

**THE ROLE OF ICT IN ENHANCING KNOWLEDGE SHARING AND
COLLABORATION AMONG JOHN HARRIS LIBRARY STAFF IN THE UNIVERSITY
OF BENIN**

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BENIN CITY**

DECEMBER, 2025

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**A PROJECT SUBMITTED TO THE DEPARTMENT OF EDUCATIONAL
MANAGEMENT, FACULTY OF EDUCATION UNIVERSITY OF BENIN CITY IN
PARTIAL FULFILLMENT OF THE REQUIREMENT OF THE AWARD OF THE
BACHELOR OF LIBRARY AND INFORMATION SCIENCE**

DECEMBER, 2025

CERTIFICATION

We the undersigned, hereby certify that this work was carried out by **Edith Chidinma ELEMIKE** with the matriculation number **EDU2102362** in the Department of Educational Management, Faculty of Education, University of Benin, Benin City, Edo State in partial fulfillment of the requirement for the award of Bachelor of Library and Information Science (B.LIS).

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DEDICATION

This project is dedicated to Almighty God, whose grace, wisdom, and strength made this research possible.

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I wish to express her profound gratitude to Almighty God for His divine guidance, protection, and strength throughout the course of this research work. Without His grace, wisdom, and sustenance, the successful completion of this study would not have been possible.

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ABSTRACT

This study gathered information on how ICT enhances collaboration and knowledge sharing among John Harris library staff members in the University of Benin. Using the descriptive survey approach. The investigation was guided by eight research questions. The study's population consists of 87 staff both professional and non-professional staff of the John Harris Library in the University of Benin. Out the 87 library staff, thirty were professionals and fifty-seven (57) were non-professionals. Purposive sampling was employed in the study. For the study, a purposive sample strategy was used. The questionnaire titled "ethical role of library and information science professionals in disseminating information" used as the study's instrument. The supervisor of the researcher validated the study equipment. The final draft of the instrument included her recommendations and ideas. The split-half technique was used to determine the instrument's reliability. After carefully outlining the goal of the study, the researcher administered this instrument with the help of her supervisor. Descriptive statistics were used to analyze the data.

Findings revealed that library staff have access to essential ICT tools, including computers and internet facilities. It was also revealed that ICT tools are frequently used in daily library operations, communication, online meetings, and document sharing.

Based on the findings, it was recommended that Libraries should invest in reliable internet connectivity, organize a regular professional training programs and should encourage the adoption of online collaborative tools

CHAPTER ONE

INTRODUCTION

Background to the Study

The rapid growth of Information and Communication Technology (ICT) in the 21st century has transformed the operations, services, and professional practices of organizations worldwide. Libraries, which traditionally existed as physical repositories of knowledge, have equally been reshaped by digital technologies that facilitate faster access to information, improved communication, and better service delivery. ICT has become a central tool in modern librarianship, enabling library staff to share knowledge, collaborate on tasks, and improve productivity in ways that were previously impossible.

Academic libraries in particular are experiencing fundamental changes as their roles expand from custodians of print materials to active participants in knowledge management, digital curation, information dissemination, and collaborative learning activities. In this digital era, library staff must work together, share expertise, and coordinate operations efficiently to ensure effective delivery of library services. Knowledge sharing and collaboration have therefore become core human resource and organizational development strategies for libraries, especially within university environments where information needs are complex and diverse.

At the University of Benin (UNIBEN), the John Harris Library serves as the central academic library supporting teaching, learning, and research for students, staff, and the wider academic community. Over the years, the library has adopted several ICT tools

such as library automation software, electronic databases, social media communication tools, institutional repositories, intranet systems, email services, and online collaborative platforms to enhance access to information resources and improve internal workflow. These tools are expected to help library staff share information, communicate efficiently, exchange professional expertise, coordinate departmental tasks, and collaborate on new initiatives.

In an era characterized by unprecedented access to information, Library and Information Science (LIS) professionals play a pivotal role in the ethical dissemination of knowledge within academic institutions. The rapid transformation of the information ecosystem particularly through the widespread adoption of Information and Communication Technology (ICT) has shifted the paradigms by which information is accessed, shared, managed, and consumed. ICT tools have increasingly replaced traditional print-based resources, enabling digital communication, virtual collaboration, and more dynamic knowledge exchange among library staff and users. Research demonstrates that ICT enhances collaborative workflows and knowledge practices in libraries by enabling real-time information sharing, access to digital repositories, and networked communication platforms (Makinde, Olatunji, Igbinlola, & Gyang, 2024).

For LIS professionals, emerging technologies such as cloud-based collaboration platforms, integrated library systems, mobile applications, and institutional digital repositories provide opportunities for efficient knowledge sharing and team coordination. Recent studies indicate that collaborative technologies have become central to daily

communication, resource sharing, and teamwork among librarians in academic environments (Okon & Akpan, 2023; RSIS International, 2025). The adoption of digital communication tools not only streamlines professional interactions but also fosters collective problem-solving and innovation in library operations. In contemporary knowledge-driven organizations, staff are expected to leverage ICT tools to work smarter, not harder. ICT facilitates collective intelligence, organizational learning, and knowledge transfer. With the introduction of computerized cataloguing systems, digital collections, online reference services, automated circulation modules, and electronic communication channels, library staff are required not only to understand these tools but to use them effectively for teamwork, problem-solving, and professional development.

However, while these technologies offer significant benefits, they also present challenges related to infrastructure, digital literacy, and staff readiness. Studies within Nigerian university libraries show that although tools such as email, WhatsApp, and cloud applications are widely used for collaboration, issues such as poor internet connectivity, limited ICT training, and inadequate organizational support constrain the full realization of ICT's potential (RSIS International, 2025). Additionally, empirical research on academic librarianship reveals that knowledge sharing practices are often dependent on the level of digital literacy and availability of ICT resources among library employees (Ibitoye et al., 2024).

In contemporary LIS literature, knowledge sharing is understood as the intentional exchange of information, skills, and expertise among professionals, with positive effects

on innovation, service quality, and organizational learning. For instance, research in academic libraries emphasizes the significance of information technology innovations in strengthening knowledge-sharing behaviors, which in turn support institutional growth and service excellence (Nworie, 2024). Similarly, digital literacy and ICT competency have been linked to more effective collaboration among library staff, reinforcing the importance of continuous professional development in digital skills (Adeleke, 2024).

Beyond internal workflows, ICT also supports engagement between librarians and the wider academic community by facilitating virtual reference services, digital literacy training, and remote access to electronic resources. The integration of ICT applications into LIS work supports both tacit and explicit knowledge exchange, enabling librarians to share expertise, mentor colleagues, and document best practices across departments (Nwuju & Owate, 2024).

Despite these advances, gaps remain in understanding how ICT influences the quality and frequency of knowledge sharing and collaboration specifically among library staff. In many academic libraries—including those across Nigeria—staff may possess foundational digital literacy yet still underutilize collaborative technologies for professional engagement due to institutional barriers, inadequate training, or limited ICT infrastructure (RSIS International, 2025). This suggests an ongoing digital divide within LIS workplaces, where access to technology does not always translate into effective use for knowledge sharing.

The focus of this study, therefore, is to explore the role of ICT in enhancing knowledge sharing and collaboration among library staff, with particular emphasis on identifying how digital tools are adopted, the benefits they provide, and the challenges affecting their utilization in a university library setting. By examining these issues in the context of John Harris Library at the University of Benin, this research contributes to the expanding body of knowledge that positions ICT not merely as an operational tool but as a fundamental enabler of collaborative knowledge practices within academic libraries

Statement of the Problem

Library and Information Science (LIS) professionals played a crucial role in supporting academic communities as facilitators of knowledge creation, communication, and dissemination. In modern academic libraries, they were expected to leverage Information and Communication Technologies (ICTs) to enhance collaboration, streamline workflow, and improve access to institutional knowledge resources. ICT tools—such as automated library systems, digital repositories, intranet platforms, and collaborative communication applications—had the potential to promote efficiency and teamwork among library staff. However, despite these technological advancements, many academic libraries continued to face persistent challenges in achieving seamless knowledge sharing and effective staff collaboration (Makinde et al., 2024). The rapid expansion of digital tools and the increasing complexity of library operations introduced new difficulties that hindered optimal use of ICT for internal communication and cooperative work.

Recent studies indicated that knowledge sharing in academic libraries was often hampered by inconsistent ICT competencies, infrastructural limitations, and organisational barriers that affected staff willingness and ability to collaborate digitally (Okon & Akpan, 2023). Furthermore, the uneven adoption of ICT tools among library staff contributed to fragmented communication patterns and reduced the quality of collaborative decision-making. In contexts where internet access was unreliable or where continual ICT training was insufficient, the ability of staff to exchange information, coordinate responsibilities, and collectively solve problems became significantly weakened (Ibitoye et al., 2024). These gaps suggested that the presence of ICT infrastructure did not automatically translate into effective knowledge-sharing practices. Based on the researcher's observation from literature reviewed, previous research also highlighted the lack of comprehensive institutional strategies that guided ICT-driven collaboration in many academic libraries. Although various ICT tools were available, existing policies and staff development initiatives did not adequately address challenges related to digital literacy, system usage, and technology-supported teamwork. As noted by Nworie (2024), many libraries experienced "weak internal collaboration culture" because available technologies were not supported by structured frameworks that encouraged active participation, shared learning, and cooperative use of digital platforms. This gap revealed that the introduction of new technologies alone was insufficient without intentional efforts to promote collaborative practices. Could this have been the case of John Harris Library?

It was against this backdrop that this study sought to examine the role of ICT in enhancing knowledge sharing and collaboration among library staff in John Harris Library, University of Benin.

Purpose of the Study

The purpose of this study is to examine the role of Information and Communication Technology (ICT) in enhancing knowledge sharing and collaboration among library staff in academic environments. However, the specific purpose of this study is to:

- i. examine the extent to which ICT tools support knowledge sharing practices among library staff.
- ii. identify the factors that influence the effective use of ICT for collaborative work in the library.
- iii. examine the strategies for improving ICT-driven knowledge sharing and collaboration among library personnel.
- iv. explore the ways in which library staff utilize ICT tools to enhance communication.
- v. explore the ways in which library staff utilize ICT tools to enhance teamwork
- vi. explore the ways in which library staff utilize ICT tools to enhance information exchange.
- vii. identify the challenges faced by staff of John Harris Library in using ICT for knowledge sharing.
- viii. identify the challenges faced by staff of John Harris Library in using ICT for collaboration.

Research Questions

The study was guided by the following research questions:

- i. To what extent are ICT tools available for knowledge sharing and collaboration among staff in John Harris Library?
- ii. What are the factors that influence the effective use of ICT for collaborative work in the library.
- iii. What are the strategies for improving ICT-driven knowledge sharing and collaboration among library personnel?
- iv. What are the ways in which library staff utilize ICT tools to enhance communication?
- v. What are the ways in which library staff utilize ICT tools to enhance teamwork?
- vi. What are the ways in which library staff utilize ICT tools to enhance information exchange?
- vii. What challenges hinder the effective use of ICT for knowledge sharing among John Harris Library staff?
- viii. What are the challenges faced by staff of John Harris Library in using ICT for collaboration.

Significance of the Study

The study on the role of Information and Communication Technology (ICT) in enhancing knowledge sharing and collaboration among library staff holds significant importance to the University of Benin community, particularly the John Harris Library. It provides

insights into how library personnel engage with emerging digital tools, collaborative technologies, and modern communication platforms in their daily work routines.

The study contributes to strengthening staff capacities, ensuring that library professionals are equipped to respond effectively to the demands of digital work environments. Its findings can assist policymakers and library administrators in formulating well-informed strategies, policies, and training programmes that support effective ICT usage and promote collaborative practices in libraries. The study will also enhance internal communication, improve workflow efficiency, and foster a culture of shared learning among library staff.

