Knowledge Management Practices Among Librarians: Tracing the Missing Link

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Abstract: The study investigates knowledge management practices among librarians, focusing on the absence of KMPs in academic libraries. Many young graduate librarians struggle to secure white-collar jobs where they can apply their tacit knowledge and expertise to enhance library practices. The inability to share insights, experiences, and skills impedes professional development in the library field. Consequently, this study aims to identify the root causes of these gaps in KMPs among librarians. Using a quantitative research approach, surveys were conducted across various university libraries in Nigeria and South Africa. The findings underscore the importance of librarians sharing their tacit knowledge and experiences to improve daily library operations and user services. Various knowledge management tools, such as database management systems, web portals, electronic document management systems (EDMS), management information systems, and barcode readers, support librarians' activities. However, several obstacles hinder the effective implementation of KMPs among librarians. To address these challenges, the study recommends strategies for reskilling librarians to enhance their knowledge, skills, and experiences for optimal library practices. It emphasizes the importance of governmental and organizational support in providing essential facilities for quality service delivery. Furthermore, policy adherence should be prioritized to eliminate barriers preventing the implementation of KMPs in university libraries.

Keywords: Information, Knowledge management, Knowledge management practices, Strategies, Missing link, Nigeria

1. Introduction

In the contemporary information and knowledge economy, knowledge emerges as a crucial asset vital for organizational survival and prosperity, particularly amidst fierce competition and rapid digital advancements (Mostert & Snyman, 2007). Like other organizations, academic libraries implement effective strategies and tools for managing knowledge to enhance service provision and ensure growth. Central to this endeavour lies the knowledge and skills of librarians, which significantly influence work performance, particularly in tasks related to processing, managing, and utilizing information and knowledge for Knowledge Management Practices (KMPs) within a dynamic work environment. The sustainability and competitive edge of academic library organizations heavily hinge on their collective knowledge—both tacit and explicit. This knowledge is perpetually leveraged to add value and sustain superiority over competitors (Wanangeye & George, 2016). Wanangeye and George (2016) observe a transition in academic libraries toward becoming learning organizations, where experiences, knowledge, and skills are regularly shared among colleagues. Traditional library activities managed through machine-readable catalogues and circulation desks are now facilitated by KMPs. These practices encompass a spectrum of ideologies aimed at fostering a culture of sharing ideas, lifelong learning, information acquisition, knowledge management, knowledge transmission, academic support, and collaborative review processes among colleagues (Wanangeye & George, 2016). This collaborative approach not only enhances individual and organizational learning but also fosters innovation and adaptation in response to evolving demands and challenges within academic libraries.

The imperative for KMPs in academic libraries stems from the pressing need for effective and efficient service delivery within library operations. Studies by Wanangeye and George (2016), Kim and Abbas (2010), and Daneshgar and Parirokh (2007) underscore those academic libraries, tasked with supporting institutional goals through the provision of information (explicit knowledge) in various formats, require librarians—acting as gatekeepers of libraries—to collaborate as a cohesive team to fulfil this mission. The collective efforts of librarians in meeting the diverse information needs of users have driven the necessity for KMPs. As librarians continually update their knowledge using KM tools, catering to diverse users' information needs becomes more manageable, even amidst multiple urgent tasks within limited timeframes. The rationale behind implementing

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KMPs in academic libraries today lies in the myriad principles and strategies employed by librarians, which not only serve to identify, capture, share, and retain knowledge but also foster collaboration, innovation, and social networks among colleagues. These practices have significantly enhanced the working environment for both professional and non-professional staff in academic libraries, enabling them to better serve and redefine their roles. Additionally, academic staff heavily rely on librarians' expertise in repackaging information resources for teaching, learning, and research activities within institutions. With KMPs in place, identifying librarians' diverse areas of expertise and knowledge becomes much more straightforward (Mavodza and Ngulube, 2011; White, 2004). The author of this paper asserts that when Knowledge Management is practised among colleagues, it fosters a deeper understanding of knowledge creation, thereby helping to dispel uncertainties surrounding unfamiliar library practices that librarians may encounter daily.

The author of this study has identified a trend where users' information needs are becoming increasingly intricate, necessitating librarians to acquire new competencies (knowledge, skills, and disposition) (Impagliazzo & Pears, 2018). The importance of possessing adequate knowledge, skills, and disposition to support library operations has led to a shift in the Library and Information Science profession towards focusing more on virtual and technological approaches in recent times. This approach underscores the need for librarians to practice Knowledge Management (KM) in their academic libraries, where sharing known, and unknown knowledge is essential to remain relevant in the digital space. Reluctance to adapt to these changes has hindered many librarians, particularly in developing nations, from acquiring the broad knowledge necessary to effectively cope with evolving library practices. This reluctance also indicates a lack of interest in KM practices. Empirical studies in KM indicate that the utilization of tacit knowledge enables librarians to connect information and knowledge for application in academic library services with minimal delay (Wanangeye and George, 2016; Singh and Sharma, 2011). Librarians need to utilize tacit knowledge due to the increasing complexity of users' information needs in recent times. Additionally, achieving the expected turnaround time for service delivery has become increasingly challenging due to the expanding responsibilities that librarians must manage. Moreover, some librarians exhibit reluctance to share their knowledge, despite job specifications that may encourage knowledge sharing.

