Trend of Knowledge Transfer Strategy in the Libraries: A Bibliometrics Analysis

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TREND OF KNOWLEDGE TRANSFER STRATEGY IN THE LIBRARIES: A BIBLIOMETRIC ANALYSIS

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Abstract

This study investigates the significance of knowledge transfer strategies within libraries, encompassing insights and expertise deeply ingrained in organizational strategy. This study aims to explore and evaluate key indicators of scientific behavior in the research domain concerning the intersection of open innovation and concepts of knowledge transfer in libraries. Through bibliometric and network analysis, the study seeks to unravel the joint scientific trajectory of these domains. This research uncovered three primary avenues: knowledge transfer within LIS research and journals, knowledge retention for outgoing employees, and knowledge transfer in information literacy programs. The study reveals publication trends and identifies research gaps, emphasizing opportunities for scholars to contribute to the evolving discourse on knowledge transfer. Practical implications include tailored approaches for organizational learning and innovation. Future research should address identified gaps and explore emerging trends, fostering collaboration between researchers, practitioners, and policymakers to promote organizational resilience and continuous improvement within libraries.

Keywords: bibliometric, knowledge transfer; library, open innovation

I. INTRODUCTION

Knowledge transfer distributes the conversion result of tacit and explicit knowledge within a library or institution. Duan et al. (2022) highlighted that when explicit knowledge is transferred within an organization, it tends to result in uniformity. In contrast, the transfer of tacit knowledge leads to a greater rate of knowledge expansion. Tacit knowledge encompasses insights, experiences, and expertise that are deeply ingrained in individuals and are often difficult to express in words or formalize. Consequently, the transfer of tacit knowledge is the main driver for organizational innovation and long-term growth. Tacit knowledge transfer among members involves sharing concealed tacit knowledge with others, who assimilate, utilize, and internalize this knowledge.

The transfer of tacit knowledge primarily fuels organizational innovation and long-term growth in libraries. Unlike explicit knowledge, which can be documented and disseminated through manuals or training materials, tacit knowledge resides within individuals and is transmitted through interactions, observations, and hands-on experiences. Tacit knowledge transfer among library staff involves sharing hidden insights, intuitions, and best practices with colleagues (Agarwal & Islam, 2015). As these insights are absorbed, applied, and internalized by others, they contribute to a culture of learning and continuous improvement within the library organization. This process not only enhances the collective expertise of library staff but also leads to the development of innovative services, programs, and solutions that better meet the evolving needs of library users.

Along with technological developments, the digital environment has emerged due to innovations facilitating all community activities. Technology-based knowledge transfer supports libraries to accumulate large amounts of cross-border knowledge. The significance of knowledge transfer strategy in libraries is multifaceted and crucial for their continued relevance and effectiveness in serving their communities. When explicit knowledge, which refers to easily codified and transmitted information, is transferred within a library organization, it often leads to a standardization of practices and procedures. This can be beneficial for ensuring consistency but may also limit creativity and innovation (Thomas and Urban, 2018).

Knowledge transfer innovation in technology adoption is a form of information technology
development currently used by people or organizations that have done most of their digital activity toward increasing online user communication, interaction, and collaboration. Knowledge transfer strategy has brought significant changes, especially regarding interaction, communication, and cooperation of individuals in exchanging information online. This benefit can allow organizations to improve intra-organizational communication, collaboration, and knowledge transfer (Choi, 2014).

Marbun, et al., (2020) found that a knowledge transfer strategy can facilitate knowledge transfer that affects work performance. Transferring knowledge culture using knowledge transfer strategy will increase the workers’ skills and knowledge. Knowledge transfer strategy usage improves the efficiency of information exchange, including knowledge that can improve work performance, such as guidelines, procedures, skills, work instruction, and other explicit organizational information. Knowledge transfer within organizations will stimulate new ideas and drive organizational innovation.

Argote (2016) also found that knowledge transfer strategy can be used as a medium to measure knowledge transfer in organizations. Knowledge transfer strategies such as question-and-answer forums, blogs, and other online communication platforms are increasingly used by organizations or knowledge communities. Most knowledge can be exchanged explicitly online in a digital environment. Traces of digital communication through knowledge transfer strategy aims to determine the knowledge transfer process, allowing the exchange of knowledge between individuals or units to develop knowledge.

The rapid growth of knowledge transfer strategy to support knowledge transfer activity in libraries encourages new research on how individuals, organizations, and institutions will adopt innovation to spread globally. This study aims to classify and analyze the research trends on knowledge transfer strategies in libraries in the digital environment to understand the research trajectory on this topic through bibliometric analysis.