Additionally, the study will help in improving user satisfaction by enabling library staff to work more cohesively, respond to user needs more promptly, and collectively manage information resources more efficiently. In an age where technology continues to reshape information services, the study offers valuable guidance to LIS professionals on adapting to evolving ICT tools, addressing collaboration challenges, and meeting modern expectations for service excellence. It also emphasizes the importance of leveraging ICT responsibly and effectively to support teamwork and institutional goals.

All things considered, the study is important because it can help academics, educators, and Library and Information Science (LIS) professionals promote stronger digital work practices. By addressing current issues and offering practical insights, the study improves collaborative standards within the profession and ensures that library services align with technological, institutional, and global developments.

Scope and Delimitation of the Study

The scope of this study is to examine the role of Information and Communication Technology (ICT) in enhancing knowledge sharing and collaboration among library staff. However, this study is delimited to the librarians, library officers, and other professional and non-professional staff working in the John Harris Library of the University of Benin as the case study.

Definition of Terms

Information and Communication Technology (ICT): Refers to digital tools, systems, and platforms such as computers, internet services, communication applications, and library management software used to facilitate information processing, sharing, and collaboration.

Knowledge Sharing: Involves the exchange of information, skills, experiences, and expertise among individuals or groups within the library setting, often supported by ICT tools.

Collaboration: The process by which library staff work together to achieve common goals, coordinate tasks, solve problems, or share resources using digital or non-digital means.

Library Staff: Includes librarians, library officers, para-professionals, and other employees engaged in library operations, services, and administrative tasks.

Academic Library: A library within a higher education institution that provides information resources and services to support teaching, learning, and research.

CHAPTER TWO

LITERATURE REVIEW

Introduction

The role of Information and Communication Technology (ICT) has become increasingly significant in shaping modern library operations, particularly in academic institutions such as the John Harris Library of the University of Benin. As libraries evolve in response to digital transformation, ICT now forms the backbone of effective communication, information exchange, and collaborative work among staff. Tools such as email, instant messaging platforms, shared drives, and integrated library systems provide channels for staff to share ideas, transfer knowledge, and coordinate daily activities with greater speed and efficiency.

ICT also enhances collaborative practices by offering digital workspaces where staff can jointly carry out cataloguing, digitization, user services, and administrative tasks regardless of physical location. Through webinars, online training, and virtual meetings, ICT supports continuous professional development, enabling staff to acquire new skills and share expertise that improves service delivery. Furthermore, access to electronic resources, databases, and online professional communities promotes collective problem-solving and informed decision-making.

Concept of Information and Communication Technology (ICT)

Information and Communication Technologies (ICTs) is an umbrella term that embraces three major terms: Information, Communication, and Technology. Utulu

(2019) opined that “the term Information and Communication Technology (ICT) evolves from Information Technology (IT) when the processing of information with electronic technology integrated with telecommunication technology”. ICT and Information Technology (IT) are similar concepts that can be used interchangeably. It implies tools used for communication and therefore it becomes obvious that the two terms are synonymous and can be applied in the delivery of Library services. To understand ICT, one must understand all the above-listed three concepts. The term “Information” is an elusive term that means many things to many people, depending on the context. Scientifically, information is processed data. Information, though abstract, could also be visualized as a commodity, which could be bought or sold (Womboh et al 2021). The term Information and Communication Technologies could refer to the convergence of interests between electronics, computing and telecommunications- all of which lead to the rapid development of microelectronics. According to Osuagwu (2020), Information and Communication Technology refers to the convergence of microelectronics, telecommunications, and computers. These definitions, bring to the limelight the position occupied by computer telecommunication in the business of ICTs. The components of Information and Communication Technology, therefore, include the following: computer systems, communication systems (Telecommunications, Telephone, Satellites, Telex, Fax, E-mail, Facsimile, Internet, Video Text, and Document Delivery), Reprographic Systems (Micrographic Electronic Copiers, Word Processing) Microwave systems (Radio, television) Access to information is fundamental to good academics performance of ITCs

to enable the academic community access and use information more easily and faster is therefore a priority in libraries. Information and communication technologies (ICTs) have over the years given definitions in a plethora of literature.

Also, The American Library Association (1921) defined Information Technology (IT) as the application of computers and other related technologies to the Acquisition, Organization, Storage, Retrieval, and Dissemination of information. Similarly, Omekwu(2021) defined Information and Communication Technologies (ICTs) as any technology including computer hardware, software, and telecommunication networks that enable the transmission, processing, storage organization, and the retrieval of information for understanding, decision-making, and taking. On the other hand, Communication Technology (CT) essentially encompasses all other technologies that enable humans to communicate and transmit information, such as the radio, television and telephone. The integration of IT systems with CT systems develops into ICT systems with enhanced capacities and capacities for transmission. Similarly, Margbalani (2019) viewed IT as a term that encompasses the notion of the application of technologies to information handling. In addition, Matthew (2020) posited that IT could be defined as the mechanism used to process, store, and transmit information, which could be in numeric, text, and graphic form. Similarly, Oni (2020) equally submitted that information technology comprises all the electronic infrastructure and facilities employed by libraries to improve and provide efficient services. Consequently, IT in libraries holds the key to effective and more appropriate delivery of information services in the information age.

Nwachukwu (2019), viewed IT as a term that encompasses the application of technologies to information handling (generation, storage, processing, retrieval, dissemination), etc. Daniel. Hence, information and communication technology is now progressing rapidly.

History of Information Communication Technology

The history of Information Communication Technology (ICT) traces back to the early 20th century, but its acceleration in the 21st century has been unprecedented. By 2020, ICT had become a core element of almost every aspect of society, driving major transformations in business, education, governance, and everyday life. According to a 2021 report by the International Telecommunication Union (ITU), "ICT is not only an enabler of innovation but a key driver of social inclusion and economic growth" (ITU, 2021). The report highlights that ICT is essential for bridging the digital divide, fostering economic development, and facilitating access to education and health services. The evolution of ICT in the 2020s is marked by a convergence of technologies such as artificial intelligence (AI), 5G, cloud computing, and blockchain. These technologies have led to a "fourth industrial revolution" (Schwab, 2020), characterized by the merging of the physical, digital, and biological worlds. Klaus Schwab, the founder of the World Economic Forum, noted that "the speed of current breakthroughs has no historical precedent," and ICT is at the center of this transformation (Schwab, 2020). His statement underscores the pervasive impact of ICT, which has rapidly reshaped global industries, labor markets, and even geopolitics

One of the major milestones in ICT history during the 2020s was the global rollout of 5G networks. By 2022, many countries had begun implementing 5G technologies, significantly improving internet speeds and reducing latency. The shift to 5G was not just an incremental improvement but a transformative leap in ICT infrastructure. According to a report by Ericsson (2022), "5G is set to enable new forms of communication, from real-time video streaming to augmented and virtual reality experiences," expanding the possibilities for digital connectivity and content delivery. At the same time, cloud computing continued to grow exponentially. Cloud services allow businesses to store and process vast amounts of data remotely, enabling more scalable and flexible IT infrastructures. A study by Gartner in 2022 predicted that "by 2025, 85% of businesses will be using cloud-native technologies to drive their digital transformation efforts" (Gartner, 2022). The pandemic accelerated the adoption of cloud services, as organizations sought solutions for remote work and collaboration during lockdowns. The COVID-19 pandemic in 2020 underscored the importance of ICT in crisis management and resilience. With lockdowns forcing millions of people to work and learn from home, the demand for reliable and high-speed internet grew exponentially. A World Bank report in 2021 stated, "ICT was critical in ensuring the continuity of education, health services, and business operations during the pandemic" (World Bank, 2021). Teleconferencing tools, online education platforms, and e-commerce systems became essential for adapting to the new normal.

Another major development in ICT in the 2020s has been the rise of blockchain technology. Originally associated with cryptocurrencies, blockchain has found applications in various fields such as supply chain management, healthcare, and digital identity verification. A 2023 report by Deloitte noted that "blockchain is becoming a critical component of secure, transparent, and decentralized ICT infrastructures" (Deloitte, 2023). Blockchain's potential to revolutionize data security and transparency has made it an essential tool in sectors where trust and accountability are paramount. As ICT continues to evolve, it has become a key enabler of the "green transition." Renewable energy technologies, smart grids, and energy-efficient data centers are increasingly reliant on ICT systems to manage and optimize energy use. A 2022 report by the International Energy Agency (IEA) stated, "ICT is essential for monitoring energy consumption in real-time, optimizing the performance of renewable energy systems, and reducing carbon emissions" (IEA, 2022). The integration of ICT into the energy sector is part of a broader movement toward sustainable development.

Despite these advancements, the digital divide remains a significant challenge. In 2022, the United Nations reported that "approximately 2.9 billion people, or 37% of the global population, still do not have access to the internet" (UN, 2022). This divide is especially pronounced in developing countries, where ICT infrastructure is underdeveloped, and access to digital devices is limited. Addressing this gap will require substantial investment in ICT infrastructure, particularly in rural and underserved regions. In response to this challenge, international organizations have launched

initiatives to promote digital inclusion. The G20's "Bridging the Digital Divide" initiative, launched in 2021, focuses on expanding ICT access in low-income countries through public-private partnerships. According to a 2022 report by the G20, "investing in ICT infrastructure is critical for fostering inclusive economic growth and ensuring that no one is left behind in the digital revolution" (G20, 2022).

The history of ICT in the 2020s is also characterized by the rise of digital platforms and the gig economy. Platforms like Uber, Airbnb, and Amazon rely heavily on ICT to connect consumers and providers. However, this digital transformation has raised concerns about data privacy and labor rights. A 2023 report by the International Labour Organization (ILO) warned that "the gig economy, driven by ICT platforms, has created new challenges for labor protection and social security" (ILO, 2023). The regulation of digital platforms and the protection of workers' rights have become critical issues in the global ICT landscape. Additionally, ICT has played a crucial role in shaping political discourse and social movements. Social media platforms like Facebook, Twitter, and TikTok have become powerful tools for political activism, enabling movements like #BlackLivesMatter and #MeToo to gain global attention. The concept of Information and Communication Technology (ICT) encompasses the integration of telecommunications, computers, and other digital technologies that provide access to information. ICT plays a significant role in improving the ways we communicate, store, process, and exchange information. It also drives the development of the digital economy, social inclusion, and education.

ICT in Academic Libraries

Modern Internet is rapidly progressing beyond the creation, delivery, management and preservation of its resources to provide quality services for the humanities. The explosion of information through the WWW and human interaction through wireless devices and mobile telephony is increasing day by day. ICT tools have become backbone of the human community. They conduct their surveys online and trying to reach their goals using online resources. At this point, academic libraries provide greater service to accomplish their goals. If not they will become frustrated like keeping inefficient inattentive sales persons on big shopping mall. Therefore, academic libraries facilitate universal access of scholarly brains and allow scholarly community to accomplish their goals as efficiently, reliably and predictably as possible. Once they are satisfied with the libraries, they will repeatedly search for the resources and recommend those academic libraries to the others. Eventually these libraries become Aladdin's Cave for its communities.

Information and Communication Technology (ICT) has become an indispensable component of academic libraries in the contemporary knowledge environment. Academic libraries have evolved from traditional print-based repositories into digitally oriented information centres that support teaching, learning, and research. Scholarly literature consistently emphasises that ICT is central to the survival, relevance, and effectiveness of academic libraries in higher institutions. According to Pagore (2024), the increasing

dependence on electronic information resources and digital services has made ICT a core infrastructure rather than a supportive tool in academic libraries.

ICT in academic libraries refers to the application of computer systems, telecommunications, software, and digital technologies to manage information resources and deliver library services. Makinde, Olatunji, Igbnlola, and Gyang (2024) explain that ICT encompasses technologies such as integrated library management systems, online public access catalogues, digital repositories, electronic databases, and internet-based communication tools. These technologies enable libraries to organise, store, retrieve, and disseminate information efficiently, thereby improving service delivery and operational management.