Another crucial factor to consider is the support provided to users with extensive research interests. The researcher emphasizes the crucial role of policy in Knowledge Management Practices (KMPs) within academic libraries, particularly in the African context. Policies guide librarians on the approaches to adopt and influence current library practices. Implementing KM in libraries necessitates specific policies, as every library activity is governed by policies. Effective KMPs in academic libraries require actionable policies that can enhance service delivery amid evolving roles in the digital era. When such KMP policies are adopted, librarians gain the opportunity to exchange ideas and share tacit knowledge among themselves. This study identifies factors contributing to the absence of KMPs among librarians in university libraries, recognizing that this challenge is not unique to libraries but prevalent across various organizations.

2. Purpose of the Study

The purpose of the study was to investigate knowledge management practices among librarians in designated academic libraries in Nigeria and South Africa. In line with this, three research questions were used to guide the study:

- How do librarians practice KM in academic libraries?
- Why are knowledge management tools important to support KMPs in academic libraries?
- What approaches could be employed for knowledge management practices in academic libraries?

3. Literature Review

Knowledge Management (KM) in libraries may not be seen as entirely innovative, given the rapid advancements in technologies such as artificial intelligence (AI), robotics, the Internet of Things (IoT), 3D printing, genetic engineering, and quantum computing (Schwab, 2016) that have transformed various sectors. While KM might appear relatively recent to some, many libraries have been inadvertently practising it for years. Libraries have long been involved in managing explicit knowledge and leveraging tacit knowledge to drive their operations. The absence of a universally agreed-upon definition of KM can be attributed to scholars from various disciplines holding diverse views on its conceptualization. However, for this research paper, several perspectives on KM by authors such as Alavi and Leidner (2001), Morgan, Zou, Vorhies, and Katsikeas (2003), Hult (2003), Nonaka and Takeuchi (1995), Nonaka (1994), and Fombad (2016) are foundational. These authors establish that KM extends beyond merely storing and using data or information for various purposes. Instead, it recognizes the value of

knowledge residing within the human mind—an individual asset that can function as an organizational asset. This knowledge can be harnessed and utilized by a diverse range of individuals, thereby influencing the organization's trajectory through the strategic application of technologies, people, and processes.

KMPs are viewed through the lens of organizational learning, emphasizing networking among communities of practice (Beesley and Cooper, 2008). Stemming from Knowledge Management (KM), KMPs involve reshaping data, information, knowledge, or wisdom to address specific phenomena. Innovation is crucial for organizational growth, thus stimulating a knowledge-sharing interface becomes imperative in academic libraries (Mundra, Gulati, and Vashisth, 2011). Previous studies by Nonaka and Takeuchi (1995), Nonaka (1994), and Scarbough (1999) highlight that KMPs are built upon six fundamental principles of KM. These principles include orientation towards knowledge development, transfer, and protection, fostering continuous organizational learning, cultivating an innovative culture, developing competencies, adopting people-centric approaches, and understanding the organization in a global context. Bernborn (1999) suggests that KMPs involve capturing the collective knowledge of individuals within organizations and subsequently filtering and sharing this knowledge among colleagues. The essence of capturing and sharing collective knowledge lies in enhancing the complexity of collaborative work.

Davenport (2002) and Boom and Pimentel (2009) argue that Knowledge Management Practices (KMPs) are instrumental in the creation of new knowledge. This process involves leveraging tangible resources within organizations, and prioritizing teamwork to ensure timely task completion. Such collaboration enhances information access and retrieval within library organizations (Prusak, 2001). The recent surge in knowledge has prompted a shift from traditional to digital forms of Knowledge Management (KM), emphasizing the value of KMPs in libraries (McInerney, 2002). Studies by Pasha and Pasha (2012), Gamble and Blackwell (2001), Schön (1995), Stenmark (2001), Davenport and Prusak (2000), Martin (2007), Ackoff (1999), Benet and Benet (2004), and Kidwell (2002) substantiate the notion that knowledge encompasses a broad spectrum of fluid forms, including personal experiences, wisdom, resources, and values. In the context of KMPs, understanding knowledge involves applying information and insight to broaden frameworks for evaluating and integrating new experiences into organizational decision-making processes. The dynamics of academic libraries are shaped by embedded information, knowledge, documents, repositories, practices, norms, and the expertise of librarians, who continually assess organizational goal attainment. Librarians' skills and experiences are significantly influenced by KMPs, underscoring the importance of regularly consulting diverse sources of explicit knowledge, such as books, documents, journals, and the internet, to foster effective KMPs. Individual knowledge, as posited by Davenport and Prusak (1998), arises from experiences within organizational norms.