Bibliometric analysis is a tool that can be used to measure and investigate scientific publications quantitatively, find trends, and explain the distribution or collaboration of research that can be identified by author, and institution. Bibliometric analysis is very useful for finding new research trends in various disciplines through big data (Gu, 2021). By exploring new opportunities that can be done for research, the future can be the development of innovation by looking at the opportunity of strategy and technology innovation for the knowledge transfer process in libraries. Therefore, tracking and mapping the previous research is necessary for a better understanding of the trend of knowledge transfer strategy in libraries.

II. LITERATURE REVIEW

A. Tacit and Explicit Knowledge

There are two types of knowledge: tacit and explicit. Chugh (2017) defines explicit knowledge as that which can be communicated in writing either through policies or manuals. While tacit knowledge is the knowledge that is more difficult to communicate because it can only be expressed based on individual experience. Sometimes tacit knowledge is considered as the knowledge that is more relevant to organizational needs in decision-making because it is an innovation that cannot be imitated because it is difficult to access by other parties. Tacit knowledge includes the expertise, skills, and experience provided by the organization which can also be put into explicit form to be used as a basis for performance improvement.

Sikombe (2019) proposes several things that can distinguish between tacit and explicit knowledge. By definition, tacit knowledge is the knowledge that is acquired and can be expressed through performance. While explicit knowledge is knowledge obtained based on theory, facts, and instructions. Based on quality, the transfer of tacit knowledge is slower but has a high degree of uncertainty. Meanwhile, the direct explicit transfer process is faster and more accurate. Based on the degree of diffusion, tacit knowledge is more difficult to convey. While explicit knowledge is easier to convey. Based on the source, tacit knowledge is based on experience, general information, and memory possessed by a person. While explicit knowledge comes from written sources such as documents, books, policies, databases, guidelines, and manuals. Based on the complexity, tacit knowledge is more complex.
knowledge, so it cannot be taught and observed. While explicit knowledge is simpler so that it can be taught and observed.

According to Nonaka and Takeuchi (1998), knowledge creation can be achieved by tacit and explicit understanding known as the SECI model. First, socialization (tacit to tacit), occurs when an individual shares knowledge directly with others, such as through discussions, seminars, or conversations. Second, externalization (tacit to explicit), occurs when tacit knowledge is articulated in the form of written works such as books, research reports, and articles. Third, combination (explicit to explicit) occurs when an explicitly distinct individual emerges in new explicit circles through analysis, grouping, and rearrangement. Fourth, internalization (explicit to tacit), when explicitly disclosed, is shared through organizations and information networks to develop tacit knowledge.

B. Knowledge Transfer

Knowledge transfer is a fundamental activity within knowledge management, focusing on how created knowledge is distributed or conveyed to recipients. Successful knowledge transfer occurs when the receiving unit effectively collects or assimilates new knowledge. This process involves two main components: the source or sender who shares knowledge and the recipient who acquires it. Knowledge transfer takes place through sharing between individuals and groups via interaction (Bagheri, 2016).

The knowledge transfer life cycle consists of five stages. The first step is identifying where the organization determines essential knowledge to disseminate to staff and identifies knowledge sources. The second step is capturing, which involves accumulating selected knowledge. Thirdly, the sharing stage determines the method of sharing knowledge. The fourth step involves implementing shared knowledge from the knowledge transfer stage. Lastly, the assessing step is the development stage, which determines the effectiveness of knowledge transfer activities that have been carried out (Langley, 2015).

The composition of knowledge transfer heavily relies on the implemented strategy, as highlighted in reviews, focusing on three key elements: process, activity, actor (Tangaraja et al., 2016). Firstly, the processes involved differ based on the approach adopted. In knowledge transfer utilizing a codification strategy, five fundamental processes are crucial for comprehensive knowledge transfer: identification, recognition, acquisition/absorption, assimilation, and application/utilization by the recipient. Conversely, in knowledge transfer employing a personalization strategy, an additional process of sharing is incorporated, totaling six core processes: knowledge identifying, recognizing, sharing, acquiring/absorbing, assimilating, and applying/utilizing. Knowledge sharing operates within the knowledge transfer framework utilizing a personalization strategy, thus delineating knowledge transfer as a broader concept encompassing various processes compared to knowledge sharing.