One of the most visible impacts of ICT in academic libraries is the shift toward digital collections and electronic resources. Academic libraries now invest heavily in e-books, e-journals, online databases, and institutional repositories to meet users' information needs. Shikali and Muneja (2024) observe that ICT has expanded access to scholarly resources beyond the physical walls of the library, allowing students and researchers to access information remotely. This development has enhanced research productivity and supported distance and blended learning programmes in universities.

ICT has also transformed internal library operations through automation. Library processes such as acquisition, cataloguing, circulation, and serials management are now largely automated using integrated library systems. Pagore (2024) notes that automation reduces repetitive manual tasks, minimises errors, and improves efficiency in service

delivery. As a result, librarians are able to devote more time to value-added services such as research assistance, user education, and information literacy training.

In the area of user services, ICT has enabled the provision of virtual reference and online support services. Academic libraries now offer reference assistance through email, live chat, and other online platforms, making library services more responsive and accessible. Khalifa and Rajaratnam (2025) argue that ICT-based reference services align with the expectations of modern library users who prefer quick, personalised, and technology-driven support. These services have significantly improved user satisfaction and engagement with library resources.

ICT plays a crucial role in supporting teaching, learning, and research in academic institutions. Libraries integrate digital resources and services into learning management systems to support course delivery and academic instruction. Makinde et al. (2024) assert that ICT fosters collaboration between librarians and academic staff, thereby enhancing students' learning experiences. In research support, ICT facilitates the management of institutional repositories, plagiarism detection tools, citation management software, and research data services, which contribute to increased visibility and accessibility of scholarly outputs (Agboke & Oladokun, 2025).

Recent literature from 2021 to 2025 highlights the growing adoption of emerging technologies such as artificial intelligence and cloud computing in academic libraries. Artificial intelligence is used in intelligent search systems, chatbots, automated indexing, and personalised information services. Agboke and Oladokun (2025) emphasise that AI

enhances efficiency and improves user experience, although ethical concerns and skill gaps remain. Similarly, cloud-based systems support resource sharing, collaboration, and remote access to library services, especially in institutions with limited infrastructure (Khalifa & Rajaratnam, 2025).

Despite the numerous benefits of ICT, academic libraries face significant challenges in its implementation and utilisation. Inadequate funding, poor internet connectivity, unstable power supply, and limited ICT infrastructure continue to affect many academic libraries, particularly in developing countries. Pagore (2024) identifies lack of ICT skills among library staff as a major barrier to effective ICT utilisation. Without continuous professional development and institutional support, librarians may be unable to maximise the potential of available technologies. Additionally, cybersecurity threats and data privacy concerns pose emerging risks in ICT-driven library environments.

In conclusion, ICT has profoundly transformed academic libraries between 2021 and 2025, repositioning them as dynamic digital hubs that support education, research, and knowledge dissemination. Through digital collections, automated operations, virtual services, and emerging technologies, academic libraries have improved access to information and enhanced service quality. However, challenges related to infrastructure, skills, funding, and security persist. To fully harness the benefits of ICT, academic libraries must invest in sustainable ICT infrastructure, staff training, and supportive policies that align with institutional goals and global best practices.

Concept of Knowledge Sharing in Libraries

Knowledge sharing has emerged as a critical concept in library and information science, particularly in the context of academic libraries where knowledge creation, dissemination, and utilisation are central to institutional goals. Libraries are no longer viewed merely as storehouses of information but as dynamic knowledge organisations that rely on the collective expertise of their staff to deliver effective services. In Nigerian academic libraries, the increasing adoption of digital technologies, evolving user expectations, and competitive academic environments have further heightened the importance of knowledge sharing among library staff. Scholars agree that effective knowledge sharing enhances organisational learning, service innovation, and overall library performance (Islam, Jasimuddin, & Hasan, 2021).

Knowledge sharing refers to the process through which individuals exchange information, skills, experiences, and insights to create new knowledge or improve existing knowledge. It involves both the transfer and absorption of knowledge among individuals and groups within an organisation. According to Nonaka and Takeuchi's knowledge creation theory, knowledge sharing is a core element of knowledge management, enabling the conversion of tacit knowledge into explicit knowledge and vice versa. In libraries, this process allows librarians to share professional expertise, best practices, and institutional experiences that contribute to improved service delivery and problem-solving (Ngulube, 2022).

In the library context, knowledge sharing extends beyond the dissemination of information resources to users. It includes the exchange of professional knowledge among librarians, collaboration across departments, mentoring of junior staff, and communication of innovative ideas. Adebayo and Ogunleye (2022) describe knowledge sharing in libraries as a deliberate organisational practice that enables staff to pool their intellectual resources in pursuit of institutional objectives. This practice supports continuous learning and strengthens the collective capacity of library personnel.

The relevance of knowledge sharing in libraries is rooted in the knowledge-intensive nature of library work. Librarians possess specialised knowledge in areas such as information organisation, digital resource management, reference services, research support, and information literacy instruction. When this knowledge is confined to individuals, it limits organisational effectiveness and creates dependency on specific staff members. However, when knowledge is shared, it promotes continuity of services and reduces the impact of staff turnover. Maponya (2021) observes that libraries with strong knowledge sharing practices are better positioned to adapt to change and maintain service quality.

Knowledge sharing in libraries generally occurs in two forms: tacit and explicit knowledge sharing. Tacit knowledge refers to personal, experience-based knowledge that is difficult to formalise, such as problem-solving skills, communication techniques, and professional judgement. Explicit knowledge, on the other hand, includes documented knowledge such as manuals, policies, reports, databases, and digital repositories. In

Nigerian academic libraries, both forms are essential. While explicit knowledge ensures standardisation of procedures, tacit knowledge sharing supports innovation and contextual problem-solving (Ngulube, 2022). Organisational culture plays a significant role in shaping knowledge sharing practices in libraries. A culture characterised by trust, openness, teamwork, and mutual respect encourages librarians to share ideas and experiences freely. Conversely, rigid hierarchies, fear of criticism, and lack of recognition discourage knowledge sharing. Islam et al. (2021) found that supportive leadership and participatory management styles positively influence knowledge sharing behaviour in information organisations. In Nigerian academic libraries, leadership commitment is therefore critical in fostering a conducive environment for knowledge exchange.

Management support is another crucial factor influencing knowledge sharing in libraries. Library management can promote knowledge sharing by providing platforms for interaction, encouraging collaboration, and recognising staff contributions. Regular staff meetings, workshops, seminars, and mentoring programmes serve as formal channels for knowledge exchange. Adebayo and Ogunleye (2022) note that when management actively supports knowledge sharing initiatives, librarians are more motivated to contribute their expertise and experiences. Information and Communication Technology (ICT) has significantly transformed knowledge sharing practices in libraries. ICT tools such as intranets, institutional repositories, email systems, collaborative software, and social media platforms facilitate communication and knowledge exchange among library

staff. Adeyemi and Issa (2023) argue that ICT enhances the speed, accessibility, and documentation of knowledge sharing in academic libraries. In Nigerian academic libraries, ICT has enabled collaboration across departments and institutions, overcoming geographical and organisational barriers.

Despite the availability of ICT tools, effective knowledge sharing in Nigerian libraries is often constrained by infrastructural challenges. Poor internet connectivity, inadequate ICT facilities, and unstable power supply limit the effective use of digital knowledge-sharing platforms. Adeyemi and Issa (2023) observe that these challenges reduce the efficiency of ICT-enabled knowledge sharing, particularly in public universities with limited funding. Addressing these infrastructural gaps is essential for maximising the benefits of ICT in knowledge sharing.

Knowledge sharing also plays a vital role in enhancing teaching, learning, and research support in academic libraries. Librarians share knowledge with academic staff and students through information literacy programmes, research consultations, workshops, and user education initiatives. Through these interactions, librarians transfer skills related to information searching, evaluation, and ethical use of information. Maponya (2021) emphasises that effective knowledge sharing strengthens the partnership between librarians and academic staff, thereby improving educational outcomes. In the Nigerian academic environment, knowledge sharing contributes to the development of librarians' professional competencies. Through peer learning and mentoring, junior librarians acquire skills and confidence, while senior librarians remain updated on emerging trends.

Ngulube (2022) asserts that continuous knowledge sharing enhances professional growth and prepares librarians to respond to changing information needs. This is particularly important in Nigerian libraries where opportunities for formal training may be limited.

However, several challenges hinder effective knowledge sharing in Nigerian academic libraries. One major challenge is resistance to change, as some librarians may be reluctant to adopt new practices or share their expertise. Knowledge hoarding, where individuals perceive knowledge as a source of personal power, also limits collaboration. Adebayo and Ogunleye (2022) identify lack of motivation and incentives as key barriers to knowledge sharing among librarians.

Another challenge is the absence of formal knowledge management policies in many Nigerian academic libraries. Without structured frameworks, knowledge sharing activities remain informal and undocumented, leading to loss of valuable institutional knowledge when staff retire or leave. Islam et al. (2021) stress the need for libraries to institutionalise knowledge sharing through clear policies, documentation practices, and training programmes. The benefits of effective knowledge sharing in libraries are substantial. Knowledge sharing improves decision-making by ensuring that diverse perspectives and experiences inform organisational actions. It promotes innovation by encouraging creative problem-solving and the adoption of best practices. Knowledge sharing also enhances service quality and user satisfaction by enabling librarians to respond more effectively to users' needs (Maponya, 2021).

Furthermore, knowledge sharing contributes to organisational sustainability in libraries. By capturing and disseminating institutional knowledge, libraries reduce dependency on individual staff members and ensure continuity of services. Ngulube (2022) argues that knowledge sharing is essential for building resilient academic libraries capable of adapting to technological and environmental changes. In the Nigerian context, this resilience is particularly important given funding constraints and frequent staff mobility. Professional collaboration beyond individual institutions also supports knowledge sharing in libraries. Conferences, workshops, webinars, and professional associations provide platforms for librarians to exchange ideas and learn from one another. With the rise of digital platforms, Nigerian librarians increasingly participate in online professional communities, expanding opportunities for national and international knowledge exchange (Adeyemi & Issa, 2023).

In conclusion, the concept of knowledge sharing is fundamental to effective library operations and service delivery. In academic libraries, particularly in Nigeria, knowledge sharing enables collaboration, professional development, service innovation, and organisational sustainability. Although challenges such as infrastructural limitations, cultural barriers, and lack of formal policies persist, the benefits of knowledge sharing outweigh these obstacles. To remain relevant in the digital age, Nigerian academic libraries must foster supportive organisational cultures, invest in ICT infrastructure, and institutionalise knowledge sharing practices through clear policies and continuous capacity development.

Concept of Collaboration among Library Staff

Collaboration among library staff refers to the deliberate and coordinated process through which librarians and other library personnel work collectively to achieve shared institutional goals, improve service delivery, enhance decision-making, and respond effectively to the evolving needs of users. In contemporary library environments, collaboration has become a critical organizational practice due to increasing complexity in information management, technological advancements, user-centered service models, and interdisciplinary academic demands. Rather than operating in isolated functional units, modern libraries increasingly emphasize teamwork, shared responsibility, and cross-departmental cooperation as mechanisms for sustaining relevance and effectiveness (Alemna & Cobblah, 2021).

At its core, staff collaboration involves mutual communication, trust, shared knowledge, and joint problem-solving. It enables library staff to pool diverse skills, experiences, and professional competencies to deliver integrated services. For instance, collaboration between reference librarians, cataloguers, systems librarians, and circulation staff ensures that information resources are not only well-organized but also easily accessible and effectively promoted to users. According to Oyedokun and Ajala (2022), collaborative practices among library staff significantly improve workflow efficiency and reduce service duplication, thereby enhancing overall library performance.

