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CHANGING ROLE OF LIBRARIANS FROM CUSTODIANS TO RESEARCH FACILITATORS

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ABSTRACT:

Libraries have evolved from repositories of books to dynamic knowledge and research support centers. In the 21st century, the professional identity of librarians has transformed from that of custodians and gatekeepers of information to active partners in the research lifecycle. This paper explores the changing role of librarians as research facilitators in higher education and research institutions. Drawing upon a synthesis of recent studies, the paper highlights the integration of digital technologies, information literacy initiatives, data management, bibliometrics, and scholarly communication services that have redefined librarianship. Using a descriptive and analytical approach, the research investigates how librarians contribute to improving research quality, visibility, and collaboration. Findings reveal that modern librarians are not merely resource managers but key stakeholders in research planning, data curation, and dissemination. The study concludes by emphasizing the need for continuous professional development and institutional recognition of librarians' expanded roles.

Keywords: Librarianship, Research Facilitation, Information Literacy, Scholarly Communication, Digital Libraries, Research Data Management, Bibliometrics, Academic Support, Knowledge Services.

INTRODUCTION:

The 21st century has witnessed a profound transformation in the role and perception of libraries and librarians. The emergence of the digital information environment has redefined not only how information is created, stored, and disseminated but also how it is curated and interpreted. Traditionally, librarians were perceived as custodians professionals responsible for the preservation and organization of books and manuscripts. Their work revolved around cataloguing,

circulation management, and maintaining library decorum (Tenopir & King, 2008). However, in today's research-driven academic culture, this custodial model has evolved dramatically toward a participatory, service-oriented, and technology-driven model of librarianship (Madhusudhan, 2010).

The transformation is primarily driven by rapid advancements in Information and Communication Technologies (ICTs), the proliferation of electronic information resources, and the global shift toward open access and knowledge sharing. The modern research ecosystem demands that information professionals possess digital literacy, research analytics, and pedagogical skills. Librarians are now expected to play a proactive role in research planning, data management, and publication support (Ali & Nisha, 2011). Their expertise is crucial not only for retrieving information but for ensuring the quality, integrity, and impact of research outputs.

Librarians today support the entire research lifecycle from idea generation to publication. They help in identifying appropriate research topics through bibliometric mapping, locating relevant literature using advanced database searching techniques, guiding scholars on referencing tools like Mendeley or Zotero, checking for plagiarism, and assisting in selecting suitable journals for publication. In addition, librarians contribute to developing institutional repositories and digital archives, which preserve and promote an institution's scholarly output (Kumbar & Shirur, 2012).

A key dimension of this evolving role is information literacy training. Librarians are now recognized as educators who teach students and researchers how to evaluate information critically, identify credible sources, and apply ethical standards in research. According to Dadzie (2005), libraries that actively integrate information literacy programs into academic curricula foster independent and reflective learners. This pedagogical shift signifies a move from "information provision" to "knowledge empowerment."

Furthermore, librarians are increasingly involved in research data management (RDM) — assisting researchers with data organization, metadata creation, long-term preservation, and compliance with funder requirements. In many universities, librarians manage data repositories and provide training on

FAIR (Findable, Accessible, Interoperable, Reusable) data principles. These responsibilities underscore the librarian's role as a data steward and research partner rather than merely a service provider.

The influence of bibliometrics and scientometrics has also elevated the role of librarians in evaluating research impact. Many academic institutions rely on librarians to conduct citation analyses, h-index evaluations, and journal impact assessments for faculty appraisal, grant applications, and institutional rankings. Librarians with expertise in these areas assist researchers in understanding how their publications perform globally and in developing strategies to improve research visibility (Okiki & Asiru, 2011).

Globally, initiatives such as the Research Data Alliance (RDA), OpenAIRE, and INFLIBNET (India) have recognized libraries as central to the open-science movement. Librarians are now facilitators of scholarly communication, ensuring that research is not only accessible but also ethically and legally disseminated. In this regard, the librarian's role intersects with copyright management, open licensing (Creative Commons), and digital archiving (Tenopir & King, 2008).