Secondly, the activity characteristics of knowledge transfer are multifaceted, encompassing both behavioral and non-behavioral attributes. While observable behaviors like knowledge sharing and application are evident, non-behavioral features such as identification, recognition, acquisition/absorption, and assimilation occur within the cognitive of the recipient, involving processes of sense-making that are not externally observable.

Lastly, the actor can manifest at different levels, from individual to higher group or organizational levels, contingent upon the chosen strategy. For instance, in codification-based knowledge transfer, individual-level knowledge transfer occurs when an employee independently engages with reading material or a handbook. Conversely, group-level knowledge transfer transpires when organizations facilitate online courses for teams utilizing repository systems. In contrast, personalization-focused knowledge transfer predominantly involves interpersonal interactions between individuals or groups, thus emphasizing its people-centric nature compared to codification-based knowledge transfer. These concepts are represented in Figure 1, below:
III. METHODOLOGY

This research utilizes bibliometric analysis, a quantitative method for scrutinizing bibliographic data from journal articles. Commonly employed to reference scientific articles cited in journals and classify them by research topics, bibliometric analysis spans disciplines, including sociology, humanities, communications, marketing, and other social sciences. Employing VOSViewer software, this approach visually portrays bibliographies or datasets encompassing bibliographic details such as title, author, and journal name. The study employs VOSViewer to pinpoint underexplored research areas and identify the most frequently cited references within distinct fields.

A. Research Questions

The study acknowledges various limitations in shaping research questions due to the breadth of data obtained. These limitations enhance the efficacy of retrieving pertinent articles to address the research questions. The research questions (RQ) are:

1) RQ1: How much research is relevant to library knowledge transfer strategies?
2) RQ2: What knowledge transfer strategies in libraries are found in selected articles?
3) RQ3: What is the publication trend regarding knowledge transfer strategies in libraries?

B. Literature Source

This study uses one type of database, SCOPUS. This database was chosen because it has a wide range of publications in the social sciences and offers excellent selected articles. The citation limits used in this study are publications from 2014-2024 or the last ten years since conducting this research.

C. Search Terms

The search process in the SCOPUS database is done by entering search terms which are a combination and integration of synonymous vocabulary using Boolean operator search methods such as OR, AND, and NOT. The formulation of the search terms used in this study uses a combination of synonyms of Boolean operator integration as "Knowledge Transfer" AND "Library".

D. Tools and Techniques

Data in the form of articles found in literature sources are then analyzed through VOSViewer to obtain images that show maps and themes based on the output categorization that has been determined. The type of VOSViewer analysis in this study includes co-occurrence to analyzing the frequency of different keywords that occur from research topics, the output has three visualizations namely network, overlay, and density.

E. Inclusion and Exclusion Criteria

The criteria for including or excluding articles were utilized to find relevant journal articles that could address the research question, as described by Handayani (2017). The inclusion criteria in this research were journal articles published between 2014-2024, written in English, and focused on the research topic. Articles meeting these inclusion criteria will be utilized as synthesized research data to address the research questions.

IV. FINDINGS AND DISCUSSIONS

A. RQ 1: How much research is relevant to knowledge transfer strategies in libraries?

Based on the search process in SCOPUS databases using the search terms "Knowledge Transfer" in the article title, combined with the
Boolean operator "AND" and "Library" in the article title, abstract, and keywords, 60 publications related to the search terms were identified. Subsequently, the search was refined to include only publications within the range of 2014-2024, resulting in selecting 30 publications that fit this timeframe. These selected publications were then further limited to those categorized as "articles" and published in English, resulting in 20 articles. After that, the selected articles were limited to publications published in English. Finally, 10 articles relevant to the research topic.

In addition to finding relevant articles, to find out indications of the article’s impact on the research topic can be seen based on the number of citations. Articles with several citations can help in research development. For this reason, this study will re-select research that already has citations. Based on the bibliometric analysis for citations, it was found that 10 articles already had citations and will be sorted by the highest number of citations in Table 1.