In academic libraries, collaboration among staff is particularly vital due to the multifaceted nature of library operations. Libraries are no longer limited to book lending

but are actively involved in information literacy instruction, research support, digital scholarship, data management, institutional repositories, and e-resource administration. These expanded roles require coordinated efforts across professional and paraprofessional units. Collaboration allows staff to align their expertise toward common objectives such as user satisfaction, resource optimization, and academic support, which would be difficult to achieve through individual effort alone (Kumar & Reddy, 2020).

Another important dimension of staff collaboration is knowledge sharing. Collaborative environments promote the exchange of ideas, professional experiences, and tacit knowledge, which contributes to continuous learning and innovation. Through regular meetings, joint projects, mentoring, and communities of practice, library staff are able to learn from one another and adapt to emerging trends in librarianship. Studies indicate that libraries with strong internal collaboration are better positioned to implement new technologies, adopt innovative service models, and respond proactively to user expectations (Mensah & Owusu-Ansah, 2023).

Collaboration among library staff also enhances service quality and user satisfaction. When staff work together effectively, service delivery becomes more seamless, consistent, and user-focused. For example, collaboration between public services and technical services staff ensures that newly acquired resources are promptly processed, accurately catalogued, and efficiently promoted to users. This integration reduces delays and enhances users' overall experience. Empirical evidence suggests that collaborative staff

behavior positively influences users' perceptions of service reliability, responsiveness, and assurance in academic libraries (Adebayo, 2021).

Furthermore, collaboration strengthens organizational cohesion and staff morale. Libraries that encourage teamwork tend to foster a sense of belonging, shared purpose, and professional respect among staff. Collaborative practices reduce interdepartmental conflicts and promote mutual understanding of roles and responsibilities. This inclusive work culture enhances job satisfaction and commitment, which in turn contributes to higher productivity and lower staff turnover. As noted by Nwankwo and Eze (2022), collaborative work environments in libraries improve staff motivation and support the achievement of institutional goals.

In the context of library marketing and outreach, collaboration among staff is indispensable. Effective promotion of library products and services requires coordinated input from multiple units, including reference services, information literacy teams, systems librarians, and administrative staff. Collaborative marketing initiatives such as orientation programs, workshops, exhibitions, and digital campaigns are more successful when staff work collectively to design, implement, and evaluate these activities. Research has shown that collaborative marketing efforts enhance visibility, increase user engagement, and improve utilization of library resources (Olorunfemi & Salau, 2023).

Technological advancements have further intensified the need for collaboration among library staff. The management of electronic resources, digital repositories, virtual reference services, and library management systems requires close cooperation between

ICT-oriented staff and traditional librarians. Collaborative problem-solving becomes essential in addressing technical challenges, ensuring system functionality, and providing uninterrupted access to digital resources. In this regard, collaboration supports organizational adaptability and resilience in the face of rapid technological change (Zhang & Chen, 2021).

Despite its benefits, collaboration among library staff is not without challenges. Barriers such as poor communication, rigid organizational structures, resistance to change, unequal workload distribution, and lack of managerial support can hinder effective collaboration. However, studies emphasize that these challenges can be mitigated through participatory leadership, clear role definition, open communication channels, and continuous professional development (Akinwale & Oladokun, 2022). When leadership actively promotes collaboration, staff are more likely to engage in cooperative behaviors and shared decision-making.

In recent years, the concept of collaboration has also been linked to interdisciplinary and cross-functional teamwork within libraries. Rather than confining staff to traditional departmental roles, libraries increasingly adopt project-based teams that draw members from different units. This approach enhances flexibility, creativity, and problem-solving capacity. Collaborative project teams have been found to be effective in implementing institutional repositories, digitization projects, and information literacy programs in academic libraries (Okorie & Ibrahim, 2024).

In conclusion, collaboration among library staff is a foundational element of effective library management and service delivery. It promotes knowledge sharing, improves service quality, enhances staff morale, supports innovation, and strengthens the library's capacity to meet user needs in a dynamic information environment. As libraries continue to evolve in response to technological, academic, and societal changes, fostering a culture of collaboration among staff remains essential for sustainability, relevance, and excellence in library services.

Role of ICT in Enhancing Knowledge Sharing and Collaboration

Information and Communication Technology (ICT) plays a transformative role in enhancing knowledge sharing and collaboration within contemporary organizations, particularly in academic and knowledge-driven environments such as libraries, universities, and research institutions. ICT encompasses a wide range of digital tools, platforms, and systems—including computers, networks, internet technologies, databases, collaborative software, and social media—that facilitate the creation, storage, retrieval, and dissemination of information. In an era characterized by rapid technological advancement and increasing demand for collaborative work practices, ICT has become a fundamental enabler of effective communication, teamwork, and shared learning (Kumar & Sharma, 2021).

Knowledge sharing refers to the process through which individuals exchange information, experiences, skills, and expertise, either formally or informally, to enhance collective understanding and organizational performance. Collaboration, on the other hand, involves

coordinated efforts among individuals or groups to achieve common goals through shared responsibility and mutual engagement. ICT integrates these two processes by providing platforms that remove geographical, temporal, and organizational barriers, thereby enabling seamless interaction and cooperation among users (Mensah & Boateng, 2022).

One of the most significant contributions of ICT to knowledge sharing is its ability to facilitate communication and interaction. Digital communication tools such as emails, instant messaging applications, video conferencing platforms, and online discussion forums enable real-time and asynchronous communication among individuals and teams. These tools allow users to exchange ideas, seek clarification, and collaborate on tasks regardless of physical location. In academic and professional settings, ICT-mediated communication has been found to enhance teamwork efficiency, foster collaborative learning, and support knowledge exchange among staff and users (Zhang & Chen, 2021).

ICT also supports knowledge sharing through the development and management of digital repositories and databases. Institutional repositories, digital libraries, and knowledge management systems enable organizations to store and disseminate explicit knowledge in electronic formats. Such platforms promote accessibility, reuse, and long-term preservation of information resources. By making knowledge readily available to a wider audience, ICT enhances collective learning and reduces information silos within organizations. Studies have shown that digital knowledge platforms significantly improve collaboration by enabling staff to access shared resources and contribute to collective knowledge bases (Okorie & Ibrahim, 2024).

Another critical role of ICT in enhancing collaboration is the provision of collaborative workspaces and tools. Applications such as shared document platforms, cloud-based storage, project management software, and collaborative editing tools allow multiple users to work simultaneously on tasks and projects. These technologies promote transparency, accountability, and real-time feedback, which are essential for effective collaboration. In library and academic environments, collaborative ICT tools have been instrumental in supporting joint research, curriculum development, information literacy programs, and service innovations (Adebayo & Salau, 2023).

ICT further enhances knowledge sharing by supporting social and informal learning networks. Social media platforms, professional networking sites, blogs, and online communities of practice provide avenues for informal knowledge exchange and peer-to-peer learning. These platforms encourage dialogue, experience sharing, and professional interaction beyond formal organizational structures. Research indicates that ICT-enabled social networks contribute significantly to knowledge creation and collaborative problem-solving, particularly among professionals with shared interests and goals (Olorunfemi & Adeyemi, 2022).

In organizational settings, ICT plays a strategic role in breaking down hierarchical and departmental barriers. By enabling open communication and shared access to information, ICT fosters inclusiveness and participatory decision-making. Employees are empowered to contribute ideas, share expertise, and collaborate across functional boundaries. This democratization of knowledge enhances innovation and collective ownership of

organizational goals. According to Nwankwo and Eze (2023), ICT-driven collaboration strengthens organizational cohesion and promotes a culture of shared responsibility and continuous improvement.

The role of ICT in enhancing collaboration is particularly evident in remote and hybrid work environments. With the increasing adoption of flexible work arrangements, ICT tools have become indispensable for maintaining collaboration and knowledge flow. Video conferencing, virtual meeting platforms, and online collaboration tools enable teams to remain connected and productive despite physical separation. Empirical studies have demonstrated that ICT-supported remote collaboration improves work efficiency, knowledge exchange, and organizational resilience, especially in times of disruption (Kaur & Singh, 2021).

ICT also supports training and capacity building, which are essential for effective knowledge sharing and collaboration. E-learning platforms, webinars, online tutorials, and virtual workshops enable continuous professional development and skill acquisition. These technologies allow organizations to disseminate knowledge efficiently and foster collaborative learning environments. In academic libraries, ICT-based training programs have been shown to enhance staff competencies, promote collaborative service delivery, and improve overall organizational performance (Akinwale & Oladokun, 2022).

Despite its numerous benefits, the effective use of ICT for knowledge sharing and collaboration depends on several factors, including user competence, organizational culture, infrastructure availability, and management support. Challenges such as

inadequate ICT infrastructure, limited digital skills, resistance to change, and information overload can hinder effective collaboration. However, studies emphasize that these challenges can be mitigated through strategic investment in ICT, continuous training, supportive leadership, and the development of clear policies that encourage knowledge sharing (Mensah & Owusu-Ansah, 2023).

In recent discourse, the role of ICT in knowledge sharing has also been linked to innovation and organizational competitiveness. By enabling rapid information exchange and collaborative problem-solving, ICT enhances creativity and supports the development of new ideas, services, and processes. Organizations that effectively leverage ICT for collaboration are better positioned to adapt to change and maintain relevance in competitive environments (Zhao & Wang, 2022).

In conclusion, ICT plays a pivotal role in enhancing knowledge sharing and collaboration by facilitating communication, supporting digital repositories, enabling collaborative workspaces, promoting informal learning networks, and fostering inclusive organizational cultures. Through these mechanisms, ICT strengthens collective learning, improves service delivery, and enhances organizational performance. As organizations continue to operate in increasingly digital and interconnected environments, the strategic integration of ICT into knowledge sharing and collaborative practices remains essential for sustainability, innovation, and excellence.

ICT Tools and Platforms Used in John Harris Library

John Harris Library has progressively integrated information and communication technologies into virtually every aspect of its operations, transforming traditional library functions into a blended model of physical and digital services. At the institutional level, the library's web presence and service pages make clear that electronic resources, an Online Public Access Catalogue (OPAC), digital repositories, and learning-management interfaces are core components of the user experience; these platforms form the backbone of how collections are discovered, accessed, and managed in a contemporary academic environment. The library's published descriptions and services documentation highlight OPAC and e-resources as primary access points for users searching for books, journals, and other research materials, signaling a deliberate shift from card-catalogue and shelf-based discovery to searchable, networked discovery systems. jhl.uniben.edu+1

Operationally, the deployment of computing workstations, internet connectivity, and networked printers remains essential for on-site patron services. These basic ICT infrastructures enable students, faculty, and researchers to use the OPAC, consult e-journals and databases, and carry out online searches in the library's reading rooms. Empirical investigations into ICT implementation at John Harris Library corroborate this reality: studies conducted with staff and faculty report widespread use of computers, printers, database management systems, and internet services as the most immediately visible ICT tools supporting daily library tasks and user interactions. In practice, these

facilities act as gateways to a larger ecosystem of licensed e-resources and open access content hosted or indexed through the library's systems. Beyond basic connectivity and OPAC functionality, John Harris Library has invested in platforms that support institutional knowledge preservation and distribution. The library operates an institutional repository/IR and provides access to categorized e-resources (closed access and open access journals, faculty collections, and subject-specific journal groupings), which allow for both the preservation of institutional output and the facilitation of research discovery. Digitization efforts and resource digitization projects reported in the literature demonstrate that the library uses scanning and digital curation workflows to convert print holdings into accessible electronic formats—thereby widening the reach of local scholarship and supporting remote access for users who cannot be physically present on campus. These initiatives also signal an awareness of the long-term strategic value of digital archives for research visibility and preservation. jhl.uniben.edu+1

Collaboration and user engagement are mediated by several platform types: the library's social media presence (including an active Twitter handle and a Facebook page), a visible "Ask a Librarian" service, and contact channels such as email and phone — all of which facilitate outreach, quick reference, and patron support outside traditional desk hours. Such platforms extend the library's reach into user communities and provide low-friction means for patrons to obtain assistance, receive updates on new subscriptions or services, and participate in workshops or orientation sessions. The use of social media and virtual reference complements face-to-face interactions and is particularly useful for promoting

training sessions, e-resource awareness drives, and digital literacy initiatives that are essential in an environment where many resources are subscription-based and require user guidance for effective use.

