://pmc.ncbi.nlm.nih.gov/articles/OMC4138698/pdf/nihms564315. pdf
Mundy, P.A. and Crompton, J.L. (1995). Indigenous communication and indigenous knowledge in D.M. Warren,I.J., Slikereer and D. Bronkensha (Eds.). *The cultutre dimension development: Indigenous Knowledge Systems.* London: Intermediaate Technoogy Publications, 112-118.
Narayana, G.J. (2010). *Knowledge and information: Perspectives and*

Prospects. New Delhi: Ess Ess Publications.
National Geographic Society (2025). Industrial revolution. Available at https://education.nationalgeographic.org
Naumer. C.M. and Fisher, K. (2017). *Encyclopedia in Library and Information Sciences.* 4th ed. CRC Press. Available a https://www.tesearchgate.net/publication/288949939_Information_Nee ds
Nicholas, D. and Herman, E. (2009). *Assessing information needs in the digital age of the digital consumer.* London: Routledge, Taylor & Francis.
NIST Computer Security Resource Center (2025). Information: Definitions. Available at https://csrc.nist.gov
Nwosu, M.C. (2017). *The sociology of library and information science Exploring the philosophy of Library and Information Science.* Uturu, Abia State: JustmanPublishers, Abia State University: Department of Library and Information Science
Obinyan, G.A. and **Ijatuyi, O.A. (2003).** A collective approach towards meeting the information needs of visually-impaired in Nigeria. *Journal of Association of Libraries for the Visually-Impaired* 2(1) 1-7.
Odugbemi, T. and Akinsulire, I.O. (2006a). Medicinal plants by family names in Odugbemi, T. (Ed.). *Outlines and pictures of medicinal plants from Nigeria.* Lagos: University of Lagos Press, 73-116.
Odugbemi, T. and Akinsulire, I.O. (2006b). Medicinal plants by family names in Odugbemi, T. (Ed.). *Outlines and pictures of medicinal plants from Nigeria.* Lagos: University of Lagos Press, 117-161.
Okiy, R.B. (2014). *History of libraries.* 2nd ed. Benin City: Ambik Press.
Olofinsawe, A.A. and **Ijatuyi, O.A. (2005).** T*he abstracted bibliography of Doctor of Philosophy (PhD) Master in Business Administration (MBA) and Master in Technologyb(M.Tech.) theses of the Federal University of Technology, Akure*. Lagos: NewInfotech.
Omoyeni, M.S.J. (1996). Retirement: A study of adulthood psychological stress in Ondo State, Nigeria. *Ife Journal of*

Psychology 2(1) 86-96.

Oniye, O.A. (2001). O.A. Problems associated with retirement and implications for productive life. *Nigerian Journal of Gender and Development* 2(1) 59-64.

Ours, J.C. (2022). How retirement affects mental health, cognitive skills, mortality: An overview of recent empirical evidence. *De Economist* 170: 375-400. Available at https://link.springer.com/article/10.1007/s10645-022-074410-y

Oyeniyi, B.A. (2015). *Dress in the making of African identity: A social and cultural history of the Yoruba people*. Cambria Press.

Richard, W., Malcolm, B., Randall, B., Sarah, C., Nuttapon, C., Sadasivam, K. and Michael, P. (2014). Improving productivity and environmental performance of aquaculture. *WorldFish* World Bank 60.

Riforgiate, S.E., Ruh, C., Ibiwoye, C., Zinia, J.F. and Nartey, G.M. (2025). *Mentoring in and across work organisations.* Encyclopedia 540169. Available at https://www.mdpi.com/2673-8392/5/4/169

Rocha, L.M. and Schnell, S. (2013). The nature of information. Available at https://www.semanticscholar.org

Schaap, J. (2026). Move over information age – This is the age of experience. Available at https://www.stayntouch.com

Spar, I. (2004). The origins of writing. Available at https://www.metmuseum.org

Strickland, A. (2024). Undeciphered symbols may be key to origin of world's oldest writing system. Available at https://www.ksl.com

Sustainable Development Goals (SDGs) (2015). Available at https://www.bing.com/search?pglt=43&q=unitednations+sustainable+development+goals&cvid=6e6b0ff76358149936a6baac363f2bf33be&gs/crp=EgRIzGdlKjYIABBFGDkyBggAEEUYOTI G CAEQ

Swan, P. (2003). John Henry's Dilemma in Bridges, K. (Ed.) *Expectations of librarians in the 21st century.* London: Greenwood Press.

TeachThought Staff (2025). The future of learning post: What comes

after the information age? Available at https://www.teachthought.com The Editors of Time-Life Books (1991). *Voyage through the universe: Workings of the universe*. Virginia: Time-Life Books.

The Information Philosopher, (2025). Solving philosophical problems with the new information philosophy. Available at www.informationphilosopher.com/knowledge/

Torrens, K. (2016). Best sources of protein. Available at https://www.bbcgoodfood.com/how-to/guide/best-sources-protein

Tucci, L. (2023). Definition: Information age: What is information age? Available at https://www.teachtarget.com

University Library at the University of Notre Dame, Australia (2025). Getting started: Information literacy. framework. Available at https://lib.nd.edu.au/infolit

Vaes, K. (2013). Understanding data, information, knowledge and wisdom. Available at https://kvaes.wordpress.com/2013/05/31/data-information-knowledgewisdom

Valassoupoulos, A., and Mostafa, D.S. (2014). Popular protest music and the 2011 Egyptian revolution. *Popular Music and Society* 37(5) 638-659.

Vones, G. (2015). Trick or truth essay contest: Physics as mathematics of information. Available at https://forums.fqxi.org

Wolf, M. (2024). The master of disaster. Available at https://www.camagazine.icas.com

World Fish Centre, (2005). Crisis in African fish supplies looms: Experts warn African leaders. Available at www.eurakalert.org/pub_release/2005

Yan, X- S. (2011). Information Science: Its past, present and future. *Information* 2(3) 510-527; https://doi.org/10.3390/info2030510 mdpi.com

Yevelson-Shorsher, A. and Bronstein, J. (2018). Three perspectives on information literacy in academia: Talking to librarians, faculty and students. https://researchgate.com

Yip, S.Y. and Chakma, U. (2024). The teaching of indigenous knowledge and perspectives in initial teacher education: A

Scoping review of empirical studies. *Journal of Further Higher Education* 48(3) Available at https://:www.tandfonline.com/doi/full/10.1080/0309877X.2024.232702 9#

Yussuf, B.N. and Olubomehin, O.O. (2018). Traditional music and the expression of Yoruba socio-cultural values: A historical analysis. *Muziki* 15(2) 61-74.

Zhang, J. and Yan, L. (2024). The impact on the mental health of older adults and the buffering effect of social capital. *Frontiers of Public Health* 12 Available at https://frontiersin.org