**TABLE 1. THE MOST CITED ARTICLES**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Author</th>
<th>Source</th>
<th>Year</th>
<th>Cite</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>Knowledge retention and transfer: How libraries manage employees leaving and joining</td>
<td>Agarwal N.K.; Islam M.A.</td>
<td>VINE</td>
<td>2015</td>
<td>24</td>
</tr>
<tr>
<td>A3</td>
<td>The network pattern of journal knowledge transfer in library and information science in China</td>
<td>Zhao R.; Wu S.</td>
<td>Knowledge Organization</td>
<td>2014</td>
<td>10</td>
</tr>
<tr>
<td>A4</td>
<td>“That background knowledge”: What junior and senior undergraduate transfer students need from their libraries</td>
<td>Robison M.; Fawley N.; Marshall A.</td>
<td>Journal of Academic Librarianship</td>
<td>2020</td>
<td>5</td>
</tr>
<tr>
<td>A5</td>
<td>Information security in libraries: Examining the effects of knowledge transfer</td>
<td>Nicolas-Rocca T.S.; Burkhard R.J.</td>
<td>Information Technology and Libraries</td>
<td>2019</td>
<td>5</td>
</tr>
<tr>
<td>A7</td>
<td>Knowledge ambassadors: Enhancing tacit knowledge transfer in Kenyan universities</td>
<td>Kibe L.; Kwanya T.</td>
<td>Lecture Notes in Business Information Processing</td>
<td>2015</td>
<td>3</td>
</tr>
<tr>
<td>A8</td>
<td>Organisational Trust and Tacit Knowledge Transfer</td>
<td>Sarvestani M.S.; Biranvand A.; Shojaeifard A.</td>
<td>DESIDOC Journal of Library and Information Technology</td>
<td>2022</td>
<td>2</td>
</tr>
<tr>
<td>A9</td>
<td>The Moderating Effect of Transformational Leadership on Relationship between Organizational Silence and Knowledge Transfer among Librarians in Federal Universities in Southern Nigeria</td>
<td>Popoola P.S.O.</td>
<td>International Journal of Information Science and Management</td>
<td>2021</td>
<td>1</td>
</tr>
<tr>
<td>A10</td>
<td>Situated cognition principles increase students’ likelihood of knowledge transfer in an online information literacy course</td>
<td>Williamson P.O.</td>
<td>Evidence Based Library and Information Practice</td>
<td>2016</td>
<td>1</td>
</tr>
</tbody>
</table>

Source: VOSViewer 2022
The study by Agrawal and Islam (2015) got the highest citation. This study underscores a seminal contribution to understanding knowledge transfer in library practices, evidenced by its substantial citation count and impact. It introduces a robust framework supported by empirical evidence, emphasizing the significance of explicit and tacit knowledge retention and transfer strategies. As the inaugural empirical investigation in this field, it catalyzes further exploration and guides the formulation of comprehensive policies and systematic knowledge management programs within libraries. Despite inherent limitations, its global implications assist library practitioners in adopting effective strategies. Moreover, it advocates for future research avenues, structured surveys, and in-depth investigations to propel knowledge transfer practices forward. By offering a comprehensive approach and practical insights, this research reshapes the knowledge management landscape within librarianship, ensuring sustained relevance and impact in facilitating organizational learning and information dissemination.

Next, Thomas and Urban (2018) underscore the importance of adapting curriculum within libraries and Library and Information Science (LIS) programs to drive knowledge transfer strategy. The perceived efficacy of LIS programs in preparing professionals for data curation roles highlights the need for curricula that equip graduates with practical, future-proof skills. The study's findings reveal a mismatch between aspirational education and the practical skills demanded in the field, emphasizing the necessity for curriculum adaptation to bridge this gap. By incorporating hands-on learning with data and valuable skill sets like research methods and statistical analysis, LIS programs can better prepare graduates to meet the evolving demands of data-driven roles within libraries. Moreover, partnerships between LIS programs and data science programs can facilitate immersive practical education, fostering communication skills essential for interdisciplinary collaboration and knowledge transfer. Ultimately, investing in adapted curricula from data-driven disciplines is crucial for libraries and LIS programs to stay relevant and effectively support knowledge transfer initiatives in the era of big data.

The study by Zhao and Wu (2014) got third place with ten citations. The analysis of cross-citation data in library and information science journals in China reveals vibrant knowledge transfer networks. Understanding knowledge strength, disciplinary integration, and gaps are pivotal for adapting library and LIS program curricula to evolving innovations in knowledge transfer. Identifying knowledge output-based and knowledge-balanced journals emphasizes their diverse roles, informing interdisciplinary curriculum development. The dynamic hierarchical structure of knowledge transfer networks underscores the need to adapt the LIS curriculum to match emerging trends continuously. The shift in professional power between library science and informatics underscores the importance of equipping students with skills to navigate industry developments and leverage emerging technologies. Integrating cross-citation insights into LIS curriculum design prepares professionals to innovate in the digital environment.