Libraries and librarians play essential roles in the daily management of information and knowledge. These roles have driven the implementation of various approaches, tools, and practices in modern libraries (Ajiferuke, 2003). These tools and practices assist in identifying, creating, representing, distributing, and facilitating the adoption of insights and experiences within library organizations (Ajiferuke, 2003). Knowledge Management Practices (KMPs) employ a range of approaches and tools to systematically generate ideas, insights, and experiences for managing library operations (Bhatt, 2001; McInerney, 2002; Koenig, 2002). Shanhong (2000) suggests that KMPs foster knowledge innovation and library development, enhancing knowledge networking among users. Similarly, Thorn (2001) emphasizes that KMPs focus on knowledge transmission through apprenticeship, which can be challenging to formalize. This transmission occurs through personal interactions, where apprentices observe and emulate the master's example. Through this process, apprentices absorb both explicit and tacit knowledge, including nuances not explicitly articulated by the master (Thorn, 2001).

The rationale behind the proposition of Knowledge Management Practices (KMPs) in academic libraries encompasses several key considerations. Firstly, contemporary library organizations increasingly focus on capturing, sharing, retaining, and reusing both librarian-specific and organizational knowledge to enhance service delivery efficiency (Jyoti, Rani, and Kotwal, 2013:9). Secondly, knowledge sharing within the organization creates opportunities for improved productivity and service delivery effectiveness (Jain, 2007; Senge, 1994). Thirdly, the knowledge inherent in individuals, processes, and routines should be recognized and valued by the organization (Jain, 2007; Senge, 1994). Fourthly, the failure to effectively manage the organizational knowledge base can impede various organizational functions. Fifthly, Mavodza and Ngulube (2012) (cited in Nonaka, 1994; Nonaka and Takeuchi, 1995; Nonaka and Teece, 2001) underscore that KMPs foster knowledge generation, leading to the creation of new knowledge, often facilitated through collaborative efforts. Consequently, promoting internal information flow and utilization for institutional effectiveness aligns with KMP activities (Kidwell, Van der Linde, and Johnson, 2000; Williams, Giuse, Koonce, Kou, Giuse, 2004). Sixthly, KMPs cultivate a knowledge-intensive organizational culture (Davenport and Prusak, 1998). Seventhly, they support product

development and employee innovation, leveraging harvested knowledge to enhance colleagues' performance (Holsapple and Wu, 2011). Eighthly, KMPs deepen organizational learning, crucial for risk mitigation, efficiency improvement, and goal achievement (Zack, McKeen, and Singh, 2009). These factors collectively contribute to bridging the gaps in KMP implementation within academic libraries.

Krubu (2009:73) argues that KMPs facilitate the transformation of value from tangible to intangible assets within library organizations. The knowledge acquired through experience, reasoning, intuition, and continual learning can be effectively recognized and valued (Krubu, 2009:74). Consequently, the ongoing process of nurturing, collecting, managing, sharing, and updating knowledge resources has significantly propelled academic libraries ahead compared to other library organizations. This comprehensive Knowledge Management (KM) approach can foster competition among organizations, driven by innovative ideas that enhance long-term employee retention. Recognizing and rewarding employees for their knowledge contributions during service delivery operations, as exemplified by Aina, Mutula, and Tiamiyu (2008), underscores the importance of valuing organizational knowledge. In contemporary times, KMPs have emerged as indispensable assets for enhancing organizational productivity (Alavi and Tiwana, 2002). The recognition of the inherent value of knowledge embedded within individuals, though challenging to capture at times, deserves continuous appreciation (Alavi and Tiwana, 2002; Wright, 2001; Prusak, 2001).

The objective of KMPs in academic libraries is to maximize the utilization of existing knowledge within the organization (Branin, 2003). By enhancing productivity and operational efficiency among individuals, organizations gain a competitive advantage over peers with a limited understanding of KMPs. This fosters an environment where essential knowledge components drive organizational goals (Branin, 2003). The underutilization of knowledge significantly impacts work operations and staff performance, prompting Branin (2003) to advocate for initiatives focused on coding, storing, and transmitting knowledge among information professionals. Such efforts not only enhance information management but also contribute to the core mission of libraries, which is the effective dissemination of information (Townley, 2001).

Integrating Knowledge Management Practices (KMPs) into libraries expands organizational capabilities beyond traditional boundaries. Currently, libraries prioritize the continual utilization of both explicit and tacit knowledge to strengthen organizational functions. These efforts in leveraging tacit and explicit knowledge have refined knowledge-harnessing practices, effectively addressing various organizational challenges encountered by librarians. KMPs are credited with enhancing organizational strength and productivity in work performance. The insights and ideas shared by librarians during knowledge-sharing processes significantly influence work performance (Knowledge Management Research Centre, 2010). These shared insights and ideas inform organizational problem-solving approaches, accommodating diverse colleague backgrounds and practices (Knowledge Management Research Centre, 2010). Mattauch and Caumanns (2003:23) observe that knowledge and information have emerged as new economic factors of production, integral to all sectors of the knowledge economy. In addition to traditional factors like land, capital, labour, and entrepreneurship, knowledge and information are now deemed essential for enhanced productivity. This underscores the indispensability of knowledge and information in all facets of human enterprise. Schaub and Zehnke (2000:316) assert that knowledge often catalyzes social interactions and learning processes. A prior study by Probst et al. (1997:44) highlights that individual capabilities and skills deployed during knowledge production are typically aimed at solving specific problems.