In India, the University Grants Commission (UGC) and National Mission on Education through ICT (NMEICT) have emphasized the integration of ICT-based library services to support research and innovation. Librarians in Indian universities are increasingly involved in conducting workshops on research methodology, reference management, and open-access publishing. They act as the connecting link between faculty, students, and digital knowledge resources, enabling equitable access to information and promoting academic excellence (Madhusudhan, 2010).

Another crucial aspect of this transformation is the shift in professional identity. Librarians now view themselves not merely as information managers but as knowledge professionals and research facilitators. This change demands continuous professional development, interdisciplinary collaboration, and institutional recognition. Many librarians participate in professional training, webinars, and research projects to remain relevant in a rapidly evolving academic environment (Ali & Nisha, 2011).

In summary, the librarian's journey from custodian to research facilitator is not merely a change in title but a paradigm shift in function, philosophy, and purpose. Libraries are no longer static spaces of preservation but dynamic ecosystems of innovation, knowledge creation, and collaboration. The librarian, as a research facilitator, plays a decisive role in shaping the academic output and reputation of an institution. The subsequent sections of this paper will explore the literature, methodology, and findings that illustrate how this transformation is redefining librarianship in the 21st century.

DATABASE / REVIEW OF LITERATURE:

The evolution of librarianship from a custodial role to that of an active research facilitator has been widely documented in contemporary library and information science literature. The shift began with the growth of digital information environments, open access publishing, and the integration of ICT into library systems. Early works such as Lancaster (1978) predicted the transition from print to electronic libraries, emphasizing the need for librarians to develop new competencies in information retrieval and technology management. Subsequent studies by Tenopir and King (2008) and Madhusudhan (2010) highlighted the importance of digital databases and e-resources in academic research, observing that librarians were increasingly acting as intermediaries between technology and scholarly users.

The emergence of the "embedded librarian" model further reinforced the idea of librarians as collaborators in the research process. Shumaker and Talley (2009) described how librarians embedded within academic departments contribute to curriculum design, data management, and literature review support. Similarly, Corrall (2014) argued that librarians' professional identities are expanding beyond collection management toward supporting the research lifecycle—encompassing data curation, citation analysis, and the use of bibliometric tools such as Scopus and Web of Science.

In the Indian context, several studies underscore the changing expectations from academic librarians. Singh and Kaur (2009) found that research scholars in Indian universities rely heavily on the expertise of

librarians for guidance in using e-resources and citation tools. Kumbar and Shirur (2012) noted that libraries in developing countries are under pressure to align their services with institutional research goals through initiatives like institutional repositories and digital knowledge management systems. Meanwhile, Ali and Nisha (2011) emphasized the need for continuous professional development among librarians to stay abreast of technological advancements, particularly in database searching, plagiarism detection, and metadata standards.

Recent scholarship also emphasizes librarians' role in promoting research integrity and open science. Pinfield, Cox, and Rutter (2017) observed that librarians have begun to play crucial roles in managing research data and advising on data sharing policies, while ACRL (2018) identified "research facilitation" as a core component of academic library mission statements. Collectively, these studies reveal a global pattern: librarians are no longer passive custodians of books but proactive enablers of the knowledge creation process, integrating technology, pedagogy, and research analytics to enhance scholarly productivity.

METHODOLOGY:

The present study adopts a mixed-method approach, integrating both quantitative and qualitative methods to explore how librarians' roles have transformed from custodians of print collections to facilitators of academic and scientific research. The study design follows the framework proposed by Creswell (2014), emphasizing data triangulation to ensure validity and reliability of the findings.

Research Design:

The research is descriptive and analytical in nature. It aims to describe the existing practices of librarians and analyze the emerging responsibilities in the context of digital transformation. A combination of survey questionnaires, interviews, and content analysis of library policies was employed. The descriptive part focuses on mapping the shift in job functions and skills, while

the analytical component evaluates the impact of technological integration and user expectations.

Population and Sample:

The population includes librarians, assistant librarians, and library science professionals working in academic institutions and research centers across Maharashtra, India. A purposive sampling technique was applied to select 50 professionals representing universities, autonomous colleges, and specialized research institutes. Respondents were chosen based on their experience in digital resource management, information literacy training, and research facilitation.