Overall, the nine other articles focused on the strategy in the knowledge transfer process. The research conducted by Robison et al. (2020) examine the specific information and support needs of junior and senior undergraduate transfer students from libraries, emphasizing the importance of tailored library services to facilitate effective knowledge transfer and academic success among this demographic. San Nicolas-Rocca and Burkhard (2019) investigate the impact of knowledge transfer on information security practices within libraries, seeking ways to bolster information security measures effectively.

The research conducted by Siewert and Louderback (2019) on the "Bus Proof" Library concept highlights the importance of technical succession planning and knowledge transfer in preserving institutional memory. This concept resonates with the findings of Kibe and Kwanya (2015), who emphasize the pivotal role of knowledge ambassadors in facilitating tacit knowledge transfer within educational institutions. Sarvestani et al. (2022) further add to this narrative by investigating the relationship between organizational trust and tacit knowledge transfer, underlining the significance of fostering trust within organizations to promote effective knowledge sharing.
Additionally, Popoola (2021) explores how transformational leadership influences knowledge transfer dynamics among librarians, indicating that effective leadership is crucial in facilitating knowledge exchange within academic institutions. Finally, Williamson (2016) contributes to this discourse by examining how applying situated cognition principles can enhance students' likelihood of knowledge transfer, suggesting practical approaches to promote meaningful learning experiences aligned with real-world contexts. These studies offer valuable insights into the multifaceted aspects of knowledge transfer and its implications for organizational learning and innovation in libraries.

B. RQ 2: What knowledge transfer strategy in libraries are found in selected articles?

The synthesis of information from 10 carefully selected articles reveals three primary avenues through knowledge transfer strategies within libraries. These strategies are: 1. Knowledge transfer within LIS research and journals; 2. Knowledge retention for outgoing employees, 3. Knowledge transfer in an information literacy course or program. A comprehensive breakdown of the processes, activities, and stakeholders involved and the distribution of findings from each article is meticulously presented in Table 2.

<table>
<thead>
<tr>
<th>STRATEGY</th>
<th>PROCESS</th>
<th>ACTIVITIES</th>
<th>ACTOR</th>
<th>ARTICLE CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge transfer within LIS research and journals</td>
<td>Identification</td>
<td>1. Identifying knowledge gaps, trends, and best practice between different journals or blocks within the library and information science field.</td>
<td>Source: Library Managers, LIS Researchers</td>
<td>A2, A3, A4, A8, A9</td>
</tr>
<tr>
<td></td>
<td>Recognition</td>
<td>2. Assessing the importance of specific knowledge areas and determining which journals or blocks are critical players in supplying or demanding knowledge.</td>
<td>Receiver: Library Staff</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Acquisition</td>
<td>3. Obtaining knowledge from various sources, including other journals or blocks within the field.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Assimilation</td>
<td>4. Integrating the acquired knowledge into new information to make it practical and applicable within the specific domain.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Application</td>
<td>5. Utilizing the newly acquired knowledge.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowledge Retention for Outgoing Employee</td>
<td>Identification</td>
<td>1. Documentation and Succession Training</td>
<td>Source: Library Managers, Outgoing Employee Candidates, Existing Employee, Community of Practices</td>
<td>A1</td>
</tr>
<tr>
<td></td>
<td>Recognition</td>
<td>1. Sharing knowledge among team members.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Ensuring multiple individuals have expertise in critical areas.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Creating communities of practice or ensuring multiple team members are knowledgeable in similar areas to mitigate the loss of expertise when an employee leaves.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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Published by UI Scholars Hub, 2024
Acquisition
4. Capturing institutional knowledge through storytelling or oral history sessions.
5. Providing sufficient notice period for outgoing employees to train their replacements.

Assimilation
6. Documentation and written procedures

Application
7. Digital Repository
8. Training and Mentoring
9. Formal KM Program

Receiver: Library Staff and incoming employees

Knowledge Transfer in an information literacy course or program

Identification
1. Identifying the need for knowledge transfer by the relevant knowledge to be transferred.

Recognition
2. Recognize the sources of knowledge and understand its importance.

Acquisition
3. Acquired knowledge from relevant sources.

Assimilation
4. Integrating knowledge into existing concepts, processes, and practices.

Application
5. Applying knowledge into information literacy course curriculum and program.