Munn (2001:160) suggests that effective KM in academic libraries is imperative due to the following reasons:

- The evolving nature of the profession requires librarians to be strategic in managing knowledge.
- Dynamism in the workplace requires changes to happen in every sector.
- Cross-fertilisation and collaboration of ideas helps to strengthen knowledge management.
- The creation and capturing of knowledge for institutional memory.
- Knowledge sharing gives people a sense of belonging and motivation.
- Knowledge breeds uncertainty and anxiety, which in turn interferes with focus productivity; and
- Competition among colleagues and other organizations is critical.

These suggestions have driven libraries and librarians to continually thrive in the business of managing and rendering information services to knowledge seekers.

In library practice, the utilization of tacit knowledge becomes crucial due to its versatility in both individual and organizational contexts (Mansell, 2002). Tacit knowledge is understood as the information stored within the human mind (Mansell, 2002). This form of knowledge is predominantly leveraged by Knowledge Management

Practitioners to achieve organizational objectives. Tacit knowledge serves as a conduit for managing and transferring explicit knowledge, facilitating its codification, articulation, and communication (Mansell, 2002).

Previous studies by Polanyi (1966; 1969) and Nonaka and Takeuchi (1995) established the interdependence of two knowledge types—explicit and tacit. The success of Knowledge Management Practices (KMPs) relies on activating and sharing the latent aspects of tacit knowledge inherent in individual capacities, insights, and experiences among colleagues (eSCC, 2004:47). Nonaka and Krogh (2009:636) further emphasize that tacit and explicit knowledge play pivotal roles in achieving organizational objectives. KMPs cannot thrive without fostering creativity, learning, innovation, and change management among colleagues. A notable aspect of KMP activities is when librarians advance by exploring diverse problem-solving approaches (Krogh et al., 2000). The cultivation of new knowledge through continuous knowledge-sharing initiatives is central to this endeavour (Krogh et al., 2000). One hindrance to this progress occurs when colleagues fail to engage in knowledge-sharing exercises, thereby impeding the support system crucial for KMPs. Consequently, the sustainability of KMPs in academic libraries hinges on accessibility to both tacit and explicit knowledge types (Nonaka and Krogh, 2009:636).

4. Research Methodology

This research paper employed a quantitative research approach, specifically utilizing a survey method with questionnaires to collect data from respondents in university libraries across Nigeria and South Africa. The study population consisted of 400 librarians from these university libraries. Ultimately, responses were retrieved from 132 librarians, comprising 77 respondents from Nigeria and 55 from South Africa, representing six selected university libraries in total from both countries. The selection criteria included universities considered top-ranking in their respective countries, such as the University of Ibadan and the University of KwaZulu-Natal, and excluded those in rural areas (e.g., University of Zululand, South Africa, and Delta State University, Nigeria) or those focusing solely on technology (e.g., Durban University of Technology and Federal University of Technology). Six university libraries in both countries were purposefully and randomly selected based on their status as top-ranking institutions, according to the University Web Rankings-Africa 2014. These libraries serve diverse users across Southern and Western regions of Africa, reflecting the visibility of research outputs within the African context. Both countries' universities benefit from well-resourced environments and highly qualified personnel across various disciplines, including professors, doctors, engineers, pharmacists, nurses, and psychologists, among others, who support teaching and learning processes. The university libraries in both countries receive adequate budgetary allocations for resources, facilities, services, policies, staffing, and support. A questionnaire was distributed to 132 respondents at intervals of three to four weeks across these university libraries and subsequently retrieved. Ethical clearance was obtained before distribution to ensure respondents' consent and voluntary participation. Respondents were given approximately four weeks to review and complete the questionnaire, with follow-up emails sent to ensure completion before the researcher visited various university libraries in the two countries. Data obtained from the retrieved questionnaires were analyzed using descriptive and inferential statistics, and the results are presented in the tables below to provide clear representations of the findings. The table represents the sampled universities, their nomenclature and the population that participated in the study. The result in Table 1 indicates a variance in participation due to the availability of participants when the study was carried out.

Table 1 relates to the sampled universities that participated in the study.

Table 1: Sampled Universities of the study

Sampled universities	Nomenclature	Population	Country
University of Ibadan	UI	29	Nigeria
Federal University of Akure	FUT	16	Nigeria
Delta State University	DSU	32	Nigeria
University of Zululand	UZ	9	South Africa
University of Kwa-Zulu-Natal	UKZN	28	South Africa
Durban University of Technology	DUT	18	South Africa

The results in Table 1 indicate that more populations of respondents participated in the study compared to the other universities. It is possible that when the study was carried out, there were more staff who volunteered to engage in the study hence this result. It can also be deduced that some staff could have left the institutions.

5. Results and Discussion of Findings

This segment dealt with the results of the three objectives mentioned earlier at the beginning of the research paper. The response rate of the 132 questionnaires retrieved out of the 400 administered was 33%.

5.1 How Librarians Practice KM in Academic Libraries

The result in Table 2 indicates where the respondents were asked how they practice KM in their various academic libraries. This was further interpreted as shown in Table 2.