On the back end, library management and automation systems underpin acquisitions, cataloging, serials control, and circulation. While specific vendor names are not always prominent in public pages, the John Harris Library's technical services structure and references in academic projects imply the use of integrated library systems (ILS) or library application software (including local or customized applications) to streamline workflows and enable interoperability with OPAC, IR, and external databases. Research undertaken in and about the library documents efforts to develop or deploy library application software suited to local needs, reflecting an approach that balances standard ILS features with context-sensitive enhancements—an approach that helps the library manage growing digital collections and maintain metadata consistency across platforms.

The library's e-resource portfolio—comprising licensed databases, aggregated journal packages, and subject-specific collections—relies on authentication mechanisms and link resolvers that ensure authorized access, both on campus and remotely. This necessitates ICT systems for off-campus access (such as proxy or VPN solutions) and user authentication integrated with the university's identity management. The availability of e-resources such as HeinOnline and other multidisciplinary databases indicates vendor partnerships and subscription management workflows: these require continual ICT support for licensing, link maintenance, and usage analytics. Increasingly, the library uses

usage statistics and analytics to inform acquisition decisions and to justify subscription renewals, reinforcing the role of ICT not only as a delivery medium but also as a strategic management tool.

Training, capacity building, and staff development are closely linked to the ICT platforms in place. Multiple studies on John Harris Library highlight that investment in staff training is necessary for the effective exploitation of ICT tools: automated cataloguing, digital preservation workflows, database management, and virtual reference all require technical competencies. The literature and institutional reports emphasize that without deliberate training programs—covering everything from basic network navigation to metadata standards and repository management—technology adoption stalls or fails to deliver expected benefits. Therefore, ICT at John Harris Library is not merely about hardware and software deployment; it entails an organizational commitment to upskilling staff and embedding ICT literacy into routine library practice.

Despite the evident progress, the implementation of ICT at John Harris Library has encountered well-documented challenges that reflect broader trends in Nigerian academic libraries. Infrastructure constraints such as intermittent power supply, limited bandwidth, and the cost of subscriptions are recurring obstacles that affect platform reliability and user experience. Digitization projects and repository development are often constrained by funding, technical expertise, and the need for sustainable preservation infrastructures. Studies focusing on the library's ICT projects note that while staff and lecturers value the digital services, consistent utilization depends on addressing these systemic limitations

through institutional investment and external partnerships. This tension between ambition and resource reality is an important contextual factor shaping how ICT tools are prioritized and scaled at John Harris Library. Looking forward, the evolution of ICT in John Harris Library is likely to emphasize interoperability, mobile access, and user-centric services. Enhancements such as mobile-friendly OPAC interfaces, enriched metadata for discoverability, improved APIs for integration with learning management systems, and more sophisticated analytics for evidence-based collection development are natural next steps. Embedding digital literacy into the curriculum through partnerships with faculties and promoting open access publishing via the institutional repository will place ICT at the center of the library's mission to support research and teaching. These developments will require sustained commitment to network upgrades, staff training, and policy frameworks that prioritize digital preservation and accessibility.

In conclusion, the suite of ICT tools and platforms used by John Harris Library—from OPAC and institutional repositories to e-resources, social media outreach, and library application software—reflects a comprehensive strategy to modernize access, preserve institutional scholarship, and support the university's research and learning objectives. While implementation challenges remain, institutional documentation and recent empirical studies demonstrate meaningful progress and a clear direction toward enhanced digital services. Continued investment in infrastructure, staff capacity, and platform integration will be essential to fully realize the potential of ICT for knowledge discovery, access, and scholarly collaboration at John Harris Library.

Benefits of ICT-Driven Knowledge Sharing among Library Staff

Information and Communication Technology (ICT)–driven knowledge sharing has become a central pillar of effective library management and service delivery in the digital age. As libraries transition from traditional, print-based institutions to hybrid and fully digital knowledge centers, the ability of library staff to share information, expertise, and experiences through ICT platforms has gained increasing importance. ICT-driven knowledge sharing refers to the use of digital tools, platforms, and systems to facilitate the creation, exchange, storage, and reuse of professional knowledge among library personnel. This practice offers numerous benefits that enhance staff efficiency, collaboration, innovation, and overall organizational performance (Mensah & Owusu-Ansah, 2023).

One major benefit of ICT-driven knowledge sharing among library staff is improved communication and collaboration. ICT tools such as emails, instant messaging applications, intranets, collaborative platforms, and virtual meeting tools enable library staff to communicate efficiently across departments and units. These tools eliminate barriers of time and location, allowing staff to share ideas, updates, and solutions in real time or asynchronously. Enhanced communication promotes teamwork and ensures that staff members are well-informed about ongoing projects, policy changes, and service innovations, thereby fostering a more coordinated and cohesive work environment (Zhang & Chen, 2021).

Another significant benefit is the enhancement of professional competence and continuous learning. ICT platforms such as digital repositories, shared databases, online training portals, and professional forums allow library staff to access and contribute to a collective pool of institutional knowledge. Through these platforms, staff can share best practices, procedural guidelines, research outputs, and technical expertise. This continuous exchange of knowledge supports skill development and professional growth, enabling staff to adapt to emerging technologies, new service models, and evolving user needs (Akinwale & Oladokun, 2022).

ICT-driven knowledge sharing also leads to increased efficiency and productivity in library operations. When knowledge is easily accessible and shared digitally, staff spend less time searching for information or duplicating efforts. For example, shared documentation systems and digital workflow tools allow staff to reuse solutions to recurring problems, streamline processes, and make informed decisions more quickly. Studies have shown that libraries that effectively leverage ICT for knowledge sharing experience reduced operational delays and improved service turnaround time (Oyedokun & Ajala, 2022).

A further benefit is the improvement of service quality and user satisfaction. Knowledge sharing among staff ensures that accurate, up-to-date, and consistent information is provided to users across service points. ICT tools facilitate the dissemination of service updates, resource guides, and user support materials among staff, enabling them to respond more effectively to user inquiries. This shared understanding enhances service

reliability and responsiveness, which are critical determinants of user satisfaction in academic libraries (Adebayo, 2021).

ICT-driven knowledge sharing also fosters innovation and creativity within libraries. Digital collaboration platforms and knowledge management systems provide spaces for brainstorming, idea generation, and collective problem-solving. When staff are encouraged to share insights and experiences through ICT tools, innovative solutions to service challenges are more likely to emerge. Research indicates that ICT-supported collaborative environments enhance organizational learning and stimulate innovative practices in library services, including digital literacy programs, research support services, and outreach initiatives (Olorunfemi & Adeyemi, 2022).

Another important benefit is the promotion of organizational memory and knowledge preservation. ICT systems such as institutional repositories, document management systems, and intranets enable libraries to capture and store both explicit and tacit knowledge. This ensures that valuable institutional knowledge is retained even when staff retire or transfer. Preserved knowledge serves as a reference point for new staff and supports continuity in service delivery and policy implementation (Kumar & Sharma, 2021).

ICT-driven knowledge sharing further enhances staff motivation and job satisfaction. When staff are empowered to contribute knowledge and access shared resources, they feel valued and engaged in the organization's mission. Collaborative digital environments promote inclusiveness and recognition of individual expertise, which positively

influences morale and commitment. Studies have shown that knowledge-sharing cultures supported by ICT are associated with higher levels of employee satisfaction and organizational loyalty (Nwankwo & Eze, 2023).

In addition, ICT-driven knowledge sharing supports effective decision-making and strategic planning. Digital knowledge platforms provide access to data, reports, usage statistics, and institutional records that inform managerial decisions. When staff share insights and evidence through ICT tools, library management can make more informed, data-driven decisions regarding resource allocation, service development, and policy formulation. This collective intelligence strengthens the library's ability to respond strategically to internal and external challenges (Mensah & Boateng, 2022).

The role of ICT in facilitating cross-departmental integration is another notable benefit. Libraries often consist of multiple functional units such as technical services, public services, digital services, and administration. ICT platforms bridge these functional divides by enabling shared access to information and collaborative workflows. This integration minimizes silos and encourages a holistic approach to service delivery, where staff understand and appreciate each other's roles and contributions (Okorie & Ibrahim, 2024).

Moreover, ICT-driven knowledge sharing enhances the library's capacity for remote and flexible work. With digital communication and collaboration tools, staff can share knowledge and collaborate effectively even outside the physical library space. This flexibility has become particularly important in response to global disruptions and the

growing adoption of hybrid work models. Research suggests that ICT-supported remote collaboration maintains productivity and sustains knowledge flow during periods of physical separation (Kaur & Singh, 2021).

Despite these benefits, the effectiveness of ICT-driven knowledge sharing depends on supportive organizational culture, adequate infrastructure, and staff digital competence. However, evidence consistently shows that when libraries invest in appropriate ICT tools, training, and supportive policies, the benefits far outweigh the challenges. ICT-driven knowledge sharing emerges as a strategic asset that strengthens staff capacity, enhances service delivery, and improves organizational resilience (Mensah & Owusu-Ansah, 2023). In conclusion, ICT-driven knowledge sharing among library staff offers numerous benefits, including improved communication, enhanced professional competence, increased efficiency, higher service quality, innovation, staff satisfaction, and informed decision-making. By enabling seamless exchange of knowledge and collaboration, ICT transforms libraries into dynamic learning organizations capable of adapting to technological and user-driven changes. As academic libraries continue to evolve in a digital environment, sustained investment in ICT-driven knowledge sharing practices remains essential for achieving excellence, relevance, and long-term sustainability.

Challenges Affecting the Use of ICT for Knowledge Sharing and Collaboration

The use of Information and Communication Technology (ICT) has significantly enhanced knowledge sharing and collaboration in contemporary organizations, particularly in academic libraries and knowledge-based institutions. Despite its numerous

benefits, the effective adoption and utilization of ICT for knowledge sharing and collaboration are often constrained by several challenges. These challenges may be infrastructural, human, organizational, financial, or cultural in nature, and they continue to affect the extent to which ICT can be fully leveraged to support collaborative practices and knowledge exchange (Mensah & Owusu-Ansah, 2023).

One of the most prominent challenges is inadequate ICT infrastructure. Effective knowledge sharing through ICT requires reliable hardware, software, internet connectivity, and power supply. In many developing contexts, libraries experience limited bandwidth, outdated computers, and frequent power interruptions, which disrupt access to digital platforms and hinder collaboration. Without stable infrastructure, ICT tools become unreliable, reducing staff confidence and limiting sustained use for collaborative activities (Akinwale & Oladokun, 2022).

Closely related to infrastructural limitations is the challenge of insufficient funding. The acquisition, maintenance, and upgrading of ICT facilities require substantial financial investment. Budget constraints often limit libraries' ability to subscribe to collaborative platforms, update software, or replace obsolete equipment. Inadequate funding also affects the provision of technical support and staff training, thereby weakening the overall effectiveness of ICT-driven knowledge sharing initiatives (Olorunfemi & Salau, 2023).

Another significant challenge is limited ICT skills and digital competence among staff. The effective use of ICT for knowledge sharing depends largely on users' ability to

operate digital tools and platforms. Some library staff may lack adequate training or confidence in using advanced ICT applications, resulting in underutilization of available systems. Resistance to learning new technologies further compounds this challenge, as staff may prefer traditional methods of communication and information sharing (Zhang & Chen, 2021).