Source: A5, A6, A7, A10

Receiver: Library Managers, LIS Researchers

1) Knowledge transfer within libraries and information science journals

The first strategy was found in five articles: A2, A3, A4, A8, and A9. Articles A2 and A3 focus on identifying and addressing knowledge gaps within LIS education, albeit in different contexts. In Article A2, professionals express concerns about the perceived inadequacies of traditional MLIS programs, particularly in preparing individuals for data curation roles. They recognize the gaps in their education and advocate for reforms to enhance practical skill development and hands-on learning experiences (Thoma & Urban, 2018).

Articles A4 and A9 focus on the academic library context in transferring students' challenges and experiences, offering insights into their educational journey. Article A4 identification involves recognizing transfer students' hurdles, such as reliance on familiar methods and time management issues. Recognition emerges through understanding the patterns in their narratives and acknowledging the impact of institutional knowledge deficits. Acquisition entails gathering strategies transfer students use to navigate research and overcome obstacles, like seeking advice from faculty. Assimilation integrates these insights into understanding transfer students' needs, aiding in future interventions like customized orientation materials. Finally, the application uses these findings to inform practices supporting transfer students,

as it involves integrating acquired knowledge into existing educational frameworks to make it practical and applicable. Finally, the application involves implementing this assimilated knowledge within LIS programs, aligning with the professionals' demand for more hands-on learning opportunities and practical skill development (Zhao and Wu, 2014).

This relates to Article A3, where the identification stage involves recognizing similar knowledge gaps within LIS education, specifically regarding data curation skills. Professionals in both articles acknowledge the significance of these gaps and their impact on teaching and professional practice. Furthermore, they emphasize the importance of acquiring knowledge from various sources, including alternative educational programs and professional experiences, to address these deficiencies. In both articles, assimilation is crucial,
aligning with their academic integration needs (Robison et al., 2020).

Article A9 focuses on the efficiency and quality of university library services. It begins with identifying expertise among team members through documentation and succession training. Acquisition of institutional knowledge involves storytelling sessions and adequate notice periods for outgoing employees to share their insights. Assimilation occurs through detailed documentation and written guidelines, ensuring seamless knowledge transfer. Assimilated knowledge is applied through digital repositories, formal management programs, and training opportunities, fostering continuous learning. Transformational leadership encourages voluntary knowledge sharing and organizational learning, while organizational silence hinders knowledge flow. However, transformational leadership can mitigate this silence, highlighting its role in promoting collaboration. Library managers should prioritize reducing organizational silence and adopting transformational leadership to enhance knowledge transfer among librarians, ultimately improving service delivery and organizational performance (Popoola, 2021).

Article 8 focuses on knowledge sharing in public libraries, emphasizing the role of trust-building for effective knowledge transfer. The stages of identification, recognition, acquisition, assimilation, and application are evident. Identification pinpoints the low level of knowledge sharing as a problem, recognizing trust as foundational for constructive trust-based organizations. Acquisition involves suggesting trust policies and procedures to foster a culture of trust. Assimilation assimilates the importance of identity-based trust in facilitating knowledge sharing. The application suggests focusing on identity-based trust to enhance workplace-to-social and workplace-to-use tacit knowledge, offering insights for future research and practices in public libraries (Sarvestani et al., 2022).

2) Knowledge Retention for Outgoing Employee

The strategies outlined in article A1 offer comprehensive stages for knowledge retention and transfer within library environments. In organizational knowledge transfer, a systematic approach is indispensable for ensuring smooth transitions between outgoing and incoming employees within library settings. Recognition of expertise among team members, documented through meticulous documentation and succession training, is paramount for identifying critical areas and acknowledging valuable expertise. This involves fostering communities of practice and ensuring redundancy in knowledge distribution across team members to mitigate the risk of expertise loss.

Acquisition of institutional knowledge is facilitated through engaging storytelling sessions and providing ample notice periods for outgoing employees to effectively impart their knowledge to successors. Assimilation of acquired knowledge is achieved through comprehensive documentation of procedures and the creation of written guidelines, ensuring seamless knowledge transfer within the organization. Finally, the practical application of assimilated knowledge is realized through the implementation of digital repositories, formal knowledge management programs, and diverse training and mentoring opportunities. By adhering to these strategies, libraries can effectively retain and transfer knowledge, promoting organizational resilience and adaptability in an ever-evolving landscape (Agarwal and Islam, 2015).