Table 2: How do librarians practise KM in academic libraries

How KM is Practiced	UI	FUT	DSU	Average % Nigeria	UZ	UKZN	DUT	Average % SA
Group discussion	100	93	96	96	100	94	96	97
Internship and mentoring	98	97	98	98	86	92	100	93
In-house training	86	100	87	91	94	86	93	91
Routine documentation	88	95	93	92	83	95	94	91
Communication network within the library	91	97	81	89	85	88	97	90
Socialisation	100	97	89	95	100	95	97	97
Seminars, conferences, and workshops	88	88	87	88	87	75	83	82
Storytelling	93	98	95	95	90	95	89	91
Communities of practice	100	98	97	98	100	100	95	98
Average %	94	96	92	94	92	91	94	92
Sample sizes	$N_{=29}$	$N_{=16}$	$N_{=32}$	$N_{Nig\ 77}$	$N_{=9}$	$N_{=28}$	$N_{=18}$	NSA_{55}

The results in Table 2 indicate that Knowledge Management Practices (KMPs) take various forms within academic libraries across the two countries. These practices span from group discussions to communities of practice. Among them, the most prevalent KMPs include group discussions/meetings, apprenticeships, in-house training, socialization, and communities of practice, each with 100% utilization, whereas seminars, conferences, and workshops are less frequently employed. As depicted in Table 2, KMPs are evident among librarians in academic settings, addressing issues related to routines, procedures, policies, applications, knowledge, and skills essential for managing information and human resources within academic libraries. Of particular interest is how KMPs could benefit corporate entities such as banks, oil companies, academic institutions, libraries, and research institutes in implementing policies to thrive in today's knowledge economy (Wanangeye and George, 2016; Jain, 2007).

Wanangeye and George (2016) and Singh and Sharma (2011) emphasize that Knowledge Management Practices (KMPs) center around the shared interests of groups engaged in discussions on common topics. In some cases, communities of practice endure through apprenticeships, where members learn under the guidance of a master. The authors advocate for in-house training, socialization, seminars, conferences, and workshops as optimal avenues for implementing these KMPs. Their findings underscore the importance of cultivating KMPs within academic libraries, as they demonstrate improvements in librarians' routines, procedures, policies, applications, knowledge, and skills crucial for managing information and human resources across diverse organizations. Realizing these enhancements depends on adopting endorsed policies and practices within academic institutions, libraries, and research institutes. Jain (2007: 389) suggests that librarians, as information professionals, should evolve into value-added knowledge professionals capable of envisioning and strategizing for rapid changes. These transformations require instantaneous communications that facilitate transitioning the organization from paper-based to networked relationships.

Singh and Sharma (2011) highlighted how organizational culture can enhance librarians' work performance through the application of Knowledge Management Practices (KMPs). These practices involve librarians analyzing various frameworks within knowledge creation platforms that employ diverse methods and techniques, promoting systems thinking and effective management practices (Liao, 2003:156). KMPs encompass

emerging phenomena within academic libraries, though there remains a need for greater understanding of Knowledge Management (KM) domains. By building on emphasis, it is conceivable that professionals such as medical practitioners, media personnel, engineers, legal practitioners, and others embed similar principles and policies deeply within their respective fields. Applying these principles in libraries could elevate and standardize expectations. Sustaining such practices requires a commitment to continually acquiring knowledge and delivering services to users at optimal standards. KMPs thrive when academic libraries embrace theoretical, methodological, and scientific approaches to foster organizational growth, necessitating a clear understanding of management styles within their institutions.

The author of this study recognizes the paramount importance of work performance. Therefore, librarians must effectively manage both tacit (human knowledge) and explicit (print forms of knowledge) to advance in their careers. Sagsan's theory of the KM life cycle can be applied to justify the necessity of Knowledge Management Practices (KMPs), highlighting knowledge creation as a critical element within formal organizations. Without the imperative to share, the act of creation becomes redundant. Shared knowledge facilitates organizational or individual restructuring when effectively utilized and audited. The enhanced efficiency and productivity of organizations rely on theories and policies that support ongoing research activities in Knowledge Management Practices (KMPs) within academic libraries.

5.2 KM Tools Used to Support KMPs in Academic Libraries

The result in Table 3 indicates where respondents were asked to indicate the KM tools used to support KMPs in their academic libraries. This was further interpreted as shown in Table 3.

Table 3: KM tools used to support KMPs academic libraries

KM Tools	UI	FUT	DSU	Average % Nigeria	UZ	UKZN	DUT	Average % SA
Decision support systems	66	25	31	41	33	32	56	84
Word processor	90	94	88	91	89	100	100	96
Search engine	90	88	81	86	89	100	94	94
Semantic web	59	56	38	51	78	61	78	72
Artificial intelligence tools	48	31	22	34	33	32	67	44
Simulation tools	55	19	16	30	33	29	50	37
Data mining	69	13	22	35	44	43	61	49
Information retrieval tools	83	88	63	78	78	96	94	89
EDMS	72	81	47	67	89	68	72	76
Database management systems	79	88	47	71	89	86	78	84
Data warehouse	69	50	34	51	78	57	56	64
Content management systems	62	44	31	46	67	57	67	64
Management Information Systems	79	81	50	70	89	75	78	81
Web portals	83	88	53	75	56	86	89	77
Site maps	69	56	31	52	67	64	83	71
Barcode reader	69	31	59	53	89	82	89	87
Indexing and abstracting	79	75	69	74	67	86	89	81
Average %	72	59	46	59	69	68	77	74
Sample sizes	$N_{=29}$	$N_{=16}$	$N_{=32}$	$N_{Nig\ 77}$	$N_{=9}$	$N_{=28}$	$N_{=18}$	$N_{SA=55}$