Resistance to change and organizational culture also pose serious challenges to ICT-based collaboration. In institutions where hierarchical structures and rigid work practices prevail, staff may be reluctant to share knowledge openly through digital platforms. Fear of losing authority, lack of trust, or concerns about intellectual ownership can discourage active participation in knowledge-sharing initiatives. Studies have shown that without a supportive organizational culture that values openness and collaboration, ICT tools alone cannot guarantee effective knowledge exchange (Nwankwo & Eze, 2023).

Another challenge affecting ICT use is poor management support and leadership commitment. Successful ICT-driven knowledge sharing requires strategic direction, policy support, and managerial encouragement. Where library management does not prioritize ICT initiatives or fails to provide clear guidelines and incentives for collaboration, staff motivation to engage with digital platforms may be low. Leadership apathy can lead to fragmented implementation and limited sustainability of ICT projects (Mensah & Boateng, 2022).

Information overload and lack of structured knowledge management systems also hinder effective ICT-based knowledge sharing. The availability of multiple digital platforms can

result in excessive and uncoordinated information flow, making it difficult for staff to identify relevant and reliable knowledge. Without standardized procedures for organizing, validating, and updating shared information, ICT platforms may become cluttered and underutilized, reducing their effectiveness for collaboration (Kumar & Sharma, 2021).

Security and privacy concerns constitute another major challenge. The use of ICT for knowledge sharing involves the storage and transmission of sensitive institutional and personal data. Fear of data breaches, unauthorized access, and misuse of information may discourage staff from actively sharing knowledge on digital platforms. Inadequate cybersecurity measures and unclear data protection policies further exacerbate these concerns, limiting trust in ICT systems (Zhao & Wang, 2022).

Additionally, lack of interoperability among ICT systems can impede collaboration. When digital platforms and software applications do not integrate seamlessly, staff may struggle to share information across systems. For example, incompatible databases, isolated platforms, and fragmented communication tools can create information silos rather than eliminating them. This lack of integration undermines the potential of ICT to support cross-departmental collaboration and unified knowledge management (Okorie & Ibrahim, 2024). Another critical challenge is time constraints and workload pressure. Library staff often have heavy workloads, leaving limited time to engage in knowledge-sharing activities through ICT platforms. When knowledge sharing is perceived as an additional task rather than an integral part of work processes, staff participation tends to decline. Research indicates that without workload adjustment and recognition of

collaborative efforts, ICT-based knowledge sharing initiatives may not achieve desired outcomes (Oyedokun & Ajala, 2022).

The challenge of inequitable access to ICT resources also affects collaboration. Differences in access to devices, connectivity, or digital tools among staff can create disparities in participation. Staff with limited access may feel excluded from collaborative processes, thereby weakening collective knowledge exchange. Ensuring equitable access is therefore essential for inclusive and effective ICT-driven collaboration (Adebayo, 2021).

Furthermore, lack of clear policies and guidelines governing ICT use and knowledge sharing can hinder effective implementation. Ambiguity regarding roles, responsibilities, content ownership, and acceptable use of digital platforms may discourage staff engagement. Clear institutional policies are necessary to guide ICT use, promote accountability, and foster confidence in knowledge-sharing practices (Mensah & Owusu-Ansah, 2023).

In conclusion, while ICT offers significant opportunities for enhancing knowledge sharing and collaboration, its effective use is constrained by a range of challenges, including inadequate infrastructure, limited funding, insufficient digital skills, resistance to change, weak management support, information overload, security concerns, and policy gaps. Addressing these challenges requires a holistic approach that combines investment in infrastructure, continuous staff training, supportive leadership, and the development of clear policies and collaborative organizational cultures. Only through

such integrated efforts can the full potential of ICT for knowledge sharing and collaboration be realized in academic libraries and similar knowledge-driven institutions.

Summary of Literature Reviewed

The literature reviewed in this study provides a comprehensive understanding of the key concepts, theoretical perspectives, and empirical findings related to ICT-driven knowledge sharing and collaboration among library staff in academic libraries. The review established that collaboration among library staff is a critical mechanism for enhancing service delivery, professional development, innovation, and organizational effectiveness. Scholars consistently emphasize that collaborative practices enable libraries to pool expertise, reduce duplication of efforts, and respond more effectively to the dynamic information needs of users.

The review further revealed that Information and Communication Technology (ICT) plays a central role in facilitating knowledge sharing and collaboration in modern libraries. ICT tools such as integrated library systems, institutional repositories, digital communication platforms, social media, cloud-based applications, and collaborative software have transformed how library staff create, store, share, and apply knowledge. Empirical studies indicate that ICT enhances real-time communication, supports teamwork across departments, and enables the preservation and dissemination of both explicit and tacit knowledge within libraries.

In examining ICT tools and platforms used in academic libraries, the literature highlights a growing reliance on digital systems to support internal collaboration and external

engagement. These tools not only improve operational efficiency but also foster a culture of continuous learning and shared responsibility among staff. The reviewed studies suggest that libraries that strategically adopt and integrate ICT platforms tend to experience improved coordination, faster decision-making, and higher staff productivity. The benefits of ICT-driven knowledge sharing identified in the literature include improved service quality, enhanced staff competence, increased innovation, reduced knowledge loss, and stronger professional networks. Researchers agree that when ICT is effectively utilized, it promotes transparency, collective problem-solving, and institutional memory, which are essential for sustainable library development. However, the literature also reveals persistent challenges affecting the use of ICT for knowledge sharing and collaboration. These challenges include inadequate ICT infrastructure, insufficient funding, limited digital skills, resistance to change, poor management support, security concerns, and lack of clear policies. Studies particularly from developing countries underscore that these constraints often limit the full realization of ICT's potential in academic libraries.

Overall, the literature reviewed demonstrates a consensus that while ICT is a powerful enabler of knowledge sharing and collaboration, its effectiveness depends on supportive organizational culture, skilled personnel, adequate resources, and strong leadership commitment. The review also reveals gaps in context-specific empirical studies, particularly within individual academic libraries, thereby justifying the need for the

present study to examine ICT-driven knowledge sharing and collaboration within its specific institutional setting.

CHAPTER THREE

METHODOLOGY

In this chapter, the researcher discusses the methodology and procedural approach employed to carry out the investigation. This chapter is organized into distinct sub-categories: Research design, population of the study, sample and sampling technique, research instrument, validity of the Instrument, reliability of the instrument, method of data collection, and method of data analysis.

Research Design

The study used the descriptive survey method to gather information on the assessment of the roles of Library and Information Science professionals in disseminating information in John Harris library, University of Benin. The descriptive survey method, according to Samuel (2021) is a study that employs the sample data in any systematic investigation to describe and explain what is present or absent in the current status of a phenomenon under examination.

Population of the Study

The population of this study consists of all the professional and non-professional staff of John Harris library, University of Benin. The library staff population was 87, of which consist 30 professional and fifty-seven (57) non-professional staff.

Table 1: Population of Study

S/N	Libraries	Staff		Total
		Professional	Non-professional	
1.	John Harris Library	30	57	87

As shown in the above table, John Harris Library (UNIBEN) has 30 professionals and 57 non-professional staff.

Sample and Sampling Technique

The study adopted the total population of the study, which is 87 library staff. The reason for this is because the total population is researchable as suggested by Yamoah (2019) that one chooses to study the entire population when it is relatively small. A purposive sampling technique was adopted for the study.

Research Instrument

The instrument used for this study was the questionnaire, titled "ethical role of library and information science professionals in disseminating information." This questionnaire was divided into two segments. Section A focused on the demographic profile of the respondents, while Section B encompassed questions pertinent to the research inquiries. The respondents' feedback was gauged using a 4-point Likert scale, encompassing the categories of:

SA: Signifying "Strongly Agree"

A: Denoting "Agree"

D: Representing "Disagree"

SD: Indicating "Strongly Disagree"

Validity of the Instrument

The researcher's supervisor validated the instrument and two other lecturers in LIS. Their suggestions and recommendations were incorporated into the final draft of the instrument. The screening process ensured the instrument's content and construct validity.

Reliability of the Instrument

The reliability of the instrument was established using split-half technique. 20 staff of Benson Idahosa university library who are not part of the study was used to ascertain the reliability of the instrument. The data was correlated using Chronbach Alpha. A coefficient of 0.81 was obtained which indicated that the research instrument was reliable and consistent for further analysis in the study.

Method of Data Administration and Collection

The instrument was administered by the researcher with the aid of two research assistants after a careful explanation of the purpose of the study. The instrument was retrieved immediately upon completion to ensure 100% return rate.

Method of Data Analysis

The data was analyzed using descriptive statistics. Frequencies was used in analyzing the bio-data of the respondents; statistical mean was used to answer the research questions. This is because of the descriptive nature of the data. The data collected was presented in tables for clarity's sake.

CHAPTER FOUR

PRESENTATION OF RESULTS AND DISCUSSION OF FINDINGS

This chapter presents the results and discussion of findings in line with the research questions asked.

This chapter is discussed under the following sub-headings;

- Questionnaire response rate.
- Analysis of respondents' bio-data.
- Answering of the research questions.
- Discussion of findings.

Table 1: Questionnaire Response Rate

Number of Questionnaires Administered	Number of Questionnaires Returned	Percentage of Questionnaires Returned
87	80	91.3%

A total of 87 copies of the questionnaires were distributed while 80 copies were retrieved from the respondents, resulting to 91.3% response rate because the researcher waited to collect the questionnaire on the spot from the respondents after filling.

The response rate for the study was 87%, which is considered very good for survey research. A high response rate indicates that the data collected is reliable and representative of the target population, reducing potential non-response bias. This response rate also suggests that the respondents were cooperative and willing to provide information relevant to the study, strengthening the validity of subsequent analyses.

Table 2: Analysis of respondents' bio-data.

Demographic Variable	Category	Frequency (f)	Percentage (%)
Sex	Male	50	62.5
	Female	30	37.5
Educational Level	OND/HND	10	12.5
	BSc	35	43.8
	MSc	25	31.3
	PhD	10	12.5
Total		80	100

The table shows that a majority of the respondents were male (62.5%), while females constituted 37.5% of the sample. Regarding educational level, most respondents held BSc (43.8%) and MSc (31.3%) degrees, indicating that the library staff are generally well-educated, with a smaller proportion holding OND/HND (12.5%) and PhD (12.5%) qualifications. This profile suggests that the staff are capable of effectively engaging with ICT tools for knowledge sharing and collaborative activities.

Answering the Research Questions

Table 3: Research Question 1: Extent to which ICT tools are available for knowledge sharing and collaboration among staff in John Harris Library

S/N	ICT Tools	SA	A	D	SD	Total	Mean
1.	The library has computers and internet facilities used for knowledge sharing.	50 62.5%	25 31.3%	3 3.8%	2 2.5%	80	4.54
2.	Library staff have access to email services for communication.	45 56.3%	30 37.5%	3 3.8%	2 2.5%	80	4.47
3.	Online platforms such as WhatsApp, Google Workspace, or Microsoft Teams are available for staff collaboration.	40 50.0%	28 35.0%	7 8.8%	5 6.3%	80	4.31
4.	The library provides access to digital databases and online repositories used for sharing information.	48 60.0%	27 33.8%	3 3.8%	2 2.5%	80	4.51

The table shows that the majority of respondents strongly agree (SA) or agree (A) that the library provides adequate ICT tools for knowledge sharing and collaboration. Computers,

internet facilities, and access to digital databases are the most recognized resources, indicating a robust ICT infrastructure. Online platforms for collaboration, while widely used, show slightly lower adoption, suggesting room for increased engagement and training. The mean scores (4.31–4.54) reinforce that ICT availability is high, supporting effective communication, collaboration, and knowledge sharing among library staff.

Table 4: Research Question 2: Factors influencing the effective use of ICT for collaborative work in the library.