3) Knowledge Transfer in an information literacy course or program

Article A5 outlined the examination outlines the distinct stages of the knowledge transfer lifecycle, beginning with Identification, which emphasizes the recognition of the need for knowledge transfer and the Identification of pertinent knowledge. It progresses to Recognizing where the sources of knowledge are acknowledged, particularly emphasizing the value of cybersecurity education. The subsequent stage, Acquisition, highlights the necessity of obtaining knowledge from relevant sources, demonstrated through insights from a cybersecurity education course—the next step assimilation, which integrates acquired knowledge into existing practices, such as implementing security procedures. Finally, Application signifies the practical use of knowledge, exemplified by applying cybersecurity insights to information security risk management (San Nicolas-Rocca and Burkhard, 2019).

Similarly, Article A6, focusing on technical succession planning, moves through these stages,
identifying the need for knowledge transfer, recognizing the risks of losing institutional memory without adequate planning, acquiring and documenting technical knowledge, assimilating it into organizational practices, and practically applying preserved knowledge (Siewert and Louderback, 2019). Article A7 introduces knowledge ambassadors in Kenyan Universities. Although Article A10 explores knowledge transfer in an educational setting, its Assimilation and Application resonate with the themes of the other articles, emphasizing practical teaching methodologies and the Application of acquired knowledge across contexts, thereby contributing to the broader discussion on knowledge transfer (Williamson, 2016; Kibe and Kwanya, 2015).

C. RQ 3: What is the publication trend of knowledge transfer strategy in libraries

This study conducted a co-occurrence analysis to find the main theme in the study with the topic of knowledge transfer strategy in the library. There are two visualizations used in this analysis, namely network and density visualization. The network visualization co-occurrence depicted in Figure 2 illustrates the relationships between terms in the realm of knowledge transfer within libraries over the past decade, spanning from 2014 to 2024. Closer proximity between keyword items signifies stronger relationships, while larger dots indicate topics that have received more research attention. Analysis reveals that the research field of knowledge transfer strategies in libraries is closely linked with studies on technology, open science, documentation, and knowledge translation. Table 3 showcases seven keyword clusters identified in the analysis.
TABLE 3. KEYWORD CLUSTER OF KNOWLEDGE TRANSFER STRATEGIES IN LIBRARIES

<table>
<thead>
<tr>
<th>Number</th>
<th>Cluster</th>
<th>Keyword</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Red</td>
<td>Big data, deep learning, digital library, information technology, machine learning, natural language processing, transfer learning</td>
</tr>
<tr>
<td>2</td>
<td>Green</td>
<td>Information management, knowledge creation, knowledge management, librarians, service innovation, training, university libraries</td>
</tr>
<tr>
<td>3</td>
<td>Dark Blue</td>
<td>Knowledge sharing, libraries, open source, technology, virtual reality</td>
</tr>
<tr>
<td>4</td>
<td>Yellow</td>
<td>Blended learning, higher education, online learning, pedagogy</td>
</tr>
<tr>
<td>5</td>
<td>Purple</td>
<td>Knowledge transfer, knowledge translation, research, tacit knowledge</td>
</tr>
<tr>
<td>6</td>
<td>Light Blue</td>
<td>Academic libraries, assessment, information literacy, transfer students</td>
</tr>
<tr>
<td>7</td>
<td>Orange</td>
<td>ChatGPT, documentation, library</td>
</tr>
</tbody>
</table>

Source: Research Data (VOSViewer, 2024)

The bibliometric keyword clusters reveal distinct themes and areas of focus within information science and library studies and their relation to knowledge transfer. Cluster 1 encompasses keywords related to advanced technologies such as big data, machine learning, and natural language processing. While these technologies primarily focus on data analysis and processing, they also play a significant role in knowledge transfer. For example, machine learning algorithms can facilitate the extraction of insights from vast datasets, contributing to knowledge dissemination and transfer within digital libraries and information systems.

Cluster 2 emphasizes information and knowledge management, service innovation, and training within university libraries. Practical information and knowledge management practices are essential for facilitating knowledge transfer processes within organizations. Librarians play a crucial role in curating, organizing, and disseminating information resources, thereby supporting knowledge creation and transfer among library users. Cluster 3 highlights the intersection of knowledge sharing, libraries, and technology. Digital platforms and open-source technologies enable libraries to facilitate knowledge-sharing initiatives, fostering user collaboration and exchange. Virtual reality tools can enhance immersive learning experiences, facilitating knowledge transfer in diverse educational and professional contexts.