The findings in Table 3 reveal that a significant majority of respondents (90%, 94%, 88%, 81%, 89%, 100%) confirmed the availability and utilization of word processors, search engines, and information retrieval tools for Knowledge Management Practices (KMPs) within the sampled academic libraries. Moreover, database management systems (88%), web portals (83%), electronic document management systems (EDMS), management information systems, and barcode readers (89%) were identified as the primary KM tools

employed across these libraries for enhancing KMPs. Meanwhile, the responses obtained in decision support systems across the universities were different (66%, 25%, 31%, 41%, 33%, 32%, and 56%). The disparity in identified KM tools between university libraries in different countries parallels the varying roles undertaken by librarians. The availability of funding to procure these tools could significantly enhance their impact. Technological advancements and developments may also contribute to disparities in tool availability, with newer technologies often supplanting older ones in facilitating knowledge management within contemporary academic libraries. According to a study by Kwiecien and Rao (2005:180-183 & 284), current KM tools used in academic libraries worldwide include web portals, knowledge-based engineering, the World Wide Web, data mining, OLAP (online analytical processing), document management systems, retrieval systems, search engines, and robust search algorithms. However, the absence of these KM tools can disrupt content management in university libraries, as noted by Frost (2014). This absence affects content management in two ways: causally, by impacting organizational and managerial efforts to effectively implement KM, and resultantly, by hindering efficient resource management. Laleye (2015:399) acknowledges that evolving technologies for operational tasks and educational training can enhance, transform, and predict learning environments that are readily accessible to users.

Muhammad, Ibrahim, Bhatti, and Waqas (2014:27) provide evidence that KM tools play a crucial role in business intelligence operations. These tools are strategically employed to optimize the use of information for tactical, strategic, and operational decision-making across organizations. They are extensively utilized for functions such as data warehousing, data mining, ETL (extraction, transformation, loading), and OLAP (online analytical processing) across various sectors. Many business managers today rely on these KM tools, which have also found adoption in university libraries. Here, they are used to enhance and streamline customer service delivery, aligning library and information services with business-oriented practices. A comprehensive understanding of KM tools is essential for effective library operations and is closely tied to ongoing knowledge management practices (KMPs) among library colleagues. Moreover, the meticulous application of structured processes like cataloguing and classification is recognized as another vital aspect of KMPs within the librarian community.

Gbaje (2007) asserts that the shift of library services into the online environment in the digital age responds to the increasingly diverse needs of users, necessitating continuous updates in knowledge and skills to effectively operate within this environment. Finlay and Finlay (1996) underline a correlation between librarians' knowledge and personality types and their attitudes toward utilizing the Internet as a component of KM tools. They further posit that librarians with expansive knowledge and innovative personalities exhibit more positive attitudes toward innovation. This underscores the critical importance of librarians' attitudes toward applying knowledge in utilizing KM tools effectively. Knight (2009) stresses the urgency of training librarians who may lack sufficient skills and knowledge to adapt to the dynamic nature of KMPs. The evolving information landscape demands versatile and well-educated information professionals capable of navigating and leveraging emerging technologies to support library services.

Previous studies by Salter (2003), Abram (2005), and Gutsche (2010) advocate for a new generation of librarians, such as Librarian 4.0, equipped with diverse skills, knowledge, behaviours, and attitudes suited to the evolving information landscape. Similarly, Nyakundi and Mnjama (2007), the Commission for Higher Education (CHE) (2007), Aina (2005), Westhuizen and Randall (2005), and Ocholla and Bothma (2007) underscore the importance of enhanced competencies among librarians across various domains. These domains encompass Internet and World Wide Web proficiency, online and offline electronic databases, LIS curriculum development, ICT integration, archives and records management, rural information services, research methodologies, management principles, publishing and public relations, communication strategies, customer service, and interpersonal skills. These extensive areas of expertise are crucial for librarians in current KM practices, reflecting the profession's ongoing evolution and diversification.

Knowledge Management Practices (KMPs) empower librarians by enhancing their knowledge, experience, and skills, which are crucial for effective service delivery and ongoing professional development in academic libraries. Another effective approach to practising KM involves librarians participating in seminars, conferences, and workshops, where they further enrich their expertise. These platforms not only foster professional growth but also promote teamwork, collaboration, and advance research activities within library environments. Infrastructure support is integral to organizational success in KM practices, encompassing the alignment of people, processes, and technologies within library settings. This support system plays a vital role in managing and optimizing library operations. Additionally, organizational structures and colleague motivation have increasingly contributed to the successful implementation of KMPs. Moreover, individual areas of specialization

significantly influence KMPs' impact in academic libraries, as noted by Vinitha et al. (2006). As library operations expand, the demand for enhanced knowledge, skills, and KM tools continues to grow.