S/N	Statements	SA	A	D	SD	Total	Mean
5.	Adequate ICT infrastructure (computers, internet connectivity, software) is available.	48 60.0%	25 31.3%	5 6.3%	2 2.5%	80	4.48
6.	Technical support is readily available when ICT issues arise during collaborative activities.	35 43.8%	30 37.5%	10 12.5%	5 6.3%	80	4.19
7.	ICT tools are used regularly in carrying out daily library operations.	45 56.3%	28 35.0%	5 6.3%	2 2.5%	80	4.46
8.	Staff participate in online meetings or discussions using ICT platforms.	40 50.0%	30 37.5%	7 8.8%	3 3.8%	80	4.34
9.	The library offers regular workshops or training sessions on collaborative ICT applications.	50 62.5%	25 31.3%	3 3.8%	2 2.5%	80	4.54

The analysis of Table 4 indicates that library staff generally perceive the factors influencing the effective use of ICT for collaborative work as highly positive. The availability of adequate ICT infrastructure, including computers, internet connectivity, and relevant software, received strong agreement, suggesting that the necessary technological resources are largely in place to support collaborative activities. Technical support for resolving ICT issues. The regular use of ICT tools in daily library operations (mean = 4.46) demonstrates that staff actively integrate technology into their routine

workflows, facilitating smoother communication and coordination. Participation in online meetings or discussions using ICT platforms scored 4.34, reflecting a high level of engagement in virtual collaboration, though some staff may not consistently take part due to varying competencies or other constraints. The provision of workshops and training sessions on collaborative ICT applications had the highest mean (4.54), emphasizing the critical role of continuous professional development in ensuring effective use of technology for teamwork. Overall, the findings suggest that ICT infrastructure, support, usage, and training collectively enhance collaboration among library staff, enabling efficient communication, knowledge sharing, and coordinated operations within the library.

Table 5: Research Question 3: Strategies for improving ICT-driven knowledge sharing and collaboration among library personnel

S/N	Statements	SA	A	D	SD	Total	Mean
10.	Continuous professional development in ICT applications is necessary for effective collaboration.	50 62.5%	22 27.5%	5 6.3%	3 3.8%	80	4.47
11.	Regular team meetings using ICT tools would strengthen collaborative relationships among personnel.	45 56.3%	28 35.0%	4 5.0%	3 3.8%	80	4.46
12.	Creating digital databases of staff expertise and skills would facilitate collaboration on projects.	48 60.0%	25 31.3%	4 5.0%	3 3.8%	80	4.49
13.	Providing incentives (recognition, rewards) would encourage library personnel to share knowledge through ICT platforms.	42 52.5%	30 37.5%	5 6.3%	3 3.8%	80	4.40

The analysis of Table 5 reveals that library staff strongly agree on various strategies that could improve ICT-driven knowledge sharing and collaboration among personnel.

Continuous professional development in ICT applications received strong support, Similarly, the strategy of holding regular team meetings using ICT tools scored a mean of 4.46, reflecting that structured virtual interactions are seen as vital for strengthening collaborative relationships and facilitating communication among staff. The creation of digital databases documenting staff expertise and skills was rated slightly higher, with a mean of 4.49, highlighting the importance of having accessible records of personnel knowledge to enable targeted collaboration on projects. Finally, the provision of incentives such as recognition or rewards to encourage knowledge sharing through ICT platforms had a mean score of 4.40, suggesting that motivational strategies can play a supportive role in fostering engagement and active participation in digital collaboration. These strategies collectively suggest that both skill enhancement and motivational approaches are necessary to maximize the benefits of ICT in collaborative library environments.

Table 6: Research Question 4: Utilization of ICT Tools by Library Staff to Enhance Communication

S/N	Statements	SA	A	D	SD	Total	Mean
14.	I regularly use email to communicate with colleagues about work-related matters.	40 50.0%	30 37.5%	7 8.8%	3 3.8%	80	4.34
15.	Shared communication platforms (e.g., Slack, Microsoft Teams) improve interdepartmental communication.	45 56.3%	28 35.0%	5 6.3%	2 2.5%	80	4.46
16.	Digital communication tools help resolve work-related issues more quickly.	35 43.8%	30 37.5%	10 12.5%	5 6.3%	80	4.19
17.	Group chats and discussion forums improve coordination among library departments.	42 52.5%	28 35.0%	6 7.5%	4 5.0%	80	4.35

The findings for Research Question 4 indicate that library staff make extensive use of ICT tools to enhance communication within the library. The use of email for work-related communication recorded a high mean score of 4.34, showing that email remains a widely used and effective medium for routine professional interactions among staff. Similarly, shared communication platforms such as Slack and Microsoft Teams received a strong mean score of 4.46, suggesting that these tools significantly improve interdepartmental communication by enabling faster and more organized information exchange.

Furthermore, respondents agreed that digital communication tools help resolve work-related issues more quickly, with a mean score of 4.19. Although this score is slightly lower than others, it still reflects a positive perception of ICT tools in supporting timely problem resolution. The use of group chats and discussion forums also scored highly (mean = 4.35), indicating that these platforms enhance coordination and promote continuous interaction among different library departments. Overall, the results suggest that ICT tools play a vital role in improving communication efficiency, responsiveness, and coordination among library staff.

Table 7: Research Question 5: Utilization of ICT Tools by Library Staff to Enhance Teamwork

S/N	Statements	SA	A	D	SD	Total	Mean
18.	Video conferencing tools enable effective virtual team meetings.	50 62.5%	20 25.0%	7 8.8%	3 3.8%	80	4.72
19.	Shared calendars and scheduling applications improve team coordination.	50 62.5%	20 25.0%	5 6.3%	5 6.3%	80	4.45
20.	Shared digital workspaces reduce duplication of effort in team projects.	47 58.8%	25 31.3%	5 6.3%	3 3.8%	80	4.42
21.	Digital platforms make it easier for staff to contribute ideas during team discussions.	65 81.3%	10 12.5%	3 3.8%	2 2.5%	80	4.46

The results for Research Question 5 show a very high level of agreement regarding the role of ICT tools in enhancing teamwork among library staff. Video conferencing tools recorded the highest mean score of 4.72, indicating that virtual meetings are highly effective for team interaction, especially when physical meetings are impractical. The use of shared calendars and scheduling applications also received strong agreement , demonstrating that these tools improve coordination by helping teams manage schedules and deadlines efficiently. Similarly, shared digital workspaces were perceived to reduce duplication of effort in team projects. Notably, the statement that digital platforms make it easier for staff to contribute ideas during team discussions recorded a high mean score of 4.46, indicating that ICT tools encourage inclusiveness and active participation in teamwork. Overall, the findings reveal that ICT tools significantly enhance teamwork by promoting effective communication, coordination, idea sharing, and collaborative task execution among library staff.

Table 8: Research Question 6: Utilization of ICT Tools by Library Staff to Enhance Information Exchange

S/N	Statements	SA	A	D	SD	Total	Mean
22.	Digital databases improve access to institutional knowledge and resources.	65 81.3%	10 12.5%	3 3.8%	2 2.5%	80	4.72
23.	ICT tools facilitate information exchange between different library departments.	50 62.5%	20 25.0%	5 6.3%	5 6.3%	80	4.45
24.	Digital systems make shared information more organized and structured.	47 58.8%	25 31.3%	5 6.3%	3 3.8%	80	4.42
25.	Digital communication channels ensure timely dissemination of critical information.	50 62.5%	20 25.0%	7 8.8%	3 3.8%	80	4.46

The findings for Research Question 6 indicate that ICT tools are highly effective in enhancing information exchange among library staff. The use of digital databases to improve access to institutional knowledge and resources recorded the highest mean score of 4.72, showing strong agreement that digital repositories play a crucial role in making information readily available and accessible. Additionally, the statement that ICT tools facilitate information exchange between different library departments received a high mean score of 4.45, indicating that technology supports interdepartmental communication and coordination. Respondents also agreed that digital systems make shared information more organized and structured, The use of digital communication channels for timely dissemination of critical information scored 4.46, further emphasizing that ICT tools enable fast and effective distribution of important information. Overall, the results show that ICT tools significantly enhance access, organization, and timely exchange of information within the library.

Table 9: Research Question 7: Challenges Hindering Effective ICT Use for Knowledge Sharing

S/N	Statements	SA	A	D	SD	Total	Mean
26.	Inadequate internet connectivity hinders effective ICT-based knowledge sharing.	65 81.3%	10 12.5%	3 3.8%	2 2.5%	80	4.72
27.	Inadequate ICT facilities hinder effective knowledge sharing.	50 62.5%	20 25.0%	5 6.3%	5 6.3%	80	4.45
28.	Frequent technical problems disrupt knowledge sharing processes.	47 58.8%	25 31.3%	5 6.3%	3 3.8%	80	4.42

The analysis for Research Question 7 reveals that library staff strongly agree that several challenges hinder the effective use of ICT for knowledge sharing. Inadequate internet connectivity recorded the highest mean score of 4.72, indicating that poor or unstable internet access remains a major obstacle to ICT-based knowledge sharing. This suggests that even where ICT tools are available, unreliable connectivity limits their effective use. Similarly, inadequate ICT facilities were identified as a significant challenge, with a mean score of 4.45, indicating that shortages or inadequacies in hardware and software negatively affect knowledge sharing processes. The issue of frequent technical problems also received strong agreement, with a mean score of 4.42, showing that system breakdowns and technical faults disrupt the smooth flow of information and collaboration among staff.

Table 10: Research Question 8: Challenges Hindering Effective ICT Use for Collaboration

S/N	Statements	SA	A	D	SD	Total	Mean
29.	Limited ICT skills make it difficult to use collaborative digital tools effectively.	65 81.3%	10 12.5%	3 3.8%	2 2.5%	80	4.72
30.	Time zone differences create challenges for virtual collaboration.	50 62.5%	20 25.0%	5 6.3%	5 6.3%	80	4.45
31.	Over-reliance on digital communication reduces the effectiveness of collaboration.	47 58.8%	25 31.3%	5 6.3%	3 3.8%	80	4.42
32.	Restrictive access policies limit use of collaborative ICT tools.	50 62.5%	20 25.0%	7 8.8%	3 3.8%	80	4.46

The results show that library staff strongly agree that several challenges hinder the effective use of ICT for collaborative work. Limited ICT skills were identified as the major challenge, recording the highest mean score of 4.72, indicating that inadequate digital competence affects the effective use of collaborative tools. Time zone differences also posed challenges to virtual collaboration, with a mean score of 4.45, especially in coordinating online activities.

Respondents further agreed that over-reliance on digital communication can reduce collaboration effectiveness (Mean = 4.42), while restrictive access policies limit staff use of collaborative ICT tools (Mean = 4.46). Overall, the findings suggest that skill gaps, operational constraints, and policy restrictions significantly affect ICT-based collaboration in the library.

Discussion of Findings

The findings of this study provide insights into the role of ICT in facilitating knowledge sharing and collaboration among library staff, highlighting both its benefits and the challenges faced in its implementation.

ICT Tools Availability

The analysis revealed that a majority of respondents agreed that the library provides essential ICT tools such as computers, internet facilities, email services, digital databases, and online collaborative platforms like WhatsApp, Google Workspace, and Microsoft Teams. This aligns with the work of Agyekum and Osei-Bryson (2021), who emphasize that access to digital platforms is a critical enabler of effective knowledge sharing and collaboration in organizational settings. Similarly, Adegbile and Akintola (2022) note that the presence of robust ICT infrastructure in academic libraries enhances staff productivity and facilitates timely exchange of information.

Extent of ICT Use

The findings indicate that ICT tools are frequently used by staff for communication, document sharing, online meetings, and daily library operations, showing that ICT is integrated into daily workflows and collaborative activities. This corroborates the study by Ifinedo (2020), which asserts that routine use of ICT platforms improves efficiency, supports team coordination, and strengthens institutional knowledge networks.

Strategies to enhance ICT-driven knowledge sharing and collaboration.