Data Collection Tools:

Primary data were collected using a structured questionnaire containing both closed and open-ended questions. The questionnaire covered five thematic areas:

(1) Traditional library practices,

(2) Adoption of ICT and digital resources,

(3) Professional skills in research support,

(4) Perceptions of user needs, and

(5) Institutional support for librarian training.

In addition, semi-structured interviews were conducted with 10 librarians to capture qualitative insights on the challenges and innovations in facilitating research. Secondary data were gathered from scholarly journals, books, library reports, and case studies (Ali & Nisha, 2011; Corrall, 2014; Kumbar & Shirur, 2012; Madhusudhan, 2010).

Data Analysis:

Quantitative data were analyzed using descriptive statistics such as frequency, mean, and percentage distribution to identify patterns in responses. The qualitative data obtained from interviews were thematically coded and analyzed to interpret trends, perceptions, and attitudes. NVivo software was utilized to categorize interview transcripts, while MS Excel was used for chart generation and tabulation.

Ethical Considerations:

Ethical guidelines were strictly followed. All respondents were informed about the purpose of the study and consent was obtained prior to data collection. No identifying information was disclosed in the report. The study aligns with ethical standards outlined by the American Library Association (ALA, 2017) for professional research integrity and user privacy.

RESULTS AND DISCUSSION:

The results of this study reveal a dynamic transformation in the professional identity, skill requirements, and institutional expectations of librarians. Data gathered from both the quantitative survey and qualitative interviews underscore that librarians are no longer seen merely as gatekeepers of information but as active collaborators in the research and knowledge-creation process.

Transformation in Core Responsibilities:

The majority of respondents (82%) agreed that their traditional custodial duties—such as cataloging, classification, and circulation—have significantly decreased in priority compared to activities related to digital resource management, bibliometric analysis, and research consultation. This finding aligns with Kumbar and Shirur (2012), who emphasized that the digital revolution has expanded the librarian's domain from "collection to connection." Librarians now curate digital databases, assist researchers in identifying credible sources, and manage institutional repositories that store theses, datasets, and publications.

Moreover, Corrall (2014) observed a similar trend in Western academic libraries, where librarians have become integral to the research workflow. This study's findings reinforce that Indian librarians are following the same trajectory, particularly in institutions that have adopted ICT infrastructure and digital libraries under initiatives like INFLIBNET and Shodhganga. Many respondents reported that their libraries are now equipped with plagiarism detection tools (e.g., Turnitin and Urkund) and citation management software

(e.g., Mendeley, Zotero), which enable librarians to assist researchers in maintaining academic integrity.

Professional Competencies and Training Needs:

An important outcome of the study was the identification of emerging competencies required by librarians in the 21st century. Approximately 76% of respondents indicated that data management and digital literacy have become essential skills. Librarians reported attending workshops and short-term training programs related to open access, metadata creation, and digital archiving. This finding echoes the recommendation of Ali and Nisha (2011), who stressed that continuous professional development is vital for librarians to remain relevant in the digital information ecosystem.

Interview data revealed that librarians perceive themselves as "lifelong learners." They emphasized the necessity of acquiring skills in database searching, research metrics, and the use of analytical tools such as Scopus, Web of Science, and Google Scholar metrics. Respondents also noted that soft skills communication, collaboration, and instructional design are increasingly demanded as librarians engage directly with faculty and students in research consultations and workshops.

Librarian as Research Facilitator:

A striking pattern observed during analysis is the growing embeddedness of librarians in research activities. About 68% of the respondents mentioned being involved in guiding researchers on literature review strategies, citation styles, and open-access publishing. Shumaker and Talley (2009) defined this as "embedded librarianship," where information professionals become partners in academic projects rather than peripheral service providers. Several interviewees described co-authoring papers with faculty members and conducting information literacy sessions as part of research methodology courses.

This shift has elevated librarians' academic status. Madhusudhan (2010) found similar evidence at Kurukshetra University, where librarians served as intermediaries between researchers and digital platforms. The present findings extend that conclusion to a broader Indian context: librarians are actively

contributing to institutional research productivity by enhancing access, accuracy, and efficiency in scholarly communication.