5.3 Approaches for Knowledge Management Practices in Academic Libraries

The result in Table 4 sought to establish the approaches used to promote knowledge management practices in the selected academic libraries in Nigeria and South Africa. This was further interpreted as shown in Table 4.

Table 4: Approaches used to promote KM practices in academic libraries

Approaches used to promote KM practices	UI	FUT	DSU	Nigeria (Average %)	UZ	UKZN	DUT	SA (Average %)
Reuse of knowledge through codification strategy	100	88	92	93	100	90	97	96
Creating values for the users	95	100	87	94	100	92	89	94
Creating coherence among colleagues	96	93	96	95	88	97	95	93
Deepening research and learning processes	100	91	91	94	88	95	100	94
Usage of skills to build new knowledge	95	93	90	93	88	92	91	90
Scaling modernization	93	81	81	85	77	89	82	83
Active commitment with senior colleagues on critical discourse	89	86	83	86	88	92	93	91
Maintaining the existing structure, competencies, and culture of the library	88	100	90	93	100	92	88	93
Knowledge audits every quarter	89	87	86	87	100	85	85	90
Initiating and sustaining a knowledge bank	93	100	86	93	100	82	82	88
Enable interrelated committee work	100	98	88	95	100	93	90	94
Educating and re-training staff	85	93	90	89	88	89	88	88
Community development project	88	96	91	92	100	93	88	94
Publishing of articles, books, and monographs	89	86	89	88	88	95	85	89
Effective examination and support through corporate governance	85	93	96	91	100	96	85	94
Preserve policy for decision-making	88	100	90	93	100	92	88	93
Specification of efficient and effective KM entities	95	91	91	92	88	95	100	94
Adhering to shared ideas	93	100	86	93	100	82	82	88
General access to information and knowledge	92	87	87	87	89	72	91	84
Managing people's intellect	89	87	86	87	100	85	85	90
Guarantee that ICT facilities are accessible and manageable to meet the needs of individuals and organisations	95	86	82	88	100	100	85	95
Intensive face-to-face communication among colleagues	95	86	86	89	82	95	90	89

Approaches used to promote KM practices	UI	FUT	DSU	Nigeria (Average %)	UZ	UKZN	DUT	SA (Average %)
Average %	95	86	86	91	82	95	90	89
Sample sizes	$N_{=29}$	$N_{=16}$	$N_{=32}$	$N_{Nig=77}$	$N_{=9}$	$N_{=28}$	$N_{=18}$	$N_{SA=55}$

Results in Table 4 indicate various approaches to promoting Knowledge Management Practices (KMPs) in academic libraries. These approaches include the reuse of knowledge through codification (88% to 100%), enhancing research and learning processes (88% to 100%), maintaining policies for decision-making (88% to 100%), providing efficient KM entities (91% to 100%), managing intellectual resources (85% to 100%), ensuring the availability and accessibility of ICT facilities (82% to 100%), and facilitating face-to-face communication among colleagues (82% to 95%). These approaches are applied based on specific situations, with certain methods proving effective for similar problem-solving scenarios. A comparison of university libraries in South Africa and Nigeria reveals that South African university libraries promote KMPs more than their Nigerian counterparts. Notably, these diverse approaches significantly influence organizational culture, work environment, management support systems, librarians' knowledge, and access to information. Some approaches have demonstrated greater efficacy when implemented by trained, qualified, experienced, skilled, and dedicated teams, fostering innovation and growth within library organizations.

In a study conducted by Allen (2012), it was highlighted that various platforms such as book fairs, workshops, seminars, conferences, online resources, and readership campaigns play pivotal roles in promoting KMPs within academic libraries. Allen further asserts that these events facilitate the cross-fertilization of information and knowledge among colleagues, which forms the foundation of KMPs within the organization. Brenya (2008) identifies several approaches as key drivers in promoting KMPs in academic libraries, including motivations, attitudes of librarians, organizational knowledge, bibliographic searches, utilization of internet resources, and diverse cataloguing tools and software. These strategies have fostered the generation of new ideas, insights, and knowledge necessary for the effective functioning of librarians. According to IFLA (2011), the execution of tasks within the library environment contributes to the creation of knowledge essential for nurturing an informed society, a process integral to Knowledge Management Practices (KMPs). Furthermore, the dissemination of information about library functions necessitates the application of strategic management principles (Fayol, 1961). Principles such as planning, organizing, coordinating, commanding, and evaluating are readily observable in contemporary library operations. The application of these management principles is crucial for academic libraries in facilitating daily access to information and knowledge.