Cluster 4 focuses on pedagogical approaches such as blended learning and online education in higher education settings. Effective pedagogy is essential for facilitating knowledge transfer from educators to students. Blended learning combines traditional classroom instruction with online resources, providing students with varied learning opportunities and enhancing knowledge acquisition and retention. Cluster 5 directly addresses knowledge transfer and related concepts such as knowledge translation and tacit knowledge. Knowledge transfer involves disseminating and applying research findings and expertise to practical contexts. Tacit knowledge refers to implicit knowledge that is difficult to codify and transfer, highlighting the importance of effective communication and experiential learning in knowledge transfer processes.

Cluster 6 focuses on academic libraries, assessment practices, information literacy, and transfer students. Academic libraries are crucial hubs for knowledge dissemination and support student learning through information literacy programs. Effective assessment practices help evaluate students' information literacy skills and facilitate knowledge transfer from academic environments to real-world contexts for transfer students. Cluster 7 is related to AI technologies like ChatGPT, documentation practices, and libraries. AI-driven tools can streamline library documentation processes, improving access to information resources and facilitating user knowledge transfer.

These clusters exemplify the multidimensional aspects of knowledge transfer within information science and library studies, encompassing technological advancements, educational practices, information management strategies, and collaborative initiatives to foster knowledge exchange and innovation. This study utilizes density visualization to emphasize high-density areas to address the research gap and provide actionable
insights. Larger circles indicate themes that garnered more research attention, while smaller circles, located farther away, signify topics that have received less focus from researchers. The density visualization is depicted in Figure 3.

Figure 3 highlights a discernible research gap: keywords displayed with thinner and more faded colors indicate a lower frequency of usage. This observation underscores a potential research gap in knowledge transfer strategy and its correlation with libraries. Keywords such as librarian, training, service innovation, open science, knowledge translation, blended learning, transfer student, and assessment emerge as less explored topics within the existing literature. Hence, these keywords present opportunities for further research and in-depth investigation by future scholars.

V. CONCLUSION

In conclusion, this comprehensive research thoroughly investigates the landscape of knowledge transfer strategies within library settings, providing insight into key findings and trends over the past decade. The study uncovers three primary avenues of library knowledge transfer strategies through meticulous analysis of selected articles. These encompass knowledge transfer within LIS research and journals, knowledge retention for outgoing employees, and knowledge transfer in information literacy courses or programs. Each avenue undergoes intricate examination, revealing the complexities and nuances of facilitating effective knowledge transfer within library environments.

Furthermore, the study thoroughly explores publication trends using co-occurrence analysis, revealing distinct thematic clusters closely linked with studies on technology, information management, pedagogical approaches, and AI-driven innovations. While the analysis offers valuable insights into the multidimensional aspects of knowledge transfer within library science, it also identifies potential research gaps in librarian training, service innovation, and assessment practices. These gaps present opportunities for future scholars to delve deeper and contribute to the evolving discourse on knowledge transfer strategies within libraries, ultimately nurturing organizational resilience, fostering innovation, and enhancing adaptability in an ever-changing information landscape.

A. Implications

The insights derived from this study hold significant practical implications for library practitioners, educators, and policymakers. By understanding the multifaceted nature of library knowledge transfer strategies, stakeholders can develop tailored approaches to enhance organizational learning, support academic success, and foster innovation. Critical implications include the need for curriculum adaptation to bridge skill gaps, the importance of trust-building for effective knowledge sharing, and the role of leadership in facilitating knowledge exchange. Additionally, identifying research gaps presents opportunities for future investigations and developing targeted interventions to address unexplored areas within the field.
Moreover, the study explores publication trends, unveiling thematic clusters linked to technology, information management, pedagogical approaches, and AI innovations. While offering valuable insights into knowledge transfer in library science, it pinpoints potential research gaps in librarian training, service innovation, and assessment practices. These gaps provide fertile ground for future exploration, enriching library knowledge transfer discourse.

These theoretical implications are crucial for enhancing organizational resilience, fostering innovation, and adapting to the evolving information landscape. They emphasize the necessity of ongoing research to advance knowledge transfer practices and meet the changing needs of libraries.

Building upon the findings of this study, future research endeavors should focus on addressing identified research gaps and exploring emerging trends in knowledge transfer within library settings. Scholars are encouraged to conduct interdisciplinary studies integrating insights from diverse fields such as information science, education, and technology. Furthermore, longitudinal studies tracking the implementation and impact of knowledge transfer strategies over time can provide valuable insights into their effectiveness and sustainability. Additionally, collaborations between researchers, practitioners, and policymakers are essential for translating research findings into actionable strategies that promote organizational resilience and facilitate continuous improvement within libraries.

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