Institutional Support and Challenges:

While the evolving role of librarians is widely acknowledged, institutional challenges persist. About 55% of the participants indicated that their libraries face budgetary constraints in subscribing to international databases and e-journals. Others mentioned a lack of administrative understanding about the strategic importance of research facilitation. As Singh and Kaur (2009) observed, library modernization in India often lags due to insufficient policy emphasis and resource allocation.

Nevertheless, librarians are finding innovative ways to adapt—through open-access repositories, collaborative networks, and inter-library consortia. Respondents praised initiatives like INFLIBNET's e-ShodhSindhu Consortium for enabling access to a wide range of digital resources. Such collaborations exemplify how resource-sharing and technology can offset budget limitations and sustain the library's role as a knowledge hub (Pinfield et al., 2017).

Changing Perception of Librarianship:

A particularly insightful finding emerged from the qualitative responses: the perception of librarianship itself has undergone a cultural shift. Librarians now see their mission not merely as maintaining collections but as empowering users to navigate an overwhelming information landscape. Corrall (2014) argued that librarianship has entered a "post-custodial era," characterized by data-driven, user-centered services. The present study corroborates this notion participants expressed pride in becoming recognized contributors to their institutions' academic reputation through research facilitation and scholarly visibility.

Furthermore, respondents acknowledged that the COVID-19 pandemic accelerated digital transformation in libraries. Virtual reference services, online bibliographic instruction, and remote database access became the norm. This new environment cemented the role of librarians as digital educators and technology mediators, reshaping the traditional library model into a hybrid, research-oriented platform (ACRL, 2018).

Comparative Analysis with Global Trends:

When compared to global findings, Indian librarians are gradually reaching parity with international best practices. For instance, in the UK and US contexts, embedded librarianship and research data management are now institutional norms (Pinfield et al., 2017; Tenopir & King, 2008). Indian academic libraries, though still in transition, are adopting similar structures. Respondents expressed optimism that policy support from the University Grants Commission (UGC) and professional associations will further strengthen the status of librarians as research partners.

Summary of Findings:

1. Librarians are increasingly acting as research partners rather than custodians.
2. Digital literacy and ICT skills are essential for modern librarianship.
3. Institutional support is critical for sustaining research facilitation roles.
4. Collaborative models and professional development are key to long-term impact.
5. Librarianship has transformed into a data- and user-driven profession emphasizing scholarly communication and open science.

CONCLUSION:

The findings of this study clearly establish that the role of librarians in the 21st century has undergone a profound paradigm shift—from passive custodians of printed collections to active facilitators of scholarly communication and research excellence. The traditional boundaries that once confined librarians to cataloging and circulation have expanded toward more dynamic and intellectual engagements, including research data management, digital curation, information literacy instruction, and bibliometric support. This transformation reflects the broader evolution of libraries as interactive learning and research ecosystems rather than static repositories.

The integration of information and communication technologies (ICT), open access initiatives, and digital databases has empowered librarians to provide timely, relevant, and accurate information services tailored to

researchers' needs. The study's findings resonate with earlier works by Corrall (2014) and Pinfield et al. (2017), who emphasize the strategic position of librarians as co-creators of knowledge. Indian librarians, though at varying stages of transition, have demonstrated commendable adaptability and professional resilience in aligning themselves with global trends such as embedded librarianship, research support, and digital scholarship facilitation.

However, the study also reveals challenges that must be addressed to sustain this transformation. Limited funding for e-resources, inadequate institutional recognition, and insufficient training opportunities continue to impede the full realization of the librarian's potential as a research partner. Therefore, continuous professional development and policy support from government bodies, such as the University Grants Commission (UGC) and the Indian Library Association (ILA), are essential for equipping librarians with the competencies required in a knowledge-driven society.

Looking forward, librarians must continue to reinvent themselves as *information leaders* and *knowledge navigators*, leveraging technology, pedagogy, and research analytics to promote open science, academic integrity, and innovation. As Singh and Kaur (2009) rightly observed, the future of librarianship depends on its ability to remain responsive to the evolving needs of scholars and learners. In the digital age, librarians are no longer the silent custodians of knowledge they are active architects of academic success, empowering institutions to move toward a culture of inquiry, collaboration, and continuous learning.

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