Approaches are seen as essential tools for fortifying university libraries, providing them with the requisite information materials, knowledge, and skills necessary for their operations. According to Allen (2012), approaches such as knowledge application, research investigation, workplace experiences, behavioural insights, and project consultations are invaluable components within Knowledge Management Practices (KMPs) in academic libraries. Sharing knowledge among colleagues alleviates individual burdens, and this exchange can occur through various platforms, including the intranet, communities of practice, wikis, brainstorming sessions, global forums, webinars, and design intelligence portals, all of which transcend boundaries (Allen, 2012). Adams (1998) contends that library and information services conducted within the library setting have altered organizational dynamics, whereby the processing of knowledge and its outcomes influence the frameworks employed in knowledge production, as well as the quality of knowledge interventions. Consequently, the knowledge requisite for academic library services undergoes a process involving the capture and reconstruction of colleagues' organizational performances. Allen (2012) highlights that the realization of effective library services hinges on the implementation of knowledge management practices among librarians.

The evolution taking place within academic libraries highlights librarians' recognition of the collective assets inherent in the university library. Butcher (2007) argues that Information and Communication Technologies (ICTs) are crucial supportive tools that enhance work performance across diverse institutional contexts. Butcher emphasizes that when devising an approach, the primary consideration should be given to people, followed by systems/tools, and finally processes. Academic libraries must possess operational proficiency, historical insight, and ICT capability to effectively pursue their objectives. The roles fulfilled by people, processes, and technologies constitute the three core pillars of approach within academic library organizations. To make informed decisions, academic libraries should employ certain planning principles, thereby bolstering strategic support for fostering proactive engagement among team members in Knowledge Management Practices (KMPs). Through

collaboration, trust-building, and the cultivation of shared understanding and communities of practice, academic libraries can effectively attain their KMP objectives (Butcher, 2007).

Institutional policies are another crucial approach that could bolster Knowledge Management Practices (KMPs) in recent years (Enakrire, 2015). Their efficacy is enhanced through regular reviews aimed at assessing organizational weaknesses and strengths. It is imperative for academic libraries to devise techniques for strategically promoting KMPs within the information and knowledge economy.

UN-Habitat (2010) asserts that organizations are adopting new approaches that consider emerging cultures, social networks, and technologies, facilitating novel avenues for sharing knowledge among librarians. To address the information needs of user communities, a study by UN-Habitat (2010) advocates for knowledge audits, which involve the systematic evaluation of both tacit and explicit knowledge within the organization. Such audits can aid in fortifying and refining the operational capacities of librarians in tasks related to Knowledge Management Practices (KMPs). Effective KMPs ensure that knowledge-sharing techniques, which enhance work performance, are duly applied. King (2009) advocates for codification and personalization approaches, both of which play pivotal roles in promoting KMPs through the dissemination and reuse of codified knowledge. Personalization is instrumental in facilitating interactions among librarians within the university environment. Studies by Hovland (2003) and Fombad (2018) highlight that KM approaches hold significance for organizations, as they facilitate the conversion of information and data into actionable knowledge that aligns with organizational objectives.

Fombad (2018) highlights the importance of codification and personalization as key elements in contemporary knowledge management (KM) approaches. The integration of people, processes, and technologies acts as enablers for achieving these objectives. These enablers facilitate knowledge sharing and transfer, thereby empowering librarians to deliver quality services to users. Ruggles (1997) asserts that technology-based mechanisms have proven instrumental in enhancing KM practices through knowledge generation, codification, and transfer. However, the mere availability of technology is insufficient without human intervention to manage its operations. Librarians must explore various options to acquire the knowledge necessary for integrating library systems conducive to KM practices. Similarly, Ngulube and Lwoga (2007) note that the utilization of tacit and explicit knowledge mechanisms has streamlined workflows, integrated workspaces, and improved time management among librarians.

6. Conclusion and Recommendations

The study established that contemporary academic libraries emphasize the utilization of both tacit (knowledge in the human brain) and explicit (knowledge in books) knowledge to excel in library management operations. This emphasis has led to the emergence of Knowledge Management Practices (KMPs). The sources of information and knowledge consulted by librarians in KMPs are evident in this study, which highlights commonalities and differences between Nigeria and South Africa in terms of applied KMP approaches in academic libraries. The quality of KMPs and the efficiency of work performance among librarians varied across the library environments of the two countries. The study emphasizes that the significant role played by librarians and academic libraries in KMPs has brought about various phases of training and development, expanding librarians' exposure to and experiences with KMPs in the workplace. Enhanced learning and work performance among librarians result in the continual acquisition, sharing, and utilization of new knowledge, leading to both personal and organizational growth. The study established that KMPs are not uniform across academic libraries in the two sampled countries. Institutional support, policies, and various Knowledge Management (KM) tools have strengthened KMPs in academic libraries. The improved services to meet user information needs reflect a blend of traditional and modern applications of technical KM tools, as well as librarians' knowledge, skills, and expertise.

Academic libraries now require new knowledge and skills to effectively address the increasing information needs of users. These new competencies are embedded in the expertise of librarians. To apply these skills, various approaches in research activities must be considered. The study recommends enhancing support from government and institutional levels to promote Knowledge Management Practices (KMPs) in academic libraries. This support would deepen educational programs, research initiatives, and community services offered by librarians to users. KM tools are utilised to support various methods of coding, organising, and disseminating local collections across different platforms. Regulating these KM tools is revitalized through proper planning and execution of the learning interface of KMPs among librarians.

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