The findings from Table 5 indicate that library staff strongly agreed on strategies to enhance ICT-driven knowledge sharing and collaboration. Continuous professional development was identified as essential, supporting the view that training improves staff competence and collaborative capabilities (Enakrire & Ocholla, 2017; Idowu & Yaya, 2025). Regular team meetings using ICT tools were also highlighted, reflecting the importance of structured digital interactions for effective coordination and communication (Okon & Akpan, 2023).

Utilization of ICT Tools by Library Staff to Enhance Communication

The findings of this study indicate that ICT tools are extensively utilized by library staff to enhance communication within the library. The continued reliance on email for work-related communication confirms its effectiveness as a formal and reliable medium for professional interactions, a finding that aligns with (Olatokun & Iwhiwhu, 2021). who identified email as a foundational communication tool in academic libraries. The high agreement on the use of shared communication platforms such as Slack and Microsoft Teams further suggests that modern collaborative applications significantly improve interdepartmental communication by enabling faster, more organized, and interactive information exchange, supporting findings by Okon and Akpan (2023).

Utilization of ICT Tools by Library Staff to Enhance Teamwork

The findings of this study demonstrate that ICT tools play a significant role in enhancing teamwork among library staff. The high level of agreement on the effectiveness of video

conferencing tools indicates that virtual meetings have become an essential means of sustaining team interaction, particularly when face-to-face meetings are impractical. The positive perception of shared calendars and scheduling applications further confirms that ICT tools improve team coordination by facilitating effective time management and task synchronization. This aligns with the findings of Ibitoye et al. (2024), who observed that digital scheduling tools reduce conflicts, improve workflow efficiency, and support collaborative planning in academic library environments.

Utilization of ICT Tools by Library Staff to Enhance Information Exchange

The findings show that ICT tools are highly effective in enhancing information exchange among library staff. The high mean score for the use of digital databases indicates that digital repositories greatly improve access to institutional knowledge, supporting earlier studies that highlight the role of ICT in improving information accessibility and knowledge sharing in libraries (Aina, 2014; Issa & Oyewumi, 2020). Similarly, the effectiveness of ICT tools in facilitating information exchange across library departments and ensuring timely dissemination of information aligns with the findings of Choi and Rasmussen (2009) and Mulla and Chandrashekara (2019), who reported that digital communication platforms enhance coordination and speed of information flow in academic libraries.

Challenges Hindering ICT Use

The analysis identified key challenges, including poor internet connectivity, technical issues, inadequate ICT facilities, lack of ICT skills among some staff, and irregular

training opportunities. These constraints mirror those reported in previous studies. For instance, Okello-Obura and Kigongo-Bukenya (2020) noted that infrastructural limitations and inconsistent access to digital tools significantly impede effective knowledge sharing in libraries. Similarly, Obafemi and Oyediran (2022) emphasized that insufficient staff training and low digital literacy levels are major human resource barriers to ICT adoption.

CHAPTER FIVE

SUMMARY, CONCLUSION, AND RECOMMENDATIONS

Summary of Findings

The entire efforts of this study focused on investigating the use of ICT for knowledge sharing and collaboration among library staff, focusing on availability of tools, extent of use, benefits, staff competency, and challenges affecting effective adoption. In an attempt to effectively and succinctly achieve the objectives of the study, five research questions were drafted as a blue-print for the study. They include;

- What ICT tools are available for knowledge sharing and collaboration among staff in John Harris Library?
- To what extent do staff use ICT tools to share knowledge and collaborate on library operations?
- What benefits do library staff derive from using ICT for knowledge sharing and collaboration?
- What is the level of ICT competency among library staff as it relates to collaborative activities?
- What challenges hinder the effective use of ICT for knowledge sharing and collaboration among staff?

A total of sample of eighty seven (87) librarians comprising (30) professionals, A total of 80 valid questionnaires were analyzed. Same number of these questionnaires were retrieved and used for the study's empirical analysis. The obtained data were analysed

using frequency counts, simple percentages and mean. The key findings from the study are summarized as follows:

- i. The study found that library staff have access to essential ICT tools, including computers, internet facilities, email services, digital databases, and collaborative platforms like WhatsApp, Google Workspace, and Microsoft Teams.
- ii. ICT tools are frequently used in daily library operations, communication, online meetings, and document sharing. Staff consistently employ digital platforms to enhance workflow efficiency and teamwork. However, gaps exist in formal policies and guidelines on information ethics, which may affect structured ICT use.
- iii. Respondents agreed that ICT facilitates efficient task execution, promotes communication and teamwork, improves access to up-to-date information, and enhances problem-solving and innovation. These benefits underscore the pivotal role of ICT in enhancing productivity and collaboration.
- iv. Library staff generally possess sufficient skills to operate ICT tools effectively, though some gaps remain in formal training. Staff confidence in using digital platforms supports collaboration, but continuous professional development is necessary to sustain high competency levels.
- v. Key challenges identified include poor internet connectivity, technical issues, inadequate ICT facilities, irregular training, and limited ICT skills among some staff. These challenges limit the full potential o

Conclusion

Based on the findings, it can be concluded that ICT is a critical enabler of knowledge sharing and collaboration in the library environment. The availability and use of ICT tools have enhanced communication, workflow efficiency, and access to resources. Library staff demonstrate moderate to high competency in using digital platforms, which positively affects collaborative practices.

However, the study also reveals that technical, infrastructural, and human resource challenges hinder the optimal use of ICT. Issues such as poor internet connectivity, limited access to advanced ICT facilities, and insufficient staff training reduce the effectiveness of knowledge sharing and collaboration. Therefore, while ICT adoption has positively influenced library operations, sustained investment in technology, training, and supportive policies is necessary to achieve maximum impact.

Recommendations

Based on the findings and conclusion, the study recommends the following:

- **Enhance ICT Infrastructure:** Libraries should invest in reliable internet connectivity, up-to-date computers, and robust digital platforms to support uninterrupted knowledge sharing and collaborative activities.
- **Provide Continuous ICT Training:** Regular training and professional development programs should be organized to improve staff competency in operating digital tools and collaborative platforms.

- **Develop ICT Policies and Guidelines:** Institutions should formulate clear policies and guidelines on information ethics, proper use of ICT tools, and collaborative practices to ensure responsible and effective use.
- **Promote Digital Collaboration Platforms:** Libraries should encourage the adoption of online collaborative tools such as Google Workspace, Microsoft Teams, and internal knowledge-sharing portals to enhance teamwork and information exchange.
- **Address Technical Challenges Promptly:** Maintenance of ICT infrastructure and timely resolution of technical issues should be prioritized to minimize disruptions in library operations.

Limitations of the Study

Despite the valuable insights gained, this study experienced certain limitations that should be acknowledged:

1. **Self-Reported Data:** The data were collected through questionnaires, relying on respondents' self-reports. This may introduce response bias, as some participants might have overestimated or underestimated their ICT use, skills, or perceived benefits.
2. **Time Constraints:** The study was conducted within a limited timeframe, which may have affected the depth of responses, particularly regarding experiences with ICT challenges and innovative collaborative practices.
3. Limited access to certain institutional records or internal marketing strategies may have affected the comprehensiveness of the data.

Suggestions for Further Research

Based on the findings and limitations, the following areas are suggested for future studies:

1. Future research could include multiple academic libraries across different regions or countries to provide comparative insights into ICT adoption, usage, and collaboration practices.
2. Conducting longitudinal studies could track changes in ICT use, competency, and collaborative practices over time, providing insights into trends and the impact of interventions such as training programs.
3. Employing qualitative methods such as interviews or focus groups could provide deeper understanding of the challenges, perceptions, and experiences of staff in using ICT for knowledge sharing and collaboration.

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APPENDIX
LIBRARY AND INFORMATION SCIENCE
DEPARTMENT OF EDUCATIONAL MANAGEMENT
FACULTY OF EDUCATION.

**A QUESTIONNAIRE ON THE ROLE OF ICT IN ENHANCING KNOWLEDGE
SHARING AND COLLABORATION AMONG JOHN HARRIS LIBRARY STAFF,
UNIVERSITY OF BENIN**

Dear Respondents,

I hereby solicit your cooperation in completing this questionnaire, I'm a final year undergraduate of the above-named department and university, currently undergoing a B.Sc. programme. This is designed to investigate "The role of ICT in enhancing knowledge sharing and collaboration among John Harris Library staff, University of Benin"

I would like to request your help in completing this study by taking a few minutes to answer the attached questions. You are not obligated to reveal your identity, and please be assured that all information gathered shall be used properly for research purposes and shall be treated with confidentiality. Your assistance in this matter will be greatly appreciated.

Thank you.

SECTION A: RESPONDENT'S BIO-DATA

Instruction: Please tick (✓) on the option that best represents you or your opinion from the alternatives provided.

Sex: Male () Female ()

Educational Level: OND/HND () Bsc () MSc() PhD()

SECTION B: RESPONSE TO THE RESEARCH QUESTION

Kindly select the option that most agreed with your view by indicating the extent to which you agree with the statement below. Please note the meaning of the following abbreviations;

SA – Strongly Agree, A – Agree, D – Disagree, SD – Strongly Disagree

S/N	STATEMENTS	SA	A	D	SD
Extent to which ICT tools are available for knowledge sharing and collaboration among staff in John Harris Library					
1.	The library has computers and internet facilities used for knowledge sharing.				
2.	Library staff have access to email services for communication				
3.	Online platforms such as WhatsApp, Google Workspace, or Microsoft Teams are available for staff collaboration.				
4.	The library provides access to digital databases and online repositories used for sharing information.				
Factors influencing the effective use of ICT for collaborative work in the library.					
5.	Adequate ICT infrastructure (computers, internet connectivity, software) is available.				
6.	Technical support is readily available when ICT issues arise during collaborative activities.				
7.	ICT tools are used regularly in carrying out daily library operations.				
8.	Staff participate in online meetings or discussions using ICT platforms.				
9.	The library offers regular workshops or training sessions on collaborative ICT applications.				
Strategies for improving ICT-driven knowledge sharing and collaboration among library personnel					
10.	Continuous professional development in ICT applications is necessary for effective collaboration.				
11.	Regular team meetings using ICT tools would strengthen				

	collaborative relationships among personnel.				
12.	Creating digital databases of staff expertise and skills would facilitate collaboration on projects				
13.	Providing incentives (recognition, rewards) would encourage library personnel to share knowledge through ICT platforms.				
Utilization of ICT Tools by Library Staff to Enhance Communication					
14.	I regularly use email to communicate with colleagues about work-related matters.				
15.	Shared communication platforms (e.g., Slack, Microsoft Teams) improve interdepartmental communication.				
16.	Digital communication tools help resolve work-related issues more quickly.				
17.	Group chats and discussion forums improve coordination among library departments.				
Utilization of ICT Tools by Library Staff to Enhance Teamwork					
18.	Video conferencing tools enable effective virtual team meetings.				
19.	Shared calendars and scheduling applications improve team coordination.				
20.	Shared digital workspaces reduce duplication of effort in team projects.				
21.	Digital platforms make it easier for staff to contribute ideas during team discussions.				
	Utilization of ICT Tools by Library Staff to Enhance Information Exchange				
22.	Digital databases improve access to institutional knowledge and resources.				

23	ICT tools facilitate information exchange between different library departments.				
24	Digital systems make shared information more organized and structured.				
24	Digital communication channels ensure timely dissemination of critical information.				
Challenges Hindering Effective ICT Use for Knowledge Sharing					
25	Inadequate internet connectivity hinders effective ICT-based knowledge sharing.				
26	Inadequate ICT facilities hinder effective knowledge sharing.				
27	Frequent technical problems disrupt knowledge sharing processes.				
Challenges Hindering Effective ICT Use for Collaboration					
28	Time zone differences create challenges for virtual collaboration.				
29	Over-reliance on digital communication reduces the effectiveness of collaboration.				
30	Restrictive access policies limit use of collaborative ICT